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International Handbook of Early Childhood Education

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Marilyn Fleer • Bert van Oers
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International Handbook of Early Childhood Education

Volume I

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Volume I

Part I Theoretical Perspectives

Editors: Marilyn Fleer and Bert van Oers

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Bert van Oers (PhD.) is special professor of cultural-historical theory of education at the Department of "Research and Theory in Education" at VU Amsterdam. He specialized in cultural-historical activity theory since the 1970s and is now working at a CHAT (cultural-historical activity theory)-based theory of play and playful learning. His major research interest focuses on the implementation of a play-based curriculum in primary school and the elaboration and evaluation of developmental education. He published about this (among others) in B. van Oers (ed.), Developmental Education for Young Children, Springer, 2012.

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Part II Research Methodologies

Editors: Marilyn Fleer and Bert van Oers

Alma Fleet has reconceptualized her work/life balance. She supervises PhD. students at Macquarie University and is involved extensively in consultancies related to supporting educational change. She learns from her work with Aboriginal and Torres Strait Islander early childhood teachers and leads others in practitioner inquiry projects and exploring pedagogical documentation. She enjoys publishing with colleagues, in books, journals, and professional resources.

Deborah Harcourt is professor of early childhood at the Australian Catholic University. She is particularly attentive to a research focus that invites children into conversations on matters of interest and important to both children and adults, as part of socializing education and research communities to the UNCRC. She is also interested in the strong links between the co-construction of educational documentation between adults and children and ongoing professional learning.

Linda Harrison is professor of early childhood education at Charles Sturt University and an honorary fellow at the Murdoch Childrens Research Institute. She has a PhD. in developmental psychology (Macquarie University), plus qualifications in early childhood education, and the biological sciences. Her research is primarily quantitative in approach and has addressed a range of issues including children's experiences of childcare/early education; transitions; child socio-emotional, cognitive, and speech-language development; processes within services that underpin the provision of high-quality education and care; and new methodologies. Her work has been widely published, including in *Early Childhood Research Quarterly*, *Child Development*, and *Developmental Psychology*. Linda is associate editor for the *International Journal of Early Childhood* and coeditor of a special issue of the *Early Childhood Research Quarterly* on the Early Development Index (EDI).

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Part III Contemporary Research and Evidence: Early Childhood Education Globally

Western Europe and UK
Editors: Bert van Oers and David Whitebread

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Sue Bingham (PhD.) is a qualified Montessori teacher and spent over 15 years as a teacher and early years advisor for UK local authorities and a national preschool learning organization. During this time, she engaged with a variety of settings, advising and coaching practitioners in developmental education practice. Subsequently, she became involved in teaching at postgraduate level on the early years and primary PGCE course and on various education- and psychology-related master courses at the Faculty of Education, University of Cambridge, while completing her research doctorate there into children's emotional and social development in the early years and how teachers can best support this within classroom settings. Recent work includes working with newly qualified teachers in a range of UK-independent and UK-maintained schools in articulating and evaluating "developmental education" specific to a variety of London school contexts.

Pascale Camus (PhD. student) has been working as advisor in education in a public administration in Wallonia-Brussels Federation (Belgium) where she is in charge of questions linked to inclusion of children with special needs (Office de la Naissance et de l'Enfance, ONE). She has worked as assistant at the Department of Education and Training at the University of Liège from 2010 to 2014. She is currently involved in a doctoral thesis on how very young children take part in the everyday life of a childcare service. Her publications are focused on the challenges of professionalization and quality in childhood education.

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Bert van Oers (PhD.) is special professor of cultural-historical theory of education at the Department of "Research and Theory in Education" at VU Amsterdam. He specialized in cultural-historical activity theory since the 1970s and is now working at a CHAT-based theory of play and playful learning. His major research interest focuses on the implementation of a play-based curriculum in primary school and the elaboration and evaluation of developmental education. He published about this (among others) in B. van Oers (ed.), *Developmental Education for Young Children*. Springer, 2012.

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Eastern Europe
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Roman Shyyan is head of Lviv Regional In-Service Teacher Training Institute (1992–2000, 2005 till now). He graduated from Ivan Franko State University of Lviv in 1982 (now National University of Lviv). He obtained his PhD. in biology in

1990. He was engaged as a consultant on several international projects on education policy, which were implemented countrywide under the Soros Foundation, UNDP, World Bank, European Commission, Ministry of Foreign Affairs of Poland, and Ministry of Education and Science of Ukraine projects (since 2002), and was listed with the International Step by Step Association (1997–2000). He is coauthor of several textbooks for educators on education policy, school self-evaluation, and lifelong learning. His areas of expertise are education policy analysis, project design and implementation, and professional development of educators.

Natalia Sofiy is a director of the Ukrainian Step by Step Foundation (USSF), which is a member of the International Step by Step Association (1998 until now). The mission of the USSF is to promote the changes in the system of education toward child-centered, inclusive education. She graduated from the National Pedagogical Dragomanov University in Kyiv (1987). She was an international consultant of Open Society Foundations in developing models of early childhood and inclusive education in such countries as Azerbaijan, Bangladesh, Bhutan, and Tajikistan. She worked as a team leader of the World Bank's project "Equal access to quality education" (2008–2010). She is coauthor of several manuals for educators on inclusive education, community schools, and leadership. Her areas of expertise are inclusive education, early childhood education, leadership, and professional development.

Aleksander Veraksa is a doctor of psychology (2014) and associate professor of the Faculty of Psychology, Lomonosov Moscow State University, and vice-president of Russian Psychological Society. He is a several-time winner of the President of Russia Grant for Talented Young Scientists as well as Lomonosov Moscow State University awards for research activity and has an experience of guiding 11 national research projects in developmental psychology. His areas of interest are preschool education, symbolic mediation in childhood, and cultural-historical approach.

Nikolay Veraksa is doctor of psychology, professor, and dean of the Faculty of Psychology of Education, Russian State University for the Humanities, professor of Moscow State Pedagogical University, and leading expert of Federal Institute of Education Development of Russia. He has a vast experience of teaching and research project organization in early years education (Cuba, Czech Republic, Mexico, Poland, Portugal, the UK, Ukraine, the USA, Russia, etc.). Under his supervision, more than 35 PhD. were defended. His areas of interest are child psychology, dialectical thinking, and methodology of psychology.

Nikolai Veresov is an associate professor of the Faculty of Education, Monash University, Australia. He has an experience as a day care center and kindergarten teacher (1987–1991) and secondary schoolteacher (1982–1987). He finished his first PhD. degree in Moscow in 1990 and started his academic career in Murmansk (Russia) as a senior lecturer (1991–1993) and head of the Department of Early Childhood (1993–1997). The second PhD. was obtained in the University of Oulu (Finland) in 1998. From 1999 to 2011, he had been affiliated to the Kajaani Teacher Training Department (Finland) as a senior researcher and the scientific director of the international projects. He published 5 books and over 60 articles available in 10

languages. His areas of interest are development in early years, cultural-historical theory, and genetic research methodology.

Bronislav Zelcerman is a founder and scientific supervisor of Pedagogical Centre "Experiment," Riga, Latvia. He developed a model of developmental education based on the ideas of D. Elkonin and V. Davidov known as developmental teaching. He also drew upon the methodology of G. Shchedrovitsky to create a system of activity thinking. He is the author of more than 90 works about problems in education, game forms in teaching, and principles of the different age student development. He teaches the subject "development of thinking and activity" and conducts individual educational projects in secondary school and qualification courses for teachers.

Australasian
Editor: Sue Grieshaber

Laila Farhana Apnan Banu is a development professional working in the field of education development. She has worked in different capacities at BRAC University, the Aga Khan Foundation's Early Childhood Development Support Project, and the Bangladesh Government's sector-wide program for primary education PEDP3, mostly focusing on expanding disadvantaged children's alternative educational opportunities. Apnan is currently working as education officer at UNICEF Bangladesh. Her portfolio involves early learning and preprimary education, primary education, teacher education, inclusive education, parenting education, nonformal/second chance education, mother tongue-based multilingual education, and education in emergencies. Her research interests include language and literacy education; early childhood care, development, and education; equity and disparity issues in education; and inclusive education.

Jane Bone is involved in research in the area of early childhood education in Australia (and formerly in New Zealand). Her expertise is in holistic and alternative approaches to pedagogy and learning, including research involving Steiner-, Montessori-, and Reggio Emilia-based preschools. Her main research area explores spirituality in early childhood settings and is internationally recognized. This research involves sensitive areas of research about values and beliefs.

Susan Grieshaber is professor of early years in the Faculty of Education at Monash University, Melbourne, Australia. Her research interests include early childhood curriculum, policy, pedagogy, and families; qualitative research methodologies; and women in the professoriate. She has published widely and is foundation coeditor of the internationally renowned journal *Contemporary Issues in Early Childhood*.

Helen May is emeritus professor of education at the University of Otago, New Zealand. Her research interests are in early childhood policy, history, and curriculum. She has been involved in advocacy work and advisory roles across a range of early childhood policy initiatives in both New Zealand and international settings.

She is the author of a number of books including *The Discovery of Early Childhood* (1997, 2013), *Politics in the Playground* (2001, 2009), *School Beginnings* (2006), *I am Five and I Go to School 1900–2010* (2011), and (with B. Kaur and L. Prochner) *Empire, Education, and Indigenous Childhoods* (2014).

Hanapi Mohamad works as lecturer in early childhood education at the Universiti Brunei Darussalam. His research explores on creativity in early childhood education, with a particular focus on how to promote creativity in the classroom.

Joce Nuttall is a research professor in the Learning Sciences Institute Australia at Australian Catholic University, where she is director of the Teacher Education, Quality and Professional Practice research program. Joce's research describes, implements, and theorizes effective formative interventions in professional learning in early childhood education, particularly in childcare.

Emma Pearson currently works as senior lecturer in early childhood education at the Universiti Brunei Darussalam. Her research explores social and cultural contexts of young children's learning and development, with a particular focus on how these can and should be incorporated in both policy and practice.

Shukla Sikder is a PhD. student in the Faculty of Education, Monash University, Australia. Her thesis is on infant-toddler development of scientific concepts through play activities as part of everyday family practices. Her research interests include play, family practices, infant-toddler age group, child development, and early childhood science using cultural-historical theory.

Anne Smith (1940–2016) was professor emeritus at the University of Otago and adjunct professor at Southern Cross University, New South Wales. Formerly director of the Children's Issues Centre, she was involved in teaching, research, policy development, and advocacy about children and childhood since the 1970s. In 2011, Anne was a member of the Ministry of Education Early Childhood Taskforce. She published *Children's Rights Towards Social Justice* in 1916. Her other books include *Children's Voices*, *Children as Citizens*, *Learning in the Making*, and *Global Pathways to Abolishing Physical Punishment.*

Jennifer Tan currently works as senior lecturer in languages and literacy education at the Universiti Brunei Darussalam. Her research explores out of school literacy practices and teacher education and professional development, with a particular focus on reflective practices.

Rosyati M. Yaakub is a research assistant at the Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam. She is a speech-language pathologist holding a M.Ed. in early childhood education and care.

Asia
Editors: Liang Li, Yuejuan Pan and Xiaoying Wang

Phan Thi Thu Hien is currently a lecturer at Ho Chi Minh City University of Education (Vietnam). Her teaching and research interests include early childhood education, early childhood teacher education, and cultural-historical theory.

Liang Li PhD. (2012), ME (EC), ME (TESOL International), Grad. Dip. ECE, B. Law, is a senior lecturer teaching undergraduate and postgraduate students and an early career researcher in the Faculty of Education at Monash University, Australia. Her research interests focus on play and pedagogy, child development, cultural world of babies and toddlers, family study, early childhood teacher education, and visual methodology. Liang publishes nationally and internationally (contact: liang.li@monash.edu).

Sirene Lim is currently a senior lecturer at the SIM University, developing a locally awarded full-time early childhood degree program while volunteering with a center catering to disadvantaged children and families. Prior to this, she has worked in the Ministry of Education and at the National Institute of Education teaching a range of preservice, in-service, and research students. She continues to contribute toward strengthening the local community of early childhood professionals in Singapore.

Chia-Fen Lin is deputy director of the Master Program of Youth and Child Welfare, School of Continuing Education, Chinese Culture University, Taiwan, ROC. Her recent book is *Theory and Practices of Service Marketing in Cultural and Educational Industries: Examples of Chinese Preschool Edu-care Institutions* (Psychology Press, 2011).

Xiangying Liu is professor in the Department of Childhood Education, Faculty of Education at Fukuyama City University in Japan. Her areas of teaching and research are comparison of early childhood education and care system in East Asia, language development and education of bilingual children, and early childhood teacher education. She also created and published many picture books for infants in Japan in addition to the study.

Yuejuan Pan is an associate professor in Beijing Normal University. Her research interests focus on early childhood education quality and evaluation, play and kindergarten curriculum, and early math education. Currently, she directs a project on assessment of school readiness in math and a project on meta-evaluation of kindergarten quality evaluation system. She was awarded Beijing Higher Education Young Elite in 2013 by the Beijing Municipal Commission of Education and BNU Young Elite in 2014 by Beijing Normal University.

Xiaoying Wang is a professor in preschool and school education in the Faculty of Education at Northeast Normal University. She is a doctoral tutor, deputy director of the training center for principals of kindergarten education, and training department director with the Ministry of Education. She is a committee member of the

Preschool Education Experts Guidance Committee of the Ministry of Education and committee member of the World Organization for Early Childhood Education (OMEP) in China. She is a deputy director of the Health Education Professional Committee of the Chinese Preschool Education Research Association. She serves as an editor of *Studies in Early Childhood Education*.

Africa and Middle East
Editor: Joseph Agbenyea

Joseph S. Agbenyega is senior lecturer in early childhood inclusive education at Monash University Faculty of Education. His research focuses on developmental disabilities, cultural diversity, and teacher professional learning.

Eleni Athinodorou has recently completed a PhD. examining the nature of early childhood and the constraints and possibilities for preschool education in postwar Sierra Leone. Eleni is currently a lecturer at the Orthodox Christian College in Sierra Leone, West Africa, where she lectures on a range of early childhood subjects. She has worked as a kindergarten teacher in Australia, Hong Kong, and China and managed a range of children's services including family day care and center-based care in Australia and early childhood principal in China. Eleni is the author of three children's books and has been a consulting writer for several resources for preservice teachers. She was also a reviewer of appeals for the National Childcare Accreditation Council (NCAC), Canberra, Australia.

North American
Editors: Artin Göncü and Carollee Howes

Angela Pons Clifford (PhD.) has been an early childhood educator and teacher researcher for 17 years in both urban and rural areas of the USA. She currently teaches in South Carolina where she also serves as a mentor to new and interning teachers and as a member of leadership teams at the school and district level. Dr. Pons Clifford received her bachelor of arts in early childhood education from the University of South Carolina Aiken and master of arts in instructional leadership and PhD. in educational psychology from the University of Illinois at Chicago. Her interests include parent involvement, inquiry-based instructional practices, and early childhood curriculum and instruction.

Kathleen Flanagan has more than 40 years' experience in child and family policy, with a concentration in early childhood education and care. Her involvement includes teaching experience in early childhood education in both Canada and the USA. She has led interministerial initiatives and government task forces at the provincial government level and intergovernmental initiatives and negotiations focused on early learning and childcare agreements. An educational and social policy consultant since 2005, her recent work has focused on strategic policy design, curriculum development, and policy and program reviews at the provincial, regional, national, and international levels. She co-led You Bet We Still Care! – Canada's

national research on human resource issues in the childcare sector. She was the architect of Prince Edward Island's new system of early years centers and is currently (2015) leading Manitoba's Child Care Commission. She has authored numerous reports and studies and regularly presents at provincial and national conferences. Kathleen is a PhD. candidate at the Ontario Institute for Studies in Education (OISE) at the University of Toronto, specializing in the early years.

Artin Göncü (PhD. 1983) is professor emeritus at the University of Illinois at Chicago where he served as the chair of the Department of Educational Psychology (2006–2009) and taught courses in child development, sociocultural approaches to human development, practicum in early childhood education, and play and its role in education. Dr. Göncü's research illustrates the role of cultural and social contexts in human development and education. His specific research projects focus on the development of imaginative play during childhood, parents' and teachers' roles in child development, professional development of early childhood teachers, as well as the role of play in adult education and development. Dr. Göncü served as an editor of *Mind, Culture, and Activity: An International Journal*. His editorial board memberships include *Child Development*, *Human Development*, *Early Childhood Research Quarterly*, *American Educational Research Journal*, *Early Education and Development*, *International Journal of Behavioral Development*, and *Bogazici University Journal of Education* and board memberships of the Jean Piaget Society and Center for Child Culture at Ankara University, Turkey. Dr. Göncü's publications include *Analyzing Children's Play Dialogues*, *Play and Development*, *Children in Play, Story and School*, and *Children's Engagement in the World*.

Sandra Soliday Hong is an investigator at the Frank Porter Graham Child Development Institute at the University of North Carolina, Chapel Hill. Her research examines the association between the quality of early care and education and the school readiness and social development of low-income children and dual language learners, with a focus on implications for quality rating and improvement systems.

Nina Howe is a professor of early childhood and elementary education at Concordia University, Montreal, and holds a Concordia University research chair in early childhood development and education. She is also a principal member of the Centre for Research in Human Development at Concordia University. She teaches in both B.A. programs (early childhood and elementary education and child studies) and at the graduate level (M.A. program in child study, PhD. in education) and has been an active supervisor of graduate students. Dr. Howe's areas of research interest include the socio-emotional development of preschool and school-aged children, sibling relationships (particularly pretense, conflict, teaching), children's play, and early childhood education (e.g., professional development for early childhood educators). She has published numerous articles, and her work has been continuously supported by a number of granting agencies for over 25 years (e.g., Social Science and Humanities Research Council of Canada).

Carollee Howes is a professor emerita and research professor in human development and psychological studies at the University of California at Los Angeles. She is also director of the Center for Improving Child Care Quality at the UCLA. Her research interests are in the area of very young children's development of interpersonal relationships, children's experiences in childcare and preschool, and interventions for caregivers and teachers of young children. Howes has published in numerous journals including *Child Development*, *Developmental Psychology*, *Zero to Three*, *Social Development*, and *Early Childhood Research Quarterly*. Her recent books include *A Matter of Trust: Connecting Teachers and Learners in the Early Childhood Classroom* and *Culture and Child Development in Early Childhood Education: Practices for Quality Education and Care* published by Teachers College Press and *The Promise of Pre-K*, *Foundations for Teaching Excellence: Connecting Early Childhood Quality Rating, Professional Development, and Competency Systems in States*, *Dual Language Learners in the Early Childhood Classroom*, and *Effective Professional Development in Early Childhood Education* all published by Brooks.

Marisha L. Humphries (PhD.) is an associate professor in the Department of Educational Psychology and a licensed clinical psychologist. She received her bachelor of science in psychology from Howard University and her master of arts and PhD. in clinical psychology from the University of Illinois at Chicago. Dr. Humphries' research seeks to develop an integrated approach to studying African-American children's normative and prosocial development and utilizing this basic research to create culturally and developmentally appropriate school-based behavior promotion programs. Her work examines African-American children's emotional and social competence and the ways in which schools can support children's development in this area. Due to her interest and experience in applied research, Dr. Humphries' work considers the contextual and cultural factors associated with children, families, and schools.

Michal Perlman has a PhD. in developmental psychology from the University of Waterloo. She is an associate professor of applied psychology and human development at the University of Toronto and is also cross appointed at the School of Public Policy and Governance. Dr. Perlman studies issues related to quality in early childhood education and care (ECEC) including how it should be defined and measured as well as the links between different aspects of ECEC program quality and child outcomes. She has worked with different levels of government in Canada and the USA to explore how ECEC quality measurement can be used for monitoring and quality improvement purposes. Dr. Perlman's interests focus on the quality of interactions between ECEC staff and children but also on how interaction patterns between different family members impact the development of young children.

Promjawan Udommana specializes in early childhood development and education in diverse cultures and is currently a school licensee of Melodies International Kindergarten, Bangkok, Thailand. She is also a director of Child connect: center for educational research and consultation. There, she publishes early childhood-related articles and organizes seminars for parents and teachers.

Latin America
Editors: Rebeca Mejía-Arauz and Gloria Quiñones

Alia Barrios is psychologist and doctor of psychology in human development processes and health and serves as professor of psychology at Higher Education Institute of Brasília, Brazil. Her areas of teaching are human development and education. Her researches are focused on moral development.

Angela Uchoa Branco works at the Institute of Psychology, University of Brasilia, Brazil. She carried out research projects, from a cultural semiotic constructivist approach, concerning early child education and development, as well as the role of communication and metacommunication processes in different aspects of human development. Her research team investigates the microgenesis and ontogenesis of human values, moral development, and social interactive patterns among children, adolescents, and adults, published in various international journals and volumes. In 2004, she edited with Dr. Jaan Valsiner the book *Communication and Metacommunication in Human Development* (Info Age Publishing) and, in 2012, the book *Cultural Psychology of Human Values* (Info Age Publishing).

Rodrigo A. Cárcamo is associate professor of developmental psychology in the School of Psychology at the University of Magallanes, Punta Arenas, Chile. He received his doctorate in the Center for Child and Family Studies at Leiden University, the Netherlands, where he is currently guest researcher. His research has focused on childcare, attachment relationships, and quality of the early childcare programs [rodrigo.carcamo@umag.cl].

Susana Frisancho is faculty professor at the Department of Psychology, Pontificia Universidad Católica del Perú. She obtained the PhD. in psychology from Fordham University, New York. Her areas of speciality are cognitive development and moral development, constructivism, moral education, and construction of knowledge. Her recent work and publications focus on moral identity and justice in persons with moral and social commitment, on moral reasoning of indigenous wise persons and leaders, as well as on students' beliefs about human rights.

Rebeca Mejia-Arauz is faculty professor and researcher in the Department of Psychology, Education, and Health at ITESO University, Guadalajara, Mexico. She obtained the doctoral degree in developmental psychology from the University of California, Santa Cruz, M.Sc. in social psychology from the London School of Economics, and a speciality in cognitive development from ITESO University. Her line of research focuses on sociocultural and cognitive development, specifically on processes of social interaction, participation, and communication for learning. Current projects involve children's literacy development in urban Mexico, children's out of school practices in urban and indigenous contexts, and cultural and intergenerational family transformations affecting children's participation in cultural activities and their education and development.

Maria Eugenia Rabbe is a psychologist with a specialization in preschool education and educational administration. She has been a university teacher and worked in preschool education for more than 20 years. Her special interest is going to investigate the relationship between process to learn and the cognitive development especially in preschool students.

Francisco José Rengifo-Herrera is a Colombian-born psychologist. Over the last decade, he did research and teaching in the area of developmental and educational psychology. He obtained his master's in cognitive psychology and learning at the Universidad Autónoma de Madrid, and in recent years, he has been working from a semiotic and cultural approach. Rengifo-Herrera received his doctorate in human development and health from the joint graduate program of the University of Brasilia, Brazil, in 2014. His work research seeks to understand the development of social values in Colombian and Brazilian children about violence, peace, collaboration, and competition. Francisco was professor at different Colombian's universities; until March of 2014, he worked with the University of Ibagué. From April of 2014, he is substitute teacher at the University of Brasilia (address: Rua 19 Norte, Lote 05, Apartamento 1505, Águas Claras, Distrito Federal, 71,915–000, Brasilia, Brazil [email: frengifo@unb.br]).

María Isabel La Rosa is faculty professor at the Department of Psychology, Pontificia Universidad Católica del Peru (PUCP). She obtained the master in developmental and educational psychology from the Universidad Autónoma de Barcelona (UAB). Her areas of speciality are educational psychology, construction of knowledge, learning and teaching strategies, teaching teachers, and mentoring. Her recent works focus on microteaching in higher and basic education.

Gloria Quiñones is a lecturer in the Faculty of Education, Monash University, Australia, and member of the Child and Community Development Faculty Research Group. Her research interest focuses on play, pedagogy, emotions, and visual methodologies. Gloria is coauthor with Avis Ridgway and Liang Li for the book *Early Childhood Pedagogical Play: A Cultural-Historical Interpretation Using Visual Methodology* (2015), Springer.

Nordic
Editor: Stig Broström, Johanna Einarsdottir, and Ingrid Pramling Samuelsson

Stig Broström is professor in early childhood education at Aarhus University, Department of Education, Denmark. His main areas of research are based on cultural-historical activity theory related to preschool, transition to school, the first years in school, curriculum theory, children's play, social competence, democracy, and friendship.

Feiyan Chen is an assistant professor of Early Childhood Education at California State University, Fresno, United States. She has been in the field of early childhood education and development across diverse cultural contexts for about 20 years. Her research interests focus on early years learning and development, with special atten-

tion on social-emotional development, cultural-historical studies, pedagogy, culture, and visual methodology.

Johanna Einarsdottir is a professor of early childhood education and the dean of School of Education, University of Iceland. She received her PhD. in early childhood education, from the University of Illinois in 2000. She has been involved in several international research projects as a researcher and a consultant in her areas of expertise and published together with international colleagues. Recently, she has been conducting research on children's views on their preschool education and transition and continuity in early childhood education. She is on the board of trustees of the European Early Childhood Research Association.

Anette Emilson has a PhD. in pedagogy and works as a researcher in the field of early childhood education at the Linnaeus University in Sweden. Her research interest is directed toward values education in preschool as well as the communication between teachers and children. She has also a background as a preschool teacher.

Anne Greve is associate professor in early childhood education at Oslo and Akershus University College of Applied Sciences, at the Faculty of Education and International Studies, Norway. Her main areas of research are based on education and care for the youngest children in preschool, peer relations and friendship, play, and teacher's professional identity.

Ole Henrik Hansen is associate professor in early childhood education, at Aarhus University, Department of Education, Denmark. His main areas of research are based on education and care for the youngest children in preschool, professional care and interactions between preschool teachers and children, the correlation between social and cultural stimulation, and the child's mental development.

Eva Johansson is professor of education, at the Department of Early Childhood Education, University of Stavanger, Norway. She is an experienced researcher in the field of early childhood education with an extensive research and publication profile in the area of values education, issues of democracy, and children's morality. She is leading a Nordic research project, Values education in Nordic preschools: Basis of education for tomorrow supported by NordForsk.

Olav B. Lysklett is an associate professor in physical activity and health at Queen Maud University College in Trondheim, Norway. His main area of teaching is physical education for preschool teachers. His main research subjects are children's physical activity in preschools and the characteristics of nature and outdoor preschools (sent by Johanna in 17/9/2014).

Ingrid Pramling Samuelsson is professor of early childhood education at the Department of Education, Communication and Learning at the University of Gothenburg, Sweden. Her main research field is young children's learning and curriculum questions of early years education. Her many research studies of children's learning and play in the preschool context have led to the development of a didactics approach, labeled developmental pedagogy. One of her most popular books is *The Playing-Learning Child* (originally in Swedish, but also translated to German),

which is based on the idea that children are playing-learning individuals and preschool didactics needs to integrate play and learning. Her latest research concerns children's possibilities to learn in relation to group size. She has been a UNESCO chair in early childhood education and sustainable development, was the former world president, and is now senior advisor of the OMEP (Organisation Mondiale pour l'Èducation Préscolaire).

Ellen Beate Hansen Sandseter is an professor (PhD.) in the Department of Physical Education at Queen Maud University College (DMMH) of Early Childhood Education in Trondheim, Norway. Her primary research focus is on children's physical play, outdoor play, and risky/thrilling play among children in early childhood education and care (ECEC) institutions. She has cooperated with early childhood researchers from both England and Australia to study cultural differences in provision of outdoor and risky play in ECEC settings. She has also been involved in a study of Norwegian children's experiences of participation and well-being in Norwegian ECEC institutions as well as a project mapping all child accidents and injuries in Norwegian ECEC institutions.

Volume II

Part IV Innovative and Long-Standing Programs

Editor: Bert van Oers

Ken Blaiklock (PhD.) is a senior lecturer in the Department of Education at the Unitec Institute of Technology in Auckland, New Zealand. He has worked extensively in teacher education at the early childhood and primary school levels. His research interests focus on language and literacy development, assessment, and the comparative study of different early childhood curricula. He has published on these topics in a range of academic journals.

Elena Bodrova (PhD.) is currently the director for Research and Development at Tools of the Mind and a research fellow at the National Institute for Early Education Research at Rutgers University. Her work on applying Lev Vygotsky's theory to education started in Russia where she worked in the Institute for Preschool Education. Dr. Bodrova is the author of multiple articles and book chapters on early literacy, assessment, play, and self-regulation. Dr. Bodrova holds PhD. in child development and educational psychology from Russian Academy of Pedagogical Sciences and M.A. in child development and educational psychology from Moscow State University, Russia.

Menno Boontje is managing director of Cito's Piramide Approach and CEO of Cito Deutschland GmbH in Solingen, Germany. He has 21 years of experience as the Netherlands-based, international marketing and sales manager for Nienhuis

Montessori, a worldwide leading manufacturer of premium quality Montessori materials. He was responsible for export and marketing management as well as new business and product/concept development. Mr. Boontje joined Cito International in 2008, and as unit manager, he coordinates the international dissemination and adaptation of Cito's Piramide Approach to Early Learning.

Milda Bredikyte (PhD.) is associate professor at the Department of Developmental and Educational Psychology at Lithuanian University of Educational Sciences, Vilnius. She teaches courses on child development and narrative learning in play and Vygotskian theory of cultural development in childhood. She is the senior researcher and coordinator of research activities in the Research Laboratory of Play (LUES). Her research interests include cultural development and the impact of play on child development. M. Bredikyte is the author of several articles and book chapters on children's play.

Dita Breebaart (M.Sc.) received her training as an educator/teacher at the University of Amsterdam. She is an acknowledged education specialist in the development and training of the Piramide Approach. She has been involved in the development of new materials for Piramide from the beginning. In addition to training teachers in the Piramide Approach, she provides Piramide training for trainers in the Netherlands and in Germany. She provides ongoing support and coaching for teachers and trainers. Dita Breebaart has a special interest in working with the Piramide projects.

Marjolein Dobber (PhD.) is assistant professor at the Department of Theory and Research in Education at VU Amsterdam, and she works as a teacher educator and researcher at "De Activiteit," the Dutch center for developmental education. Her main research interest is the theoretical and empirical advancement of developmental education, for example, by studying the role of the teacher in promoting inquiry-based learning.

Galina Dolya (PhD.) is the curriculum director of Key to Learning, which has developed an innovative Vygotskian approach to early years education. She is an acknowledged expert on the practical application of Vygotsky's theory of learning and development. She has worked at every level from early years to university and trained hundreds of teachers and trainers worldwide. Currently, she is a researcher at the Pedagogical Academy of Preschool Education, Moscow. She is based in the UK.

Pentti Hakkarainen (PhD.) is professor of developmental and educational psychology at Lithuanian University of Educational Sciences, Vilnius, and professor (emeritus) in educational sciences at the University of Oulu, Finland. He has studied cultural development and motivation in play and learning. He published in cooperation with Milda Bredikyte *Introduction to Developmental Play Pedagogy, 2014* (in Finnish).

Irma Koerhuis (M.Sc.) is project manager of the Piramide Approach in the Netherlands. She was trained as an elementary schoolteacher and went on to earn her master's degree in language and culture studies at Tilburg University.

Subsequently, she developed the Alfa approach to adult literacy and taught Dutch as a second language at all levels. Her interest in education reaches beyond applied linguistics; she is particularly interested in a holistic approach to teaching that integrates all developmental areas in a cohesive framework powered by play. Irma Koerhuis is currently involved as project manager of Piramide e-learning programs for the Dutch. Her Piramide mission is to empower teachers as intentional educators of young children.

Gennady Kravtsov (PhD.) is the head of psychology of personality department of L.S. Vygotsky Institute of Psychology. He is well-known specialist in methodology of cultural-historical psychology, particularly interested in the problems of personality, volitional behavior, and child psychology. G. Kravtsov is the head of research group, engaged in developing educational programs, based on the theory of L.S. Vygotsky, for children of preschool, primary school, and teen ages.

Elena Kravtsova (PhD.) is director and head of projective psychology department of L.S. Vygotsky Institute of Psychology. She is one of the authors of the "Golden Key," "Master," and "Opening" educational programs for children of different psychological ages. Her researches into the periodization of psychological and personal development, zone of proximal development, and developmental educational environment are direct outcomes of the cultural-historical approach traditions. Among her other research interests are the problems of psychologists' and cultural-historical psychology specialists' training.

Deborah J. Leong (PhD.) is professor emerita of psychology at Metropolitan State University of Denver. She taught for 36 years in the Psychology Department and in the Department of Education. Dr. Leong developed Tools of the Mind approach with Dr. Bodrova with whom she has written numerous books, articles, and educational videos on the Vygotskian approach to psychology and the development of play. Tools of the Mind was named an exemplary educational program by the International Bureau of Education at the UNESCO, United Nations in 2001. Dr. Leong has written several books on early childhood assessment with Drs. McAfee and Bodrova. She has her PhD. from Stanford University and her M.Ed. from Harvard University.

Marieke op den Kamp (M.Sc.) is an early childhood specialist at Cito. She authored numerous Piramide publications and instructional materials. She has extensive knowledge and experience with the Piramide Approach to early childhood education and its dynamic system theory foundations. In addition, she developed several evaluation instruments to assess young children's mathematical, language, and motor development. She taught in primary school and studied educational sciences at Utrecht University. Marieke op den Kamp has a special interest in the application of research results to guide and inspire professionals in early childhood education.

Herman van Boxtel (PhD.) is an associate professor in developmental psychology at the Department of Developmental Psychology at Utrecht University (UU). Dr. van Boxtel specializes in cognitive development, intelligence, giftedness, and test construction. His work with Cito focuses on evaluating the quality of psychological and educational tests and on research of educational programs. Dr. van Boxtel has contributed to the growing body of evidence-based research in support of the Piramide Approach to Early Learning, a renowned Dutch preschool educational method.

Bert van Oers (PhD.) is special professor of cultural-historical theory of education at the Department of Theory and Research in Education at VU Amsterdam. He specialized in cultural-historical activity theory since the 1970s and is now working at a CHAT-based theory of play and playful learning. His major research interest focuses on the implementation of a play-based curriculum in primary school and the elaboration and evaluation of developmental education. He published about this (among others) in B. van Oers (ed.), *Developmental Education for Young Children.* Springer, 2012.

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Part V Curriculum and Assessment

Editor: Geerdina van der Aalsvoort

Pat Broadhead (PhD.) is the recently retired professor of playful learning at Leeds Metropolitan University. Her research into playful learning spanned a period of 25 years with numerous journal publications, articles, and several books. Much of the research was undertaken jointly with teachers and early years practitioners. Her most recent book was co-researched and coauthored with a teacher and is entitled *Understanding Young Children's Learning Through Play: Building Playful Pedagogies* (Broadhead, P., and Burt, A., 2012, Routledge). She has developed and refined an observational tool called "the Social Play Continuum." This is designed to reveal the levels of sociability and cooperation in young children's play and to make informed pedagogical decisions about how scaffolding and resource provision might increase those levels, especially in open-ended play environments, also known in her work as "the whatever you want it to be place."

David Brody (PhD.) is the academic dean and chair of the Early Childhood Department at the Efrata College of Education in Jerusalem, Israel. He has been a leading figure in Israeli early childhood education for the past 20 years. His research interests include supporting early childhood educators in dealing with emotionally laden topics, gender balance in early childhood education, professional development of teachers and teacher educators, and the community of learners as a format for professional development. His recent book, *Men Who Work with Young Children: An International Perspective* (2014, IOE Press), focuses on the issue of gender balance in early childhood settings.

Maria Malta Campos (PhD.) is a senior researcher at the Department of Educational Research, Carlos Chagas Foundation, São Paulo, Brazil; a professor of the graduate program in education at the Catholic University of São Paulo; and the president of the NGO Ação Educativa. Graduated in pedagogy at the Catholic University of São Paulo, she has a PhD. in sociology. She has published books, chapters of books, and academic articles on the education and care of small children, quality of education, and educational policies.

Roberta Michnick Golinkoff (PhD.) the Unidel H. Rodney Sharp professor at the University of Delaware, has won numerous awards including the Guggenheim Fellowship, the Urie Bronfenbrenner lifetime achievement award from the American Psychological Association, the James McKeen Cattell Fellow Award for lifetime achievement in applied psychological research from the Association for Psychological Science, and the Francis Alison Award, the highest honor at her university. Her research is supported by federal grants and has resulted in over 150 articles and 13 books. She is an expert on language development, playful learning, and children's early spatial knowledge. She is passionate about the dissemination of psychological science and cofounder of the Ultimate Block Party movement to celebrate the science behind play. She speaks all over the world.

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Kristiina Kumpulainen (PhD.) serves as a professor of education at the Department of Teacher Education, University of Helsinki, Finland. Her research focuses on the cultural, relational, and emotional nature of human learning and development. She has examined tool-mediated learning and communication in various settings, including early childhood centers, schools, museums, and teacher education settings. She has also addressed methodological questions in the analysis of social interaction in collaborative and creative learning practices. Her current research centers on learning across contexts, playful and technology-mediated cre-

ative learning, positive pedagogy, learner agency and identity, resilience, as well as visual participatory research.

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Part VI Pedagogies in Early Childhood Education

Editors: Ingrid Pramling Samuelsson and Niklas Pramling

Paola Cagliari Graduated in Pedagogy, she worked as teacher in the preschools from 1978 to 1985, later on as pedagogista and from 2010 she is the Director of the Istituzione Preschools and Infant-Toddler Centres of the Municipality of Reggio Emilia. She is one of the members of the Scientific Committee of the Foundation Reggio Children – Centro Loris Malaguzzi. She participated in research projects with Italian and international universities and research centers. She has contributed to professional development events and conferences as a keynote speaker, and she has published essays about the educational experience in Reggio Amelia and topics related to childhood in Italian and foreign magazines.

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is coauthor of *Tender Care and Early Learning: Supporting Infants and Toddlers in Child Care Settings*, *Supporting Young Artists*, and *Small-Group Times to Scaffold Early Learning*. Dr. Epstein is a key developer of COR Advantage, an observational assessment of children from infancy through kindergarten and the Program Quality Assessment for measuring teaching practices and program management. She has a PhD. in developmental psychology from the University of Michigan and a master of fine arts degree from Eastern Michigan University.

Flora Farago is a doctoral student in family and human development at Arizona State University. She was born in Budapest, Hungary, and moved to Texas in 1998, where she earned her B.A. and M.S. degrees in psychology at the University of Texas at Dallas. Her research interests center around issues of prejudice and stereotype development in children, antibias curricula, and inclusive education in early childhood. She is particularly interested in mixed methods research.

Sara Frödén is a senior lecturer in education at Örebro University, Sweden. She previously worked as a preschool teacher and she received her PhD. in 2012. Her thesis focuses on the material and spatial dimension in the Waldorf kindergarten's practice in relation to gender, age, and spirituality. Her current research is on multicultural and feminist pedagogies, both in early childhood education and in higher education, and also on children's rights in education. She is one of the members of the Scientific Committee of the Foundation Reggio Children – Centro Loris Malaguzzi. She participated in research projects with Italian and international universities and research centers. Key note speaker in professional development events and conferences, she published essays about the educational experience in Reggio and about topics related to childhood in Italian and foreign magazines.

Claudia Giudici Graduated in Psychology, she worked from 1995 to 2007 as pedagogista and in 2009 she has been appointed as Chairperson of the Istituzione Preschools and Infant-Toddler Centres of the Municipality of Reggio Emilia. From 2016 she is President of Reggio Children s.r.l. She has coordinated, participated and collaborated in research projects with Italian universities and Italian and international research centres. Key note speaker in study seminars, conferences and professional development courses, she is the author of articles and essays published in magazines and publications in Italy and abroad.

Christina Gustafsson is professor emerita of education at Uppsala University and research director of educational sciences at the University of Gävle. She started as a classroom researcher and spent a couple of decades to evaluation as a theoretical and practical matter. For many years, she has participated in various kinds of evaluations related to education, curriculum studies, and educational sciences. For the past 20 years, she has devoted herself to research regarding higher education issues, mainly in teacher training. A parallel interest has throughout the whole career been education built on children's/students' activity in general and Montessori education in particular.

Jan-Erik Johansson is professor emeritus in early childhood education at the Department of Early Childhood at the Oslo and Akershus University College of Applied Sciences in Oslo, Norway. His main areas of research are research in pre-school teacher education, studies of young children in early childhood education, and the history of early childhood education in Sweden and the Nordic countries.

Niklas Pramling is professor of education at the Department of Education, Communication and Learning, University of Gothenburg. He is a member of the LinCS (Linnaeus Centre for Research on Learning, Interaction and Mediated Communication in Contemporary Society), a national center of excellence funded by the Swedish Research Council. He leads a national research school for preschool teachers (FoRFa). His research interests include how preschool teachers and children communicate about various phenomena. In particular, he is interested in such communication in the context of aesthetic domains such as music and literary arts. Another interest he is currently pursuing is how children, with and without adults such as preschool teachers, engage with new technologies designed for making music and stories, respectively.

Ingrid Pramling Samuelsson is professor of early childhood education at the Department of Education, Communication and Learning at the University of Gothenburg, Sweden. Her main research field is young children's learning and curriculum questions of early years education. Her many research studies of children's learning and play in the preschool context have led to the development of a didactics approach, labeled developmental pedagogy. One of her most popular books is *The Playing-Learning Child* (originally in Swedish, but also translated to German), which is based on the idea that children are playing-learning individuals and pre-school didactics needs to integrate play and learning. Her latest research concerns children's possibilities to learn in relation to group size. She has been a UNESCO chair in early childhood education and sustainable development and was the former world president of the OMEP (Organisation Mondiale pour l'Èducation Préscolaire).

Kay Sanders is professor of child development at Whittier College. Dr. Sanders received her PhD. at the UCLA Graduate School of Education and Information Studies, specializing in human development and psychology. She teaches a selection of undergraduate courses for the child development major/minor at Whittier College. Before becoming a professor, Dr. Sanders was a teacher of young children and a program director of childcare programs located in poor, urban communities. This past work with young children who were recent immigrants and/or members of language, ethnic, and racial minority groups is the driving force behind her work as a researcher. Her research focuses on the social and emotional development of young children who are ethnic/racial minorities and community-based practices associated with childcare quality.

Lawrence Schweinhart is an early childhood program researcher and speaker throughout the world. He has conducted research at the HighScope Educational Research Foundation in Ypsilanti, Michigan, since 1975 and served as its president from 2003 to 2013. He has directed the HighScope Perry Preschool Study through

age 40, the Michigan School Readiness Program Evaluation, HighScope's Head Start Quality Research Center, and the development and validation of the Child Observation Record. Dr. Schweinhart received his PhD. in education from Indiana University in 1975. He and his wife have two children and five grandchildren.

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Nikolay Veraksa (PhD.) holds a doctorate in psychology. He has been a professor since 1996. Currently, he is a dean of the Faculty of Psychology and Pedagogy of Russian State University for the Humanities, professor of Moscow State Pedagogical University, and a leading scientific researcher of the Federal Institute of Education Development. As a student, he was supervised by A. Leontiev, D. Elkonin, and P. Galperin and worked together with A. Zaporozhets, L. Venger, and N. Poddiakov. For more than 40 years, he is doing theoretical and empirical research in dialectical thinking of children and adults, creativity of children, and methodology of psychology. He has a rich experience of international cooperation with universities from different continents: Santiago de Cuba Pedagogical University, Autonomous University of San Luis Potosi, University of Central Arkansas, etc. He is a scientific advisor for the most popular preschool education program in Russia known as "From Birth to School". More than 30,000 preschools have been established. He is a coauthor with Galina Dolya-Higgins of the program called, "Key to Learning". This program has been introduced into England, Wales, Scotland, Poland, India, Singapore, etc. (Moscow, Russia, 117,588, Litovsky bulvar, 34–53).

Moira von Wright PhD., is Professor of Education, currently engaged at the Ersta Sköndal Bräcke University College in Stockholm. Her research examines intersubjectivity, the educational situation, and the conditions of participation, reconciliation, and individual formation. She is also involved in academic leadership and the development of higher education, e.g., as previous Vice Chancellor of Södertörn University.

Part VII Child, Families, and Communities

Editor: Charlotte Højholt

Agnes Andenæs is professor of psychology at the University of Oslo, Norway. She teaches courses in qualitative research methods. Her own research investigates the everyday life of different kinds of children have been a common feature. For

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Lia Beatriz de Lucca Freitas is an associate professor at the Institute of Psychology at the Federal University of Rio Grande do Sul in Brazil. She gained her PhD. in psychology from the University of São Paulo. Her main interests are in moral development, the construction of values, and the development of gratitude in children and adolescents. She has authored The Production of Ignorance at School and The Theory of Morality in Jean Piaget's Work: An Unfinished Project, both published in Portuguese. She was a visiting scholar at the University of North Carolina at Greensboro, USA, in 2004 and 2010 (email address: lblf@ufrgs.br).

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Hanne Haavind is professor of psychology at the University of Oslo, Norway. Her research interests concern parenting and care arrangements for children as well as children's developmental trajectories and engagement in social transitions. The meanings that get attached to gender and to age are central to her understanding the interface of persons' activities and their social circumstances. Her collaboration with Agnes Andenæs on the study of children's everyday life covers a period of three decades. See also special issue of *Nordic Psychology*, Everyday Life in Psychology, 2011; Loving and Caring for Small Children: Contested Issues for Everyday Practices.

Mariane Hedegaard is professor in developmental psychology and head of the Centre for Person, Practice, Development and Culture at the University of Copenhagen. She has a senior research fellowship at the Department of Education, Oxford University. In 2010, she was awarded a doctorate honoris causa by the Pablo de Olavide, Seville. Her research interests include children's activities across different institutional practices. She has authored and coedited 25 books, 11 in English, including Daniels, H. and Hedegaard, M. (Eds.) (2011) *Vygotsky and Special Needs Education: Rethinking Support for Children and Schools*; Hedegaard, M., Edwards, A., and Fleer, M. (Eds.) (2012) *Motives in Children's Development: Cultural-Historical Approaches*; and Hedegaard, M. and Fleer, M. (2013) *Play, Learning, and Children's Development: Everyday Life in Families and Transition to School* (www.marianehedegaard.dk).

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orative research processes involving researcher, professionals, children, and parents. She has published on children's everyday life across contexts and children's communities, parental cooperation, family life, and collaborative methodology, including, e.g., Researching Family Through the Everyday Lives of Children Across Home and Day Care in Denmark, Ethos 39(1) 98–114, 2011, and a number of articles together with Charlotte Højholt as Participant Observation of Children's Communities – Exploring Subjective Aspects of Social Practice, *Qualitative Research in Psychology*, 11: 316–334, 2014 (email: mariane.hedegaard@psy.ku.dk).

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Cesar A. Piccinini is an associate professor and the director of the Institute of Psychology at the Federal University of Rio Grande do Sul, Brazil. He gained his PhD. degree from the University of London (UK). His main research interest is in subjective and behavioral aspects of parent-child interactions in different developmental contexts, such as prematurity, postpartum depression, chronic disease, HIV/AIDS, and pregnancy in adolescence (email: piccinini@portoweb.com.br).

Alzira Shimoura holds a bachelor's degree in English-Portuguese translation (1987), a bachelor's degree in English language and literature (1989), a M.A. in applied linguistics and language studies, and a PhD. in applied linguistics and language studies from the Pontifical Catholic University of São Paulo (2005). Currently, she is an assistant professor at Fecap (School of Commerce Foundation Alvares Penteado) and a professor at the extramural courses of the Pontifical Catholic University of São Paulo. Her areas of interest are teacher training, mainly in the following areas: teacher and coordinator training, critical thinking, genre, teaching-learning, and didactic material production (http://lattes.cnpq.br/6063516845320629).

Jonathan Tudge is a professor of human development and family studies at the University of North Carolina at Greensboro, USA. He gained a B.A. (history) from Lancaster University and an MPhil (sociology) from Oxford and moved from the UK to the USA for his PhD. (developmental psychology) at Cornell. He is interested in cultural influences on children's development and is the author of *The Everyday Lives of Young Children: Culture, Class, and Child Rearing in Diverse Societies* (Cambridge, 2008). He is currently studying links between autonomy relatedness and the development of values, including gratitude and materialism, in different societies.

Chapter 1
International Trends in Research: Redressing the North-South Balance in What Matters for Early Childhood Education Research

Marilyn Fleer and Bert van Oers

Abstract Knowledge construction in early childhood education has tended to be dominated by perspectives on what matters for countries in the Northern hemisphere, with limited attention being directed to the research needs and activities of countries in the Southern hemisphere. This chapter seeks to redress this situation by reviewing the content of the first volume of the handbook with a north-south analytical framework in mind. The outcomes of this analysis are focused around: What are the research trends evident, what methods are primarily drawn upon, and what theories have framed the studies and the findings? This analysis draws upon cultural-historical theory, notably Hedegaard's model of societal, institutional and personal perspectives for the holistic study of what matters. In order to understand the research landscape being presented regionally and internationally, the societal and institutional practices of specific countries, along with the activity settings of early childhood education, also require examination. These conditions give context to the research needs of a community, and shape how answers to pressing problems are framed, and findings theorised. It is argued in this chapter that 'First World problems' have colonised the international early childhood vista and distorted research trajectories and narratives around what counts as valuable knowledge for the field. In contrast, the theoretical contradictions and political contexts of countries in the south have generated exciting problems that make visible important international developments currently blind to the north. Diversification and the relations between play and learning were central problems identified in the analysis. From an international perspective, the maturity of early childhood research rests on what is currently evolving in the majority world and not those of the well-resourced north. This chapter seeks to make a scholarly contribution by making visible an analysis of the activities of countries in the north and south with a view to theorising new perspec-

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tives on what constitutes a more balanced view of international research in early childhood education.

Keywords Theories • Research • Global perspective • Regional advances • Play and learning • Diversity

1.1 Introduction

This handbook brings together material from renowned scholars and emerging researchers who have been instrumental in generating scholarly knowledge in the field of early childhood education and development across the globe. In particular, this handbook captures both the long-standing well-known contributions made by leading early childhood researchers, but also those who are currently paving new directions and giving new insights into what may be possible for the future. This latter group may not be as well known due to their geographical location (e.g. northern vs. southern continent) or their relatively recent emergence within the field of early childhood education. However, their works have made a significant contribution to this handbook. As such, the content of this handbook gives a broader north-south representation than is usually achieved, and as a result, the content of the handbook is much more representative of research within the global context of early childhood education. It was an important and deliberate quest of the international editors to give a greater voice to those regions of the world that have been traditionally under-represented and through this to balance the presentations of knowledge and knowledge construction of research in early childhood education.

To achieve the goals of this handbook, in this first volume are presented current and emerging theoretical perspectives that have shaped or are shaping research in early childhood education and development around the globe. Conceptualising the theories that guide early childhood education within regions, countries and even local systems has been and continues to be under critique and in the process of development as the field of early childhood education has itself become more knowledgeable and politically active (see Taylor, Chap. 5, this volume). Through the continued deepening of its theoretical base, the field of early childhood education has moved beyond a representation of a singular view of child development that has privileged some cultural groups (see Göncü and Howes – Chap. 34, this volume), colonised others (see Martin, Chap. 4, this volume) or made invisible key cultural practices in particular communities (see Taylor, Chap. 5, this volume). An analysis of trends in how theories have been used in early childhood education more broadly is presented in this chapter in order to answer the question of: What and how are theories being used to guide the ways researchers conceptualise children's development and the associated pedagogical practices and political imperatives which frame how and what kinds of studies are undertaken in early childhood education?

In order to better understand the methodologies and methods that researchers are drawing upon to design their research to solve pressing problems for the field of early childhood education and development, this first chapter also examines how

researchers have conceptualised their research activities. Specifically, this chapter examines methodological trends across the globe in order to answer the dialectical question: What are the dominant methodological approaches to research being used, and how are the associated study designs framed to answer the pressing problems posed by the field of early childhood education?

Finally, the contemporary research and evidence for the field of early childhood education is presented from regions around the world, giving a global perspective on what is being researched and what are the problems that the regions and overall field are grapping with and finally giving a snapshot of evidence across global contexts. An analysis of these emerging trends follows in the first part of this chapter in order to answer the question: What are the key problems that are being researched within the field of early childhood education?

Together, these questions frame this introductory chapter. The intent of this first chapter is to give insights into research at the global level for early childhood education and to identify trends, gaps and directions for the field across both northern and southern continents. This first chapter goes beyond simply introducing the content of Volume 1 of the handbook, but rather seeks to give new insights into scholarship through the critique of theories, methodologies and research activity of the field across both north and south countries.

In order to ensure a balance between the northern and southern hemispheres, the specific regions that are presented in this handbook cover Western Europe and the UK, Eastern Europe, the Australasian region and the South Pacific, Asia, Africa, North America, South America and the Nordic region. Missing from the handbook are the Middle East and a comprehensive account of the African region. Similarly, key countries from each of the regions are also missing. As such, the theoretical analysis that follows in this chapter should be considered with this major limitation in mind. It is anticipated that updated versions of this handbook will redress this situation and will ensure an even broader representation of scholars from communities currently not represented.

1.2 Analytical Framework

In order to better understand how researchers in early childhood education across the countries have reported their work and conceptualised their activities theoretically and methodologically, we drew upon Hedegaard's (2014) model of personal, institutional and societal conditions as an analytical tool. For our analysis, we interpreted these concepts to be relational. Hedegaard's (2014) concepts are framed as a relational and dynamic model (Table 1.1). For example, how a country or region predominantly researches its problems is directly related to the kinds of research questions being posed and the ways in which the study design is conceptualised and implemented.

At the societal level, we took this to mean what a country or region identified as its pressing research needs and or present research activities. We also included in this what theoretical tools were drawn upon to inform research and how researchers predominantly conducted their studies within their country or region. At the institutional

Table 1.1 Personal, institutional and societal perspectives (Hedegaard 2014: 192)

Structure	Process	Dynamic
Society	Societal tradition and value demands	Societal conditions
Institution	Practice demands for type of participation	Value-laden goals/objectives/motives
Activity setting	Social situation demands on both child and others	Situated motivation/engagement/interests
Person	Reciprocal demands for concrete ways of participation	Motive orientation/intention

level, we conceptualised this as the practices that are dominating the early childhood settings, what values and goals mattered and how activity settings were predominantly organised for regions. At the personal level, we took this concept to focus on the intentions and orientations of the researcher or practitioners within regions. What did they participate in and what demands were they experiencing within their countries, and what did this say collectively about early childhood education for the regions?

We used these concepts as categories in our document analysis (Peers, Chap. 8, this volume) to identify research patterns across countries (societal level) and to examine how early childhood practices were being documented and analysed (institutional level) and what specific theories and concepts researchers were drawing upon to inform their work (personal level). The outcomes of this analysis are presented under three research headings:

What are the key problems that are being researched within the field of early childhood education?

What are the dominant methodological approaches and methods for researching children's learning and development?

What theories are being used to guide research and conceptualise children's learning and development?

The outcomes of this analysis are discussed in turn, with a special focus on examining the demands and research needs in the context of societal values and institutional conditions within and across regions.

1.3 Current Trends in Research Need Methods and Theories Guiding Early Childhood Education Across Regions

This section begins by examining each of the regions, detailing key research needs, dominant approaches and the main theories used. In the section that follows, a general discussion of this analysis can be found, where new insights into the key problems being researched globally are discussed. We examine in turn the Western European and the UK regions, the Eastern European region, the Australasian region,

the Asian region, the North American region, the Latin American region and finally the Nordic region.

What is evident in the snapshot of research captured in the regions of Western Europe and the UK is that detailed evidence of a link between quality early childhood education and care and increased outcomes for children is evident for the region (e.g. Sylva et al. 2010). European and UK research has collectively shown the benefits of quality early childhood education for children's academic success in school, and this has contributed to policy attention now being directed to the most disadvantaged children, including the growing numbers of refugee children arriving in Western European countries and the UK (Whitebread, Chap. 13, this volume). As a result of this societal need, research attention has focused on better understanding the implications of the policy imperative to begin formal schooling earlier (Bingham and Whitebread, Chap. 15, this volume), resulting in a renaissance of research into play, with new directions centred on executive functioning and self-regulation.

The rise in schoolification of early childhood education (Bingham and Whitebread, Chap. 15, this volume) has meant that new kinds of research are needed and the revisiting of existing research that examines the pedagogical practices that yield the best outcomes for children, both immediately on entering school, but also long term (Soler and Flecha, Chap. 16, this volume). Attention is being directed back to long-standing evidence from neuroscience (Sinclaire-Harding et al. Chap. 14, this volume), as well as Western European and UK research into interventions that focus on cognitive interactions where more adult guidance and enhanced peer interaction are featured (Soler and Flecha), but in contexts that promote playful encounters and support children's emotional development (Whitebread). The research directions appear to be responsive to the policy changes for starting school earlier and the increasing need by governments to show academic outcomes for the increased investments made in early childhood education. As will be shown further below, this issue has also recently arisen in the Nordic region and has been a long-standing problem in the North American region.

What is also evident in the Western European and UK region is that there is growing attention on formulating new ways of supporting the professionalisation of the field, where increasingly greater demands are being made on staff to structure their pedagogical approaches towards a more formal delivery of curriculum (Pirard et al., Chap. 17, this volume). This lies in direct contrast with the Asian region where teachers are now expected to know how to introduce play-based programmes (Pan et al., Chap. 28, this volume). The focus of best practice for supporting professionals as they deal with new practices is centred on the 'competent system' (Pirard et al.). This approach refers to various levels of responsibility that collectively supports new curricula, new practices and the individuals within the system. Changing societal demands for greater outcomes in many northern continents have resulted in changes in institutional practices, such as starting school earlier, which have impact upon the activity settings experienced by young children in Western European and UK preschools. Formal learning at a younger age is a different personal experience to a play-based curriculum. These new demands upon children are creating new research needs for better understanding the relations between play and learning for the very young child in the Western European and UK regions (see Table 1.2).

Table 1.2 Research themes in early childhood education for Western Europe and the UK

Structure	Processes across regions	Dynamic conditions across regions	Research needs
Societies are prosperous – focus on improving the outcomes for disadvantaged children and their families	Need for greater outcomes for disadvantaged children; accountability	Increasing pressure to formalise play-based curriculum; increasing investment in professional development programs	Play research that focuses on learning outcomes; Research on valid and reliable outcome assessments
Institutional practices	Starting school earlier	Goal to increase learning outcomes	Research into pedagogical practices that support greatest learning outcomes
Activity setting	Different pedagogical practices being expected	Curriculum goals may not be suitable for younger children	Research into self-regulation and emotional development in the context of early schooling
Personal perspective	New demands on children and new demands upon staff	Learning how to participate in the new practices	Research into how to support the new professional practices of staff

This new need in the Western European and UK regions is in contrast with the Eastern European region as is shown in Table 1.3 below, where play has always been a key area of research. What is different is that the play research in the Eastern European region has centred on the development of play itself. It is argued that it is through studying play periodisation that insights into the practices which support children's development can be determined. This is not to say learning has not been featured in the context of researching play, but because play is key to the early childhood period, research attention has been on this leading activity (Veresov et al., Chap. 18, this volume). As such, the focus of play research in the Eastern European region has been primarily on development, where researchers have been interested to know more about how the leading activity of play becomes the leading activity for learning. This is a very different problem framing and theoretical conception than what is evident in the Western European and UK regions where schoolification is being contested. However, synergies are also evident through the second line of inquiry that has dominated the research landscape in Eastern Europe, where the study of cognition has centred on learning, perception, imitation and cognition. The outcomes of this research have had impact upon pedagogy and curriculum development across the Eastern European region, with some influence in the USA (Tools of the mind; see Vol 2) and the UK (Key to learning, Dolya 2010) but less is known about the impact of this curriculum activity in Eastern Europe as limited research

Table 1.3 Research themes in early childhood education for Eastern Europe

Structure	Processes across regions	Dynamic conditions across regions	Research needs
Society – preschool education is established in 1960 and supported by psychological research (former USSR). Pedagogical Centre 'Experiment' (Latvia)	The study of children's development	The need to support families, particularly disadvantaged and high-need families	The study of a child's development of his personality – motive development, role of family, social context of development, emotional development and the study of children's play
Institution	State-funded research centres	Research-led and theoretically informed curriculum development	The study of cognitive development – learning, perception, imitation and cognition, methods of assessment
Activity setting	Psychologists work together with educators	'From birth to school' (Salmina and Veraksa) and the 'Golden Key Schools' (Kravtsova; see Volume 2) in Russia and the Elkonin-Davydov preschool curriculum in Latvia (Zeltserman et al.); Developmental Education in the Netherlands	
Personal perspective	Reciprocal demands for concrete ways of participating	Ongoing participation in the practices of the established curriculum	

attention appears to be directed to early childhood practices from this perspective (Salmina and Veraksa, Chap. 19, this volume).

State-funded and state-administered research centres in the former USSR have concentrated their activities around these two lines of inquiry – the study of a child's personality and a study of cognitive development. These early research activities with problems focused on personality and cognition have provided the foundation of an early childhood education system that is informed by psychological research, with current early childhood educational programmes informed by this foundational work, such as 'From birth to school' (Salmina and Veraksa) and the 'Golden Key Schools' (Kravtsova, Vol 2) in Russia and the Elkonin-Davydov preschool

Table 1.4 Research themes in early childhood education for Australasian region

Structure	Processes across regions	Dynamic conditions across regions	Research needs
Societies are culturally diverse and research evidence is specific to a community	Need for greater evidence for child outcomes in diverse contexts	Goal to increase funding for research in early childhood education in regions/countries	Build research infrastructure with a focus on outcomes for children for specific countries, rather than using research evidence from culturally different countries and contexts
Institutional practices	Building research capacity and competence	Increasing need to build research capacity and to fund research activity locally across a range of research areas	Diversity of research problems across diverse settings and cultural communities, where new research practices need to be conceptualised
Activity setting	Diversity of research settings	Diversity of research activity	Need for different approaches to researching in culturally diverse contexts
Personal perspective	New demands on staff to conceptualise problems for diverse settings and to build research competence to address research needs	Learning how to generate and work with evidence across groups	Building research maturity

curriculum in Latvia (Zeltserman et al., Chap. 21, this volume). These programmes are discussed in more detail in Volume 2 of this handbook. What is interesting to note is that there is a theoretical alignment between the research problems, the research activities and the resultant curriculum development, where the nature of child-teacher interactions is specifically theorised using concepts from cultural-historical theory. In contrast, the Western European and UK regions have a diversity of views on play and curriculum. Only recently have views on development moved from a maturational view of development, as noted by Sinclaire-Harding et al. (Chap. 14, this volume) when reviewing the neuroscience literature for the early childhood period in opposition to a maturational view of development and who state that 'young children do not simply follow fixed developmental trajectories'. Whilst Eastern Europe has used cultural-historical theory and activity theory for quite some time, Western European and UK regions are still building this theoretical foundation to support research and in turn using these theories to support the design of new pedagogical practices for the field.

In line with the context of the current research and political imperatives of the Western European and the UK region, the Australasian region has also concentrated

upon increased outcomes for children (see Table 1.4). However, the reasons are different. Rather than researching disadvantaged groups, the Australasian region has concentrated upon researching for improved outcomes in the context of diversity.

Diversity is the key societal condition that is foregrounded in the region (Bone, Chap. 22, this volume) and a topic of research that has endured over time, but in different ways. The corresponding research needs of the region are variable due to the diversity of cultural groups both within countries, but also across countries. As such, the specific countries that are included under the regional heading of Australasia and Asia more broadly (see below) are so culturally different, that it is difficult to draw out themes. There is a diversity in population numbers – Bangladesh at 153 million and Brunei at 415 thousand; there is diversity in terms of cultures both born to the country and those who have immigrated to the country; there is also diversity in the history of research for the region. However, what is common is the development of research activity in each country and therefore across the region in terms of research capacity and competency for investigating early childhood education. For some countries, such as Australia and New Zealand, systematic development of research competency has taken place over the past 40 years to support the maturation of research in the field of early childhood education (Nuttall and Grieshaber, Chap. 23, this volume). Whilst in other countries, political considerations and resources have not allowed for systemic development of research capacity, but despite these challenges, impressive research centres have been established (Mohamad et al., Chap. 25; Sikder and Banu, Chap. 26, this volume). Research infrastructure has a bearing on the breadth and depth of research possibilities in any region.

Political imperatives, such as the unification of higher education into one sector in Australia, or the national research and development project tasked to produce Brunei-specific curriculum, were important for ensuring that research becomes part of the work of early childhood academics, giving access to research infrastructure and the necessary funds so that research activity can be directed to early childhood education research. Similarly, international attention on the importance of early childhood education for the later achievements of children and outcomes for a society generally have generated a research need for more localised research within the region, as we see in Bangladesh (Sikder and Banu), Brunei (Mohamad et al., Chap. 25, this volume), New Zealand (Smith and May, Chap. 24, this volume) and Australia (Nuttall and Gieshaber).

In line with the development of research capacity within the Australasian region has been a focus on research that has mirrored the institutional and societal changes, such as quality reform (Nuttall and Grieshaber), or the preparation of new curriculum (Mohamad et al.). Research has increasingly shaped the policy agenda in some countries (Smith and May), where investigations into the lives and experiences of children have shaped the policies and practices of childcare and the development of curriculum. For example, this can be seen in New Zealand with the establishment of Te Kohanga, preschools for Maori children, and later with government demands on the field for hard data (Smith and May) in order to make more informed decisions about funding distribution and quality provision for early childhood education. These conflictual contexts between those who work in the field of early childhood

education and those who are developing policy and directing funds have been hard-won battles, but when evidence is presented, structural and institutional change is much faster and more appropriately framed. In both the New Zealand and Australian contexts, the tables are now turned, and policy developers and researchers work together to make informed decisions primarily based on research evidence. In order contexts, battles continue, as noted by Mohamad et al. when describing funding and provision of early childhood services and research in Brunei as a Cinderella complex, where ‘policies and programs at this level are considered relatively unimportant in comparison to the more important business of formal, outcomes-oriented teaching and learning that takes place in later school life’. These battles in Brunei are only too familiar to neighbouring countries (Sikder and Banu), who have also had these very same agendas and political imperatives to contend with. However, recent government initiatives in Brunei show that funding is now finally being directed to early childhood education research, not only supporting localised research needs but building research capacity in Brunei.

In the context of Brunei, research has centred on preserving the identity of early childhood education and pushing against the pressure to adopt more formalised teaching and learning approaches, as is currently still of concern in Bangladesh (Sikder and Banu) and is also evident in the Western European and UK regions where schoolification was introduced as a term to describe these challenges. However, in the Australian and New Zealand context, social justice, disadvantage and inclusion have been key themes for research, alongside of play, leadership and policy, professionalism, transitions to school, literacy and emotion regulation, the latter reflecting the diversity mentioned earlier, rather than a clustering of any particular research. Smith and May have alluded to this as sporadic research initiated by individuals, and as Sikder and Banu note for Bangladesh, ‘Some discrete research studies are taken by academics, individuals, service providers; however, no systematic approach is taken to compile a research depository or undertaking applied research to see what works’. However, in other countries, government-funded research has consistently focused on longitudinal research into both short- and long-term outcomes for children attending quality early childhood settings (Smith and May), where there has been a need for localised evidence for supporting the value of investing in high-quality early childhood education. This is in line with international trends in research discussed for the Western European and UK regions and as is evident for Brunei in the Australasian region. However, what is particularly important for the research needs of the Australasian region is for more localised evidence of country-specific and system-specific programmes that support outcomes for children in diverse settings, rather than relying upon research from Western European and North American context to inform the Australasian region. As noted by Mohamad et al., ‘there is a need in Brunei to build contextually-appropriate, “high quality” early childhood education and care programmes’.

Interestingly, the Australasian region has drawn upon a broad range of theories to inform curriculum development, with greater attention being given to sociocultural or cultural-historical theory in New Zealand and a breadth of different theories being privileged in Australia. Bangladesh and Brunei are both still working towards the development of new curricula, but little discussion has emerged in the literature

on which theories will be or have been used for curriculum development. In terms of methodology, the Australasian region has featured children as researchers, mixed methods, visual methodologies, quantitative research, action research, longitudinal research, interviews, surveys and a significant amount of case study research. Research approaches in Bangladesh have tended to be located mostly in the quantitative domain, where surveys and interviews have featured.

In the handbook are two countries specifically represented for the Asian region. They are China and Singapore. The former is a huge continent, whilst the latter is an island that is significantly smaller, with correspondingly different populations and research needs. However, like the Australasian region, they have huge diversity in their populations, and this has also been a focus of research attention for both countries. In many ways, these two countries and the Australasian region of Australia, Bangladesh, Brunei and New Zealand could have been brought together as one in the handbook. Many other countries did not participate in the handbook for these two regions, and this limitation should be kept in mind when considering the studies reported in this section of the handbook and the overviews given. As such, the general features of China and Singapore will be discussed in turn and links made back to the Australasian region.

In China a centralised system of government has provided policy directions for early childhood education and care, but funding to realise the goals is the responsibility of local provinces. This contradiction has generated a great deal of disparity in the quality and provision of early childhood education across the country, despite their policy reform agenda. As such, equity and quality provision have emerged as important societal needs, with research concentrating on illuminating the life conditions of children in different institutions and the dominant beliefs, practices and resources available to teachers (Pan et al., Chap. 28, this volume). As with Brunei, the Cinderella effect has also been noted in China, where early childhood education has not always been valued, despite central reforms that recognise this period of education as important for children's overall development. This has also been noted in Singapore, where early childhood education is still primarily viewed as a child-minding industry suitable for women and requires little professional education.

Societal beliefs and family values surrounding improving one's social status and to advance Ming-Fen through the traditional practice of examinations are still strong in China. Teachers and parents continue to 'highlight knowledge teaching and skills training, and treat play as a barrier for efficient learning' (Pan et al.). Academically oriented practices for preschool children have also been noted in Singapore, where families expect academic achievement so that they might be more successful at school and thereby do better in the high-stakes examinations for all 12-year-olds at the end of primary school. The contradiction in China, as noted by Pan et al., is between cultural transmission and cultural creation, between Western and Eastern cultures and between traditional values and values for pursuing the transformation of modern society, from planned to a market-driven economy. Lim also notes similar contradictions in the Singaporean context where Confucian ideals are still professed, but where the government has focused on building human capital. Lim draws attention to this societal value, as professed by the government that investing in its people as the only natural resource of the country is critical for the success of the economy. Human capital development and a strong belief in education by its

Table 1.5 Research themes in early childhood education for Asian region

Structure	Processes across regions	Dynamic conditions across regions	Research needs
Societies – valuing and building early childhood system	Early childhood education reforms	Researching outcomes of reforms across diverse contexts (China) and increasing localised research on impact of different programmes (Singapore)	Better understanding the outcomes of policy reforms and increased infrastructure in terms of equity
Institutional practices	Building early childhood education competence	Increased resource needs and changing pedagogical practices for greater equity	Need for understanding different pedagogical approaches in diverse contexts
Activity setting	New pedagogical practices – play centres	Diversity of contexts	Investigating child-adult interactions in play-based settings
Personal perspective	New demands to be child centred	Dealing with contradictions between traditional beliefs and ideals expressed through the reforms	Investigating teacher beliefs and practices

citizens have ensured that despite early childhood education not being compulsory, 97 % of children attend 1 year of early years of education (Lim, Chap. 30, this volume). Like China, families in Singapore schedule children's after-school activities, usually through tuition centres, which are focused on learning and which Lim refers to as the 'shadow education system'. She argues that the costly tuition centres alongside of family beliefs for promoting rote learning continue to promote the divide between rich and poor children.

China has a longer tradition of undertaking research specifically focused on the needs of its provinces (as summarised in Table 1.5), rather than relying solely upon research evidence from outside of China. For instance, research in China has examined the development of numeracy and literacy through brain imaging techniques specifically in relation to the cultural context of learners, such as Chinese character awareness. Singapore has a very short history of research, much of which is individual and nearly all of which has been done through the National Institute of Education. The research has focused on teacher beliefs, teaching practices and transition to primary school. Whilst research into child development has been ongoing, very little early childhood education research has been evident in Singapore.

Innovations in methodological approaches, such as children being coresearchers, are also evident in both Singapore and China. For example, in China the experiences of children in play-based programmes in their kindergartens are studied from the children's perspective in order to gain greater insights into how curriculum reform is being implemented (Pan et al.). These methodological innovations mirror the research activities also found in the Western European and the UK regions, the Nordic region and the Australasian region, where children as coresearchers has gained momentum over time.

At the societal level concerns for child rights, the questioning of a passive learning pedagogy in the context of a collectivist orientation, where group goals are prioritised over individual goals, has pushed forward new policy imperatives which ask teachers in kindergartens to value individual characteristics of children and to listen to children's perspectives. Play and the opportunity for children to 'make their own plan and choice' have emerged in policy as a 'political breakthrough' for supporting the development of new institutional practices in the kindergarten (Pan et al.). These new practices have generated research activity that has examined teacher beliefs and practices associated with different concepts and pedagogical approaches that support these new ideals. Particular attention has been directed to child-teacher interactions for supporting a more child-centred approach rather than teacher-oriented programmes. Similarly, the layout and availability of play resources and play areas and time have been a subject of study in China. Research into how a play-based curriculum is being implemented in different parts of China, in the context of equity and equality of resourcing at the local level, has been an important topic of research. Teacher pay and conditions across China have also been studied so as to gain a more holistic picture of the reforms in the context of beliefs, practices, resourcing and management of early childhood education at the local level.

The growth of the private sector for delivering kindergarten education has also been the dominant practice in Singapore. However, in order to reduce the disparity between children from rich and poor communities, the government has increased the number of supported childcare places through increasing the number of childcare operators in Singapore. In addition, improving teacher practices and instituting curriculum reforms have been implemented through voluntary quality assurance processes.

In line with the Australasian region, both China and Singapore have also concentrated on research that explores diversity, not just in terms of the implementation of reforms and government guidelines, but also through the close study of the development of children from different families, such as children from migrant worker families or from economically disadvantaged families, in order to better understand their preparedness for schooling. In Singapore much of this work has been supported by theories which are informed primarily by the USA on development – developmentally appropriate practice and both the cognitive and maturational interpretations of Piaget's theory. China has grappled with the influence of theories from the former USSR and educational approaches imported from Europe, such as the work of Maria Montessori and Reggio Emilia, but in the context of Confucian values as mentioned previously.

In the African region, only two chapters can be found in the handbook and this focuses only on Ghana and Sierra Leone. Subsequent revisions of the handbook will hopefully address this serious omission, but the title of the African region is kept so as to signal the significance of this region and the future need to include chapters from all of the continents, including the Middle East. The analysis that follows will only reference Ghana and Sierra Leone, rather than make any claims about the African region (Table 1.6).

In line with the Asia and Australasian regions, Ghana and Sierra Leone too are faced with the Cinderella effect. Even though the government has legislated for free early childhood education, in order to signal the importance of this period of educa-

Table 1.6 Research themes in early childhood education for Ghana and Sierra Leone

Structure	Processes across region	Dynamic conditions across regions	Research needs
Societal values: equity gaps and overcoming intergenerational poverty	Legislation of free early childhood education in context of poor infrastructure	Provision and streamlining of high-quality early childhood education services in order to close the equity gap	Need for building research infrastructure and capacity
			Investigations into what is quality early childhood education for Ghana
Institutional practices	Majority of centres are managed by staff without formal early childhood education qualification	Increasing access to early childhood education – free meals for children attending preschool	How to increase school retention?
			How to increase knowledge of early childhood education?
Activity setting	Limited play spaces	Rote learning in context of ratio of 1:50	Ways to increase parental awareness of the benefits of children attending quality early childhood education services
Personal perspective	Moving from passive to active child-teacher engagement	Teacher knowledge of child-centred practices	

tion, few families send their children to preschool. According to Agbenyega (Chap. 32, this volume), parents do not value early childhood education, and resourcing constraints mean that what is experienced is often in contexts of poor physical building and resourcing conditions, large group sizes and a formalised teacher-centred pedagogy with a correspondingly passive role for the child.

Localised research into investigating what quality early childhood education might be like for Ghana and Sierra Leone has not yet been funded. Mostly, efforts are focused on improving practices, such as how to increase retention rates of children. Wider problems of teacher knowledge of early childhood education, implementation of new curriculum and improved pedagogical practices based on localised research are yet to be instituted and are currently beyond what governments can resource. Curriculum in Ghana and Sierra Leone has, like Singapore, been informed by maturational views on development, notably Piaget's writings, but also it has been strongly influenced by the USA through the perspective of developmentally appropriate practice. However, Agbenyega, one of the leading scholars undertaking research in Ghana, and Eleni Anthinodorou in Sierra Leone both use critical theory, notably the work of Pierre Bourdieu, in order to make visible the challenges the field of early childhood education currently faces in both countries.

In contrast to Ghana, the North American region has a long history of research activity (Göncü and Howes, Chap. 34, this volume), having exported the findings

from many longitudinal studies of children's development associated with particular education programmes to many other countries to inform practices there (see Agbenyega) and to build evidence for the importance of early childhood education (see Whitebread, Chap. 13, this volume). Whilst there are many methodological debates surrounding the evidence (e.g. Peers, Chap. 8, this volume), many countries have been inspired by these well-resourced studies, but as we have discussed previously, regions in the south have also sought to undertake their own country-specific research.

Interestingly, as Göncü and Howes argue, 'while wealthy and powerful players in the global sense, [Canada and United States] are not global models for early childhood education systems'. The problems faced, focus directly on introducing formal learning to very young children, fragmented services and underfunded and of dubious quality early childhood education are evident (Göncü and Howes). Consequently, the research needs in the USA and Canada appear to be aligned with the problems faced in European and UK regions, another rich player on the world stage.

Howe et al. note the importance of play as reflected in position statements in Canada, the relations between play and learning presented through the development of early childhood frameworks across the provinces of Canada, investment in expanding services and importantly integrating care and education; however, 'very limited empirically-based research examining the quality of ECEC programs' is evident (Howe et al., Chap. 35, this volume). Hong and Udommana (Chap. 35, this volume) also note similar imperatives in the USA with concerns for the development of a more cohesive system so that quality rating and improvement systems can be put in place. With increased numbers of children attending early childhood programmes, particularly from bilingual and culturally diverse families, research interest has centred on determining what is quality provision for early childhood education for diverse populations and what school readiness means in this context (Hong and Udommana).

What is evident in the North American region is that not only has there been an expansive amount of research, but this research activity is long-standing. With research maturity, a more nuanced approach to researching in early childhood education is possible. That is, significantly different kinds of research problems are expressed, such as re-examining attachment theory through research into attachment relationships for differing cultural communities or how schools make adjustments to practices so that other 'ways of doing' seen in homes that are different to schools are considered and practised (Göncü and Howes). For instance, Göncü and Howes argue that 'parent involvement has often been conceptualized from the perspective of middle class researchers. It has been often the case that low income parents whose ways of involvement were not captured in the work of middle class researchers were labeled as uninvolved'. Critiques of this research show that new models of parent involvement are urgently needed and that different ways of theorising this area are more likely to support the 'many ways of doing things'. This is urgently needed in both the USA (Clifford and Humphries) and Canada (Hong and Udommana).

At this point in time, researchers, curriculum developers and teachers have been strongly influenced by the long-standing concept of developmentally appropriate

practice for informing child development. However, there is also a growing number of researchers, such as those published in this handbook in the North American region, who have been informed by sociocultural theory or, as is discussed in the European regions, cultural-historical theory. Understanding the many ways of doing things, as discussed above, has drawn heavily from sociocultural theory. Much of the work being done in early childhood education research and curriculum practices is now being informed by the work of Bodrova and Leong, Göncü, Howes and many others, including those who have been involved at some point in research supported through the lab of Barbara Rogoff in California, where sociocultural theory frames research and where culturally diverse communities participate in research activity.

In terms of the research methodologies being primarily drawn upon, a strong quantitative approach has been adopted but methodologies are variously theorised. Research has taken place in a context which has seen a long-standing push for both random controlled trials and intervention research. This has meant that early childhood education, as apposed to research in developmental psychology, has tended to follow traditional psychological approaches for framing research where particular types of quantitative research have dominated. Important work has been carried out, looking more broadly at how knowledge can be generated, and has produced other ways of researching, as noted earlier in the work of Barbara Rogoff, Suzanne Gaskins and Artin Göncü. In these studies, the cultural traditions of communities are also captured in the research, such as the play research done by Susanne Gaskins who draws upon a more anthropological approach to undertaking research. Many of these scholars feature in the handbook, and as such, this should be kept in mind when reviewing the results of this analysis for the North American region (see Table 1.7).

Concern for a cognitively oriented curriculum that focuses on school readiness, rather than a more holistic view of children's development in North American region, is also an issue for Latin America. In this region, the overriding concerns have been the lack of services available to families, the quality of the early childhood education services and the overall living conditions of families. Cultural diversity has also been noted within and across countries in the region, and the political will to better support equity and access to early childhood education for all families has been a key issue. This is consistent with many regions, particularly the Australasian, Asian, and Western European regions (see Whitebread Chap. 13, this volume; Bingham and Whitebread Chap. 15, this volume), where working effectively with diversity is a central problem and an important research need.

In contrast to all the regions, Latin America generally is dealing with an additional complexity of violence and issues of security. As noted by Mejia-Arauz and Quinones (Chap. 38, this volume), 'in Colombia there is a clear preoccupation for children's development in the context of guerrilla warfare and forced displacement, other countries in Latin America that have severe security issues due to the narcotic conflict'. What appears to be central is the well-being of children and their families, and in this context, research into social and emotional well-being of children is important. Further, the expansion of pedagogy from a predominantly cognitive orientation to a more play-based context is seen as an important part of promoting better life conditions for children in Latin America. In contrast to the other regions,

Table 1.7 Research themes in early childhood education for North American region

Structure	Processes across regions	Dynamic conditions across regions	Research needs
Societies – expanding and integrating early childhood systems to support diverse populations	Monitoring and assessing effectiveness of changes over time	Researching outcomes of policy initiatives	Evidenced-based services: researching quality improvement for developmental outcomes and effectiveness of the integration of services
Institutional practices	Assessment practices for determining quality provision of early childhood education for broader populations	Identification of other ways of doing things	Investigating in diverse contexts what family involvement means, identifying new pedagogical practices to support diverse learners and determining what school readiness means
Activity setting	Family-home relations	Diversity of contexts	
Personal perspective	Adult-child interactions that support diversity	Demands of contesting an expected White middle-class orientation	Investigating child-adult interactions in diverse play-based settings

Mejia-Arauz and Quinones draw attention to the lack of research and discussion on play as a valuable pedagogical practice for early childhood education and the need for greater attention being directed to the birth to 3-year-olds. These are gaps identified by Mejia-Arauz and Quinones and are in need of research for the Latin American region (see Table 1.8).

Methodological approaches in the Latin American context have primarily followed a quantitative tradition; however, innovative work is being done by Mejia-Arauz following the approaches developed in the lab of Barbara Rogoff in California. Culturally informed approaches which draw upon video ethnography, but which closely examine results in relation to both case study approaches and more quantitative techniques, are on the rise. These latter techniques support the cultural questions being asked in relation to the nature of diverse learners and culturally diverse communities that make up the Latin American region. Many of the newer approaches to research have been informed by sociocultural theory. However, much of the cognitively focused curriculum in place is informed by developmentally appropriate practice, and the pedagogical approaches being adopted are still informed by behaviourism (Quinones Goytortua 2013).

In contrast to all the other regions, the Nordic region places early childhood education as not just the responsibility of the individual family, but as the responsibility of the state where the democratic principles of supporting an equal society are foregrounded. This means that access to heavily subsidised early childhood education

Table 1.8 Research themes in early childhood education for the Latin American region

Structure	Processes across regions	Dynamic conditions across regions	Research needs
Societies – violent and unsafe societal conditions	An overly cognitively oriented curriculum	Foregrounding the emotional well-being of children in early childhood settings	Research into the emotional well-being of children
Institutional practices	New pedagogical practices that focus on play and emotional well-being of culturally diverse groups of children	Identification of broader range of curriculum goals and practices to support the well-being of all children	Investigating new pedagogical practices that can support diverse learners in more playful learning environments
Activity setting	Need for safe playful learning environments	Active learning contexts that feel safe	
Personal perspective	Adult-child interactions that support emotional well-being of children	Demands of unsafe everyday life conditions and how to create learning environments to support security and well-being	Investigating how to support emotional well-being of children through the introduction of play-based programmes

services is available in the Nordic countries, and most children spend their lives from 2 to 5 years in some form of early childhood education programme, with fully paid maternity leave, for example, from 8 months in Demark to 16 months in Sweden. Across the Nordic region, the development of early childhood education has been supported through a vision of democracy that gave opportunities for women to work, but this value is also embedded in the curriculum for young children, through play-based programmes which promote children's autonomy and capacity to make choices and decisions for themselves about what they learn (Emilson and Johanson, Chap. 47, this volume). As noted by Broström et al. (Chap. 45, this volume), 'The democratic person is a political subject, with knowledge and skills, and a desire to make use of these through transformative practice. This is a person who has knowledge, skills and a will to realize transformation though action, summarized in the concept of "action competence"'.

On most measures and ranking systems for children's education and development, the Nordic countries have tended to be ranked high or even the highest among other countries. A long tradition of a play-based programme, which integrates the upbringing and education of young children, can be seen in the Nordic region, with curricula that reflect democratic values. However, in more recent times, curricula have also included more academic goals associated with discipline areas such as literacy, numeracy and science. This development has corresponded with the movement of ministerial responsibility for early childhood education from welfare or social services to education.

It is argued that in the Nordic region, research attention needs to be directed towards investigating the outcomes of the 'trend toward a more content- and goal-

Table 1.9 Research themes in early childhood education for the Nordic region

Structure	Processes across regions	Dynamic conditions across regions	Research needs
Societies – highly ranked early childhood education	Trends towards a knowledge-oriented curriculum in a democratic curriculum context	Goal-oriented curriculum focused on discipline content areas	Investigating the outcomes of an academically oriented curriculum
Institutional practices	Relations between academic learning goals and play-based curriculum pedagogy	Implementation of curriculum that includes democratic principles and goal-oriented knowledge construction	Investigating how teachers come to understand and work with a more cognitively oriented curriculum
Activity setting	Child-formulated programme as 'action competence' in context of increasingly goal-oriented curriculum	Goal-oriented curriculum practice and child interests in a democratic value base curriculum	
Personal perspective	Negotiation between teacher and child regarding the focus of education programme	New demands upon teachers to engage in goal-oriented curriculum	Investigating the relations between democratic child action competence and goal-oriented curriculum

driven' approach to curriculum and pedagogy, in the context of play-based programmes where children are positioned as being 'involved in decisions concerning their own everyday life'. Concerns for a narrowing conception of the curriculum as a knowledge-oriented approach is counterintuitive to a holistic perspective on children's learning and development, in which the 'discourse of communication and negotiation between teacher and child concerning the education and well-being of the child, are formulated' (Bronstrom et al.). This concern is mirrored by teachers' lack of understanding regarding cognitively oriented curriculum due to the fact that this has not been a part of teacher education programmes in the past (see Table 1.9).

Methodological approaches to research in the Nordic region primarily follow qualitative case study approaches, where focus children are followed and studied using a variety of techniques, such as video ethnography. Children as coresearchers are also common. Many study designs, as well as curriculum, are primarily informed by cultural-historical or sociocultural theory. The works of Bronfenbrenner and Deleuze are still used in some contexts, and a number of research clusters have formed which drawn upon post-structuralist theories. However, Piaget's work is no longer followed. The sociology of childhood is also prominent in some research communities in the Nordic region.

1.4 What Are the Key Problems That Are Being Researched Within the Field of Early Childhood Education?

As part of the analysis, we were interested to learn how researchers within the field of early childhood education have generally framed their research problems. After analysing the content of the handbook following Hedegaard's (2012) model within each region as discussed in the previous section, we then brought the outcomes across regions together to give a collective analysis of research activity for early childhood education at an international level. The overall outcomes are summarised in Table 1.10 at the regional level and discussed further below.

Local conditions that focus on research programmes (e.g. immigration, policy environment), including historically specific traditions (e.g. Confucian philosophy), give the backdrop for the research needs that arise in each region. When brought together at the international level, the key areas of research that appear to dominate early childhood education are centred on the problem of an academically oriented curriculum. This can be viewed as a narrowing of the curriculum, where play possibilities are being reduced (north condition). This is mainly a northern hemisphere problem. This problem can also be interpreted as the opening up of curriculum from a formal discipline-based approach to increasing the possibilities for play-based curriculum with an active pedagogy for supporting learning. This is a southern hemisphere problem. As such, the predominant topic of research in early childhood education can be conceptualised as an interest in studying the relations between play and learning.

In addition to the relations between play and learning, an analysis of the overall findings identified the need for greater research evidence for child outcomes in diverse contexts. This problem is framed in the northern continents as a problem associated with disadvantage and the need to 'close the gap between the poor and the rich'. In the southern contexts (plus the research in the USA), this is conceptualised as a research problem in terms of finding the multitude of ways learning and development can be enacted in early childhood education due to the diverse cultural groups; diverse communities, geographies and languages; etc. This latter framing represents diversity in its broadest sense, whilst the former conceptualisation of diversity seeks to focus mostly on closing the gap between the advantaged and the disadvantaged. Specific diversity problems that have emerged are:

Better understanding the outcomes of policy reforms and increased infrastructure in terms of equity and quality provision (Asia)

Building research infrastructure with a focus on outcomes for diverse children for specific countries, rather than using research evidence from culturally different countries and contexts (Australasia)

Research into the emotional well-being of children potentially through play-based programmes across diverse contexts (Latin America)

In line with these research questions is the growing need for research evidence that is focused on country-specific issues, rather than drawing primarily upon research from northern countries. Research evidence, whilst generically useful, can

Table 1.10 Prevalent research themes for early childhood education

Region	Processes across regions	Dynamic conditions across regions	Research focus
Western European and the UK regions	Need for greater outcomes for disadvantaged children; need for evidence-based innovations in curriculum and asessment methods	Increasing pressure to formalise play-based curriculum	The study of play and learning, self-regulation and the associated pedagogical practices for improved child outcomes
Eastern European region	The need to support families, particularly disadvantaged and high-need families	Better understanding of children's development	The study of the development of a child's personality and the study of cognitive development
Australasian region	Need for greater research evidence of child outcomes in diverse contexts	Goal to increase funding for research in early childhood education in regions/countries	Build research infrastructure with a focus on outcomes for children for specific countries, rather than using research evidence from culturally different countries and contexts. As such, a diversity of research needs
Asian region	Need for community valuing and building of the early childhood system	Researching outcomes of reforms across diverse contexts (China) and increasing localised research on impact of different programmes (Singapore)	Better understanding the outcomes of policy reforms and increased infrastructure in terms of equity and quality provision
Ghana	Need to close the equity gaps	Provision of high-quality early childhood education that positions the child as active	Investigations into what is quality early childhood education for Ghana
North American region	Expanding and integrating early childhood systems to support diverse populations	Monitoring and assessing effectiveness of changes over time	Researching quality improvement for developmental outcomes and effectiveness of the integration of services for diverse populations
Latin American region	Violent and unsafe societal conditions	An overly cognitively oriented curriculum and the need for supporting the emotional well-being of children in early childhood settings	Research into the emotional well-being of children potentially through play-based programmes across diverse contexts
Nordic region	Trends towards a knowledge-oriented curriculum in a democratic curriculum context	Goal-oriented curriculum focused on discipline content areas	Investigating the relations between democratic child action competence and goal-oriented curriculum

never address issues of diversity and country-specific needs where contexts are completely different to those in the northern hemisphere.

1.5 What Are the Dominant Methodological Approaches and Methods for Researching Children's Learning and Development?

In this first volume of the handbook are presented methodological discussions on a variety of approaches and methods for undertaking research within the field of early childhood education. These chapters do not speak directly to regions. However, this third section of the handbook identifies methods and specific practices associated with researching early childhood education, and it offers some important critiques generally for the field of early childhood education.

One of the key methodologies and methods for researching with young children that has dominated both the northern and southern hemispheres has been co-researching with children. This approach to research was identified in the Australasian region; in the Nordic region; in the Asian region, specifically China; and in the Western European and UK regions. Alma Fleet and Deborah Harcourt (Chap. 7, this volume) give details of the variety of ways that this methodology can be realised in practice for children aged birth to 5 years. It is not surprising that this approach has emerged in the early childhood education community. The concerns for how academically oriented curriculum is being experienced by children demand a method that consults directly with children. This is also in keeping with the Nordic region, where children are routinely consulted in relation to the early childhood education programmes experienced so that their interests are foregrounded. In this context, narrative research has also gained momentum. Narrative research speaks directly to co-researching methods, but it also affords its own place in research methodologies. Narrative knowledge brings together evidence in ways that is holistic and person centred. In this handbook is a chapter which features a narrative methodology, where an example of narrative method is presented. Hakkarainen and Vuorinen (Chap. 10, this volume) showcase through a narrative methodology how play and problem solving can be investigated. Once again, the research approach adopted focuses specifically on the schoolification agenda, where a need for showing the benefits of play as a pedagogical tool is urgently required. It is in this context that the relations between play and learning are better understood for informing policy development.

Policy analysis and document research can also contribute to informing governments about the nature of play and learning. Evidence of this type of research can be seen presented through curriculum; rules governing ratios; teacher salaries, which are responsible for the care and education of children in the early period of their lives; and importantly decisions about quality assurance and measurement of quality outcomes at a system-wide level. Governments make legislative decisions

about policies that drive how care and education is managed, administrated and experienced by children and staff. Yet policy analysis and document research is an emerging research methodology in early childhood education (Peers). As with the issue of research being funded and enacted in the majority of northern countries to address research needs there, policy work has also tended to be driven in the northern continents. Powerful policy documents, such as those produced through the OECD, have both focused on informing directions for the north and developing reports for the south. Nongovernment organisations have also contributed to supporting policy directions, such as the implementation of the Global Millennium Development Goals. Peers argues that 'early childhood development is routinely treated as a factor that will contribute to a nation's future competitiveness and productivity', and it is this promise that has guided a great deal of activity in the south, despite the evidence for these claims being generated in the north. What Peers notes in his review of the document research across both north and south continents is that 'Researchers in public sector policy, such as early childhood care and education, are virtually compelled to read and contribute to studies published under the auspices of the OECD in areas such as family policy, labour market reform and the development of new statistical and technical indicators for the purposes of benchmarking quality in service provision'. These types of reports have raised concerns across both the north and south, as governments seek to benchmark against each other and contribute to world rankings on indicators of quality. Without researchers in early childhood education being a part of the policy debates, through either contributing, subverting or paralleling policy analysis and document research, then there is the danger that published reports, as an historical artefact, will continue to be 'treated as if it truthfully reflects real events, and that interpretations of the document is not complex, and does not usually lead to multiple interpretations' (Peers).

Concerns have been expressed about how to measure quality in the Western European and UK regions (Whitebread) as well as the North American regions (Göncü and Howes). Questions have been asked about how best to effectively research quality. What kinds of research methods best examine quality within diverse communities, across regions and internationally in early childhood education? Peers has warned that educational research that is based on psychological science that conceptualises the child in terms of measurable attributes focuses on universals and does not speak directly to the diversity of human experience and differing contexts and conditions of children's development. The latter is taken up explicitly by sociocultural researchers in the North American region, who worry about universals and how they inform policy decisions.

Quantitative research, with its focus on deductive methods to test theories and hypotheses, has also been used across continents as the basis of some or most of its research activity to inform policy. Only some questions can be answered using quantitative design (Harrison and Wang, Chap. 12, this volume). In early childhood education research, it is becoming evident that current 'approaches in quantitative research tend to align with a post-positivism paradigm which retains the idea of objective truth, or the existence of one reality, but warrants that the discovery of such reality is limited to a certain realm of probability. Post-positivists accept that

the theoretical frames, background knowledge and values of the research influence what is observed or measured' (Harrison and Wang). Mostly early childhood education research that draws upon quantitative approaches uses methods that focus on examining specific interventions. These studies are used as justifications for particular frameworks, curriculum approaches and importantly, measures of quality (Peers). This is primarily how early childhood education has been supported in countries in the south, where evidence generated through longitudinal quantitatively informed research from the north, particularly from the North American region and the UK region, has given directions for explaining aspects of 'the natural world through observation or experimentation and the collection of empirical (or measurable) data' (Harrison and Wang). Examples include Effective Provision of Preschool Education (Sylva et al. 2010) in the UK and Head Start Impact Study (Puma et al. 2010) in the USA.

Quantitative effects are based on correlations which when repeatedly found indicate a relationship between the occurrence of one phenomenon with another. It is through the process of comparing the scores of a substantial number of individuals on two or more constructs that results are obtained. But quantitative research on its own hides the diversity within a population (Schoonenboom, Chap. 11, this volume). Countries with diversity are interested in this diversity, as noted in the Australasian and Asian regions as being an important research need. Schoonenboom argues that what is needed in these situations is a mixed methods approach, where one reality with objective knowledge is obtained through quantitative research techniques, and multiple realities are gained through qualitative research. Schoonenboom suggests that researchers interested in diversity should incorporate the different realities where 'transformative and dialectical approach requires that researchers design for diversity, that they set up their research so that different perspectives from different realities are included'. In this interpretation of mixed methods, the pressing research needs of particular countries, such as China, who have diverse communities, require sophisticated research approaches for addressing complex problems, and mixed methods approaches would appear to make an important contribution.

Another methodology that is becoming increasingly popular is Vygotsky's cultural-historical methodology because it not only speaks directly to diversity, but if offers another perspective on how to 'measure' development. In this approach to research, both interventions and documentation of everyday life are captured and analysed so that the process of development can be determined. However, the view of child development does not follow a maturational view, but as is noted in the chapter by Fleer and Veresov, focuses on the relations between the child and the social and material context. Peers has argued that researchers in 'paediatric medicine, including psychiatric, neurological and epidemiological research, have all played an increasingly significant role in producing evidence about human development and how it can be measured'. The medical model of child development, which follows a maturational view of the child, is not relevant in early childhood educational research. The emergence of a medical model, in the context of a very different conceptualisation of the child in education, has caused some concern in many regions, both north and south. A cultural-historical methodology is the antithesis of

the medical model of research and also that of traditional psychology. Many regions have noted the research tensions between a cultural-historical conception of development and a traditional maturational view of the developing child. These contrasting models of child development continue to be problematic when assumptions are not made visible in how development in research is conceptualised.

Models of research, which are aligned closely with the medical models of researching young children and their teachers, appear to have less to say about the pressing research problems identified in this handbook. In contrast, the emerging and explanatory power of narrative methods, co-researching with children, mixed methods, post-positivist quantitative research and policy analysis and document research which includes contexts, histories and conditions have all emerged as tools that are helpful for researching the relations between play and learning in diverse contexts as has been shown as key for both the continents of the south and the north. However, as discussed previously, the framing of these problems is different, and sensitive methods that are framed to capture a cultural-historical conception of development are more likely to produce results that speak directly to each country's research needs, and this is particularly important for countries in the south. As argued by Peers in the context of policy research, 'Researchers ought to be wary of the historico-political complexities surrounding policy documents as they are generated in developing economies because many of the cultural and economic assumptions that are relevant to policy development in early childhood in a developed economy may be awkwardly or clumsily reproduced as if there were no difference between a developed and a developing economy. At the same time, since university research maybe lacking in a developing economy, policy-makers will sometimes have no alternative but to draw on the wisdom of Western sources and research as if it were automatically relevant. This is also reinforced by the mistaken perception that human development is a universal phenomenon which does not vary on the basis of cultural or economic context'.

What was evident in the south was that the maturity of the field of early childhood education research is still emerging. Both the quantity of research needed to support country-specific needs and the capacity of researchers to undertake this work are still patchy. It was identified that research activity in the southern region has either been scattered and individually undertaken, or research has been systematically done as large-scale research supported by governments. In contexts of limited resourcing, funding large-scale studies oriented directly to country-specific problems supports more evidenced-based approaches to early childhood education for a particular country or region. A second dimension for developing research maturity is the building of researcher capacity in a region. In resource-rich contexts, or regions where the importance of early childhood education is well understood in the community, funds are directed to individuals or a limited number of systematic large-scale research projects. In other regions, having access to research funds is problematic. Without access to research funds, it is difficult for a region to build research capacity and to generate research evidence for problems specific to the needs of particular communities. In the northern countries, funding for early childhood education research has a much longer tradition, and both capacity and infra-

structure appear to be in place. However, in comparison to other areas of research, the early childhood education research community has had to work hard to establish its research base and has had to advocate hard for their work to be taken seriously by the government in order to effect policy change. As noted by Peers, 'Given the late emergence of specialist early childhood educators and of corresponding programs of academic research about the practice of teaching, the cultivation of learning, and the design of curriculum and pedagogy for early years practitioners, especially by comparison with the whole field of medicine, the tension between medicine and education could not be described as a fair contest. Medicine, paediatric science, neurology and epidemiology each offer paradigms of knowledge that far outweigh the views of childcare workers in the determination of "good" policy'. The methodological chapters in this handbook address this challenge by providing strong arguments about the methods that speak directly to early childhood education research.

1.6 What Theories Are Being Used to Guide Research and Conceptualise Children's Learning and Development?

Presented in the first section in this volume of the handbook are some of the key theories and their associated concepts that have informed early childhood education research across the globe. Missing is a focus on Piaget's maturational and cognitive theory, which has influenced the rise of developmentally appropriate practice (DAP) beyond the borders of the USA. This theoretical orientation has informed constructivism, which is also missing from the handbook. Although Piaget's theory, constructivism and DAP are foundational to the North American context, and have colonised many countries in the south, this theory appears to be receding in a context in which sociocultural or cultural-historical theory has emerged. However, this has not been the case for the Eastern European region where cultural-historical theory and activity theory have always been the dominant theoretical approach (but in the context of arguing against behaviourism).

In the Eastern European region, researchers have a long tradition of drawing upon the theoretical foundations of Vygotsky and Leontiev under the name of cultural-historical theory and activity theory, respectively. What is evident is that a growing number of studies locate their study designs within the theoretical tradition of sociocultural theory, cultural-historical theory and activity theory in both the north and south continents. However, as noted above, China and some of its neighbours still struggle with the former Soviet influence and as such have not been as interested in the global focus on these theories. The essence of these theories, and their respective concepts, as discussed by Fleer and Veresov, points to how concepts from Vygotsky's work have informed over 20 years of early childhood education research in the Australasian region, the Western European and UK regions, the Latin

American region, the Nordic region and the North American region. Mostly new thinking about child development and approaches to researching child development have emerged through this work in early childhood education. However, other theories or anti-theories have also been influential in the reconceptualist movement. For instance, Taylor argues that 'Poststructuralist theories were not originally formulated or presented as theories per se. Rather they grew out of a series of ongoing and generative philosophical conversations that have travelled widely within the humanities and social science over the last fifty years or so. They effectively function as "anti-theories" – as a cumulative set of questioning interventions that provoke us to rethink the universalist truth claims of western scientific knowledge systems. The most solid thing these "troubling" poststructuralist conversations offer is a set of new conceptual tools to help us think differently' (Taylor, Chap. 5, this volume).

Taylor states that 'postcolonialization explores the constitute relationship between colonialist discourses, power and the construction of childhood within North American early childhood education'. In reviewing the early childhood literature, she notes that scholars have interrogated the 'normative and universalist assumptions of western developmental discourses'. She finds that the leading scholars of poststructuralist theory and postcolonial theory have noted how dominant discourses 'disempower, marginalize or Other children from non-western cultures while claiming to represent the interests of all children' (Africa, Chap. 5, this volume). Othering has also been taken up by those working with postcolonial theory in early childhood education. This is particularly pertinent to the north-south discussions in this handbook.

Postcolonial theory has had an impact on policy and made significant contributions to discussions surrounding knowledge construction and the colonisation and subjectification of peoples in both north and south continents where indigenous peoples have been culturally displaced (Martin, Chap. 4, this volume). The term postcolonisation suggests that the process of colonisation has ceased. Yet colonisation as the process of creating colonies in other countries, often seen as widespread across countries, results in subjugation of the home nation, often hard to see, but nevertheless impacting on the everyday lives of those who are colonised. Many have argued that this process still continues and continues to be felt. Martin, for instance, gives the example of re-naming territories with the names of the colonisers, and a process of colonisation that not only as immediate impact on peoples' everyday lives, but continues to colonise communities through its silencing and often wiping out past histories and through its obvious reminder of the colonisation process by celebrating daily the colonisers. What is important about postcolonisation is that it references an understanding of how the power of the colonisers is perpetuated. Martin argues that in the context of early childhood education, colonisation is ever present. She states that 'It seems that although the efforts to resist and thwart the normalizing effect of Western, Euro-centric theories in curriculum and teaching have garnered some traction, the same cannot be said for understanding the normalising effect inherent within early childhood education…An initial postcolonial framing shows how the field has been conditioned, where certain relationships, certain identifies and certain voices remain dominant'. She gives the examples of com-

pensatory education for low SES communities, such as head start. This is a fitting example, given how pervasive the work of the North American continent has been in the south, as discussed previously, due primarily to the lack of localised research evidence, thus making it necessary to draw upon evidence from elsewhere.

Martin argues that colonisation through early childhood education has reached ‘global proportions where a Western template has been similarly applied at national and local levels’. Further she suggests that the scientific discourse that surrounds the pathologising of early childhood education draws upon medical models of child development. Cultural-historical theory from the Eastern European region has offered one alternative view on child development to the dominant maturational models, but this too could be viewed as a new form of colonisation. What poststructuralists and postcolonalists point to is the need for localised conceptions of child development, curriculum and pedagogy. Others have also sought to build new understandings of childhood, children and development, as seen through the movement known as Childhood Studies.

Duhn (Chap. 2, this volume) states that ‘Childhood studies itself is a relatively new academic field which has emerged alongside the sociology childhood’. ‘Contributions to childhood studies have come from across disciplines’. Duhn examines the shifts in conceptualisations of childhood, critiques the idea of the global child and introduces the concept of diverse childhoods. The latter is most fitting for the regions of the south as diversity is a key area of research need and also for those working from within a sociocultural paradigm in the South American region. Duhn says, ‘Rather than thinking of childhood as a category which is being re-organised in post-industrial contexts, childhood can be considered as a discourse which constitutes and is constituted by a new economic and political order’. Childhood Studies also supports a critical view of the dominant global discourses. For instance, Duhn has noted in her critique of how the child is conceptualised locally, nationally and globally that we are now faced with the challenge of the ‘ideal of childhood’; she argues that ‘the cultural response to western nations seems to be a clinging to the ideal rather than a williness to re-imagine what globalized childhood may mean’ (Duhn).

A related and emerging field is the study of how human activity has significantly disrupted the earth’s ecology. This is known as Anthropocene and this new concept also critiques existing practices and beliefs about humanity, specifically perspectives on childhood development and progress (Payne, Chap. 6, this volume). In the handbook, Payne calls into question many dimensions of early childhood pedagogy. What Payne draws attention to specifically is the new philosophy of children, where non-anthropocentric epistemologies in education are being considered. In speaking of theory-practice and research methodologies, he suggests that there are now ‘presupposed conceptual/theoretical binaries, presumed values-hierarchical thinking, and over privileging of pedagogical perspectives about child development, cognitive development and so on’ (Payne). He argues that research and theorisation of children’s experiences of the temporal-spatial dimensions of nature as part of everyday life (home, gardens, bush, open spaces, urban, neighbourhood) are missing. Part of the new thinking put forward by Payne is the designing for body-time-space in

the context of these environmental affordances. This theorisation pushes against 'Cartesian inspired disembodiment, disembedding, displacement and decontextualization of the subject from the human-non-human and animate-inanimate vital world privileged by the ecocentric reconceptualization and reposition of its various subject/object things' (Payne). In this zone Payne suggests that 'body-time-space relationalities' as embodied and '"felt" in movement, memorying and meaning-making' are found within what he calls the eco-/somaesthetic. According to Payne, play begins to capture this dimension because it is timeless and embodied and a felt phenomenon. The thinking put forward by Payne invites more consideration of humans as part nature, rather than as controllers and purveyors of environments for economic gain, in an increasingly fast-paced society. He labels the current conceptions of childhood as clockwork children.

Conceptions of clockwork children, childhood studies, postcolonisation and poststructuralist theories have become powerful tools for noticing and disrupting subjectification of the global early childhood discourses which have emerged in the north and are often applied uncritically in the south – as evidence; as informing curriculum; as conceptualising childhood, children and child development; and as guiding assessment and monitoring of what counts as quality early childhood education. It is interesting that the field of early childhood education has drawn upon so many theoretical tools to research and conceptualise practices. Further, the colonising of beliefs, practices and measurement tools in the north have swept the south, often being invited in by governments and the profession itself, initially as tools to persuade the government to invest in both resources to support practice, but also to support more localised research. The chapters of the handbook provide the much needed content for giving more space for perspectives from the south and through this greater understanding of how the whole global context of early childhood is currently drawing upon a broad range of theories to guide new thinking.

1.7 Conclusion

In the analysis of the content of the handbook, it was found that knowledge construction in early childhood education has tended to be dominated by perspectives on what matters for countries in the north, with limited attention being directed to the research needs and activities of countries in the south. What is evident is that perspectives from both outside of early childhood education and research taken from the northern continents have primarily shaped what the government pays attention to, which in turn shape policy and curriculum in particular ways – as Martin suggest – in ways that privilege certain forms of knowledge and colonise local practices and thinking.

This chapter sought to redress the north-south imbalance by ensuring that greater representation of works from the south was included in the handbook. Through reviewing the content of this first volume with a north-south perspective in mind, different contexts for pressing problems could be identified. The outcomes of this

analysis identified two major research trends. The first research problem focused on the relations between play and learning, and the second centred on the need for diversity rather than universalism in early childhood education. The methods that were primarily drawn upon focused on approaches which pushed against a traditional medical model so that diversity of children and early childhood practices could be featured. The theories that the early childhood education field has drawn upon focused primarily on moving beyond maturational theory of child development, where the universal child is foregrounded, to looking for other theories of child development that examine diversity and do not normalise the child against external and Western standards. Theories that supported critical thinking through asking questions about the dominant early childhood discourses helped early childhood researchers make visible the effects of colonisation and push against this effect. This was noted as being particularly relevant for those in the south.

What has been found is that 'First World problems' have colonised the international early childhood vista and distorted research trajectories and narratives around what counts as valuable knowledge for the field. The contributors of this handbook have examined theoretical contradictions and political contexts of their regions, particularly those in the south, where new research problems have been made visible and where a need for diversification was found. Further, the growing maturity of the early childhood education research community and the pressing problems faced within regions in the south give new insights into what can be deemed a more balanced international perspective of early childhood education. What is fascinating is how the problems of the north and the south have a common thread, but come from a completely different cloth.

This chapter contributes to scholarship by making visible an analysis of the activities of countries in the north and south where new perspectives on what constitutes a more balanced and diverse view of international research in early childhood education have emerged.

References

Dolya, G. (2010). *Vygotsky in action in the early years*. London/New York: Routledge.

Hedegaard, M. (2012). The dynamic aspects in children's learning and development. In M. Hedegaard, A. Edwards, & M. Fleer (Eds.), *Motives in children's development: Cultural-historical approaches* (pp. 9–27). New York: Cambridge University Press.

Hedegaard, M. (2014). The significance of demands and motives across practices in children's learning and development: An analysis of learning in home and school. *Learning, Culture and Social Interaction, 3*, 188–194.

Puma, M., Bell, S., Cook, R., Heid, C., Shapiro, G., Broene, P., and Spier, E. (2010). *Head start impact study. Final report*. Washington, DC: Administration for children and families, United States Department of Health and Human Services.

Quinones Goytortua GG. (2013). *Vivencia Perezhivanie in the everyday life of children*. PhD thesis, Faculty of Education, Monash University.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (Eds.). (2010). *Early childhood matters: Evidence from the effective pre-school and primary education project*. London: Routledge.

Part I
Theoretical Perspectives

Marilyn Fleer and Bert van Oers

Chapter 2
Governing Childhood

Iris Duhn

Abstract The chapter provides an overview of ideas of childhood to explore how childhood as a domain is governed in cultural, social and educational discourse. The core assumption is that childhood is a modern invention: the child as potential, as knowable and describable and as essentially different to the adult has made childhood one of the projects of the modern state. Particularly in the twentieth century, childhood has been considered as a domain where future adults can be shaped. Childhood appeared as a cultural resource and provided a specific focus for reform, based on the understanding that childhood is essentially different to adulthood. There seems to be broad consensus that we now live in times of rapid change where traditional assumptions, beliefs and rationalities appear less coherent than in the past. The modern core beliefs in essential 'truth' as a possibility, and in progress as a given, are being contested. It is not surprising then that traditional ideas of childhood are currently 'under reconstruction'. The chapter traces some of the shifts to outline how childhood is governed in discourse.

Keywords Childhood • Governmentality • Malleability • Discourse • Modernity

2.1 Introductory Note to the Reader

This chapter makes reference to Foucault's concept of governmentality and is indebted to post-structural thought and discourse analysis. There are limitations to a focus on childhood as discourse and as currently emerging scholarship in early childhood highlights, language is only one aspect of being and becoming (Kocher et al. 2015; Lenz-Taguchi 2010). The emphasis on considering materiality, performativity and the complex entanglements of being human in an ultimately unknowable, lively world which is inhabited by multitudes of humans and more-than-humans is a vital contribution to early childhood scholarship and education at a time when human-induced change affects life on a planetary scale (Barad 2003; Heise 2008;

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Panelli 2010). While the turn towards matter generates new perspectives and insights that pose urgent questions regarding humanness and the human place on a shared planet, this chapter reviews childhood as a modernist invention (Steedman 1995). It complements the newly emerging themes and provides a perspective of childhood as a governable domain.

2.2 Governmentality and the Domain of Childhood

Foucault's notion of governmentality (1994) is particularly useful in understanding how ideas of the child generate discourses and practices which govern childhood. Governing and knowledge production are intimately linked in the concept. It is through the human sciences, such as education, sociology, psychology and economics, that expert knowledge and practices with regard to the human subject emerge. Studies of governmentality emphasise that these sites of knowledge production play a vital role in generating bodies of knowledge that cohere into mentalities or 'truths' which then legitimise particular forms of governance (Rose 1999). Generally speaking governmentality refers to rationalities or ways of thinking about governing with a focus on 'the bodies of knowledge, belief and opinion in which we are immersed' (Dean 1999, p. 16). Governmentality as critique is concerned with how social and cultural products, listed by Dean as 'theories, ideas, philosophies and forms of knowledge' (Dean 1999, p. 16), legitimise practices to such a degree that other ways of thinking and doing become not only unacceptable but also unimaginable.

Why then think about the governing of the child and childhood? As argued by sociologists of childhood, who investigate childhood predominantly in western social, economic and cultural contexts (Buhler-Niederberger 2010; Cook 2005; Cunningham 2009; Curti 2009; Lee 2005; Prout 2005), childhood often serves as an indicator of broader social and cultural understandings, and thus it is important to pay attention to the specific configuration and governance of the domain. Historically, early childhood education is a modern invention and the idea of the unfolding, incomplete child who is socialised and enculturated, and thus made fully human through education, still dominates much of the discourse, policy and practice in early childhood education (Baker 2001; Brosterman 1997; May 2006). As argued by Cannella and Viruru (2004), '….the status of the child is used to signify and legitimise the regulation of behaviour of particular human beings…We [early childhood experts] are trained to think that children are egocentric, easily distractible, noisy and curious and that our job [as educators] is to be accepting of those characteristics while moving children forward' (p. 2). The writers pinpoint 'the child' in early childhood discourse as the subject of intense regulatory practices. These practices aim to educate and socialise the child from the child's state of becoming – and thus its incomplete and yet unformed state – towards adulthood as 'being' and thus complete and stable (Stables 2008).

2.3 Imagining Childhood

Methodologically, the chapter does not intend to define how childhood is governed nor find a solution to a particular educational problem. In a way this endeavour is inimical to the field of education with its traditional emphasis on intervention and reform (Baker and Heyning 2004). Instead the idea is to intensify understandings of the child by tracing its conceptual implication in the making of 'worlds' (Taylor and Blaise 2014). How do we think the child? What is the basis for knowing her? While largely assumed as known in educational discourse, the child as subject and childhood as a category or domain are rarely analysed. The child is often taken for granted in educational discourse. The child subject can be described, observed, assessed and educated – on what grounds? By tracing the child in discourse, the familiar concept of childhood becomes strange and less knowable and creates a space for critical engagement with ideas of childhood in early childhood education (Duhn 2011; Kjorholt 2002; Rossholt 2009).

Specifically, the chapter explores how contemporary changes in political rationalities and cultural imaginaries coalesce around childhood as a concept in early childhood education from a critical childhood studies lens. It does this by drawing on cultural studies, in particular cultural literary theory, on governmentality studies and on the sociology of childhood. Such a broad approach to the topic responds to the call for interdisciplinary perspectives in critical childhood studies and in the sociology of childhood (Cannella and Viruru 2003; Prout 2011). Childhood studies itself is a relatively new academic field which has emerged alongside the sociology of childhood (James et al. 1998; James and Prout 1997; Jenks 1996; Prout 2003). Contributions to childhood studies have come from across disciplines. For the past two decades, literary criticism and cultural studies (Kincaid 1998; Lesnik-Oberstein 1994; Warner 1994; Zornado 2001) as well as childhood education scholars (Cannella 1997; Dahlberg et al. 1999; Moss and Dahlberg, 2005; Tobin 1997) have generated new perspectives of the child and childhood to challenge childhood as a domain that has been essential to modernity (Prout 2003). These perspectives have analysed childhood as a function of language (Rose 1994; Wallace 1994, 1995) and, from a governmentality perspective, as a political domain in discourse and policy (Baker 1998; Bloch and Popkewitz 2000; Grieshaber 2000; Hultqvist 1998). Governmentality perspectives contribute a relatively new way of understanding power relations in education, and it is evident that early childhood education has much to gain from governmentality perspectives that engage critically with understandings of childhood as deeply embedded in power relations (Ashenden 2002; Bloch 2003; Duhn 2006; Hearst 1997; McGillivray 1997; Millei 2011; Popkewitz 2003; Popkewitz and Bloch 2001).

2.4 Imagining Modern Childhood: Childhood as Adulthood's Other

While childhood as a domain shares some characteristics with other social denominators of difference (i.e. ethnicity, gender, sexuality), childhood has one overriding aspect that is singular: childhood is essentially different from adulthood. Childhood has a particularly strong association with three of the cornerstones of the modern episteme: universality, origin and progress (Rose 1994). These cornerstones reinforce the essential difference of childhood as adulthood's other. Western discourses of childhood emphasise that every adult on this planet has had a childhood (regardless of whether it was ideal or less than ideal). Childhood is thus assumed to be a universal human experience. The second cornerstone is an origin which appears in discourse as the understanding that many problems in adulthood have their origin in childhood and can thus be traced back to their source. And thirdly, there is the idea of progress which finds its expression in the belief that childhood is a state of being that is left behind or 'grown out of' as biological maturity is reached. The child moves steadily towards the future where adulthood awaits as a goal of becoming.

Another way of making sense of how childhood is governed in discourse is to consider it as adulthood's conceptual 'other'. The child is essentially different to the adult, and this difference as otherness produces the child as the not-yet adult, the adult in the making. Conceptually, adulthood is the normative domain against which childhood is assessed (Popkewitz and Bloch 2001). Childhood, the domain of the child as the incomplete and unstable subject and thus in need of adult governance, strengthens and normalises adulthood as the domain of the self-governing adult subject. The child represents all that which either complements or opposes the idea of the adult: the child is innocent/the adult knows, the child is dependent/the adult is autonomous, the child creates fantasy/the adult lives in reality, and so forth.

2.5 Childhood as Origin

Childhood's essential nature depends on the story of origin and almost mystical beginnings. Childhood is the time and space where the future adult takes shape – a conceptual womb. Childhood thus is dangerous territory; this is where the foundations for normal/problematic adulthood are laid. Childhood is not only time and space; it is also essence: the normal adult has left the child behind or locked it safely inside ('the inner child'). As essence, childhood can be revisited in an effort to stabilise the adult self (Lesnik-Oberstein 1994; Rose 1994). The child serves as a touchstone for normality in times of personal crisis, caught in phrases such as 'finding the child within' to understand or heal or change the adult for the better. Childhood operates through separation and the idea of essence; childhood is an essential condition for the yet-to-unfold adult as well as for the adult whose 'unfolding' has been incomplete (Caselli 2010). The child and the adult are conceptually locked in

an asymmetrical relationship where one, the child, represents 'raw material', a malleable resource, for the other, the adult. In addition, childhood as a domain presumes that all children share the essential universal traits which define them as different to adults, regardless of location and culture (Stephens 1995).

2.6 Childhood as Potentiality

Adult longings and yearnings do not only coalesce around the child; they produce the expectation of the child's unfolding as normality. Childhood appears as a repository where the child's unfolding potential can be monitored, controlled and regulated. Castaneda (2002) suggests that the idea of the child carries potentiality as its overriding principle. She proposes that the condition of childhood finds its value in potentiality. The form that the child's potentiality takes is consistently framed as a normative one, in relation to which failure is always possible. Should a child either fail to possess or to realise its potential (as in the notion of 'stunted growth'), he or she remains a flawed child and an incomplete adult (p. 4).

Childhood is by definition risky territory and thus warrants high measures of intervention. Childhood is the domain of the child subject whose normality is measured against the expectation of unfolding potential. This is of particular relevance to education (Fendler 2001). However, the child's potentiality is shadowed by the risk of failure to fulfil expectations.

2.7 The Child as Cultural Resource

In her work on the function of the child in discourse, Castaneda (2002) argues that the child, categorised as unequal and essentially different to the adult, has to be analysed in relation to the ways in which childhood has been used as a resource for cultural projects. She suggests that this kind of analysis foregrounds the value of childhood for the maintenance and stabilisation of the concept of adulthood. This emphasis on potentiality links concept of childhood directly to the future and makes childhood essential to the idea of transformative change, particularly in education (Bloch et al. 2006). The child is that which has the potential to become anything. This implies that the child is also never complete in itself. The child is not only in the making, but is also malleable – and so can be made (Castaneda 2002, p. 3).

The substance or essence of the child in discourse is precisely the lack of 'its' form. That is why childhood is a domain where new and old discursive regimes overlap: it seems that the child's malleable 'nature' is becoming more pronounced in times of accelerated social change. Possibly due to its malleability, the child now makes its various and multi-faceted appearances across and within discourses outside of the traditionally binary categories of adulthood/childhood. An example is the softening of the adult/child boundaries, with current research focusing on the

performative nature of both adulthood and childhood and its complex interrelationship (Johansson 2011). According to Castaneda, however, regardless of the discourse, the child is continuously reinscribed as an entity in the making and as a cultural resource.

2.8 A Very Brief History

To gain a sense of the malleability of the child as entity in the making and as cultural resource, filmmaker and cultural critic Patricia Holland's (1996) seminal snapshot of some of the transformations in perceptions of childhood over the past 50 years is insightful. Holland, who has based her analysis on visual representations of the child, argues that particularly during the second half of the twentieth century, childhood has consistently been linked to the future of the nation. According to her, childhood represented a beacon of hope in the post-war period, while in the 1970s, childhood and children 'bore the vision of a child-centred, spontaneous renewal of society' (p. 156). From the 1990s onwards, the child still represented the future, however, the earlier hopes that were attached to childhood have taken a more pessimistic turn. Holland emphasises that:

> Children have become the focus of moral panics which suggest a future that seems bleak and unknowable. Hope for a better world now seems unrealistically utopian and a childish search for the sensation of the minute is placed above future plans. Paradoxically we no longer look forward to a maturing world but to a world of recurring childishness. (p. 156)

The childishness that Holland identifies as a characteristic of the future arises specifically in relation to consumerism which thrives on the idea of the child as rapacious and in need of instantaneous gratification of desires. Alongside well-established discourses of the innocent and docile child, new discourses of the child as consumer see childhood increasingly 'in danger' of being governed through commercialisation (Buckingham 2011; Kanner 2005), while others propose to consider 'the consumer child' in terms of normative participation in new economic and social configurations of 'the neoliberal self' (Ailwood 2008; Saltmarsh 2009).

2.9 Shifts in Perception of Childhood

Holland (1996) argues that as an effect of the discrepancy between 'old' and 'new' representations of children, childhood itself has moved into the focus of adult fantasies. Children, who through new technologies have access to a wide range of highly diverse knowledges and pleasures, can no longer be easily imagined as innocent or controllable. As cultural resource, children at times represent a society or even a world that appears as potentially out of control and dangerous which makes childhood the focus of moral panics:

Reports in the tabloid press – on the addictive qualities of computer games, on the tendency of children to imitate violent videos, and so on – have been couched in terms of pure hysteria, while those in the responsible press often reflect a mixture of panic, ignorance, and denial (Holland 1996, p. 156).

Socially and culturally, the idea of childhood as a safe territory, well protected and regulated by well-meaning adults, is in danger of being subverted by a multitude of new, less homogenous and global representations of childhood (Chin 2003; Pence and Hix-Small 2009; Rizzini and Bush 2002). Holland suggests that a general sense of uncertainty about the future has led to a gap between representations of children and the very idea of childhood.

Sociologist Nick Lee (2001) echoes some of Holland's sentiments by emphasising that before we entered 'the age of uncertainty', adults and children fell into distinctly different categories of being human. However, Lee suggests that rather than falling into general childishness as a result of blurred boundaries, this blurring could be an opening up of conceptual space for adults to 'becoming child'. Lee is concerned with the danger of romanticising and stereotyping the child in attempts to re-establish the adult/child binary. The romantic view of the child represents the child as an embodiment of all that which the adult has to leave behind in the process of growing up (O'Loughlin 2009). The adult, understood as complete, self-possessed, stable being, views the child as a source of imagination and creative becoming. The blurring of boundaries between the adult and the child, Lee argues, offers the opportunity of considering 'becoming child' as a turn towards imagination and creativity as human (not childish) capabilities and potential.

Holland and Lee highlight two very different aspects of current understandings of childhood. Holland detects a ruthless use of images of the child as consumer which puts the fantasy of childhood as a time of innocence at risk. She interprets the blurring of adult/child boundaries as an indication of a general push towards increased mindless consumerism, based on the idea of the child as in need of instant gratification and in search of endless pleasure. The child and the adult become the same in the pursuit of untethered consumerism. At the same time, the media produces discourses of 'the child' as risky and unpredictable, while adults' fantasies of childhood as a time of purity and innocence are reinvigorated as a representation of that which has been lost (Kincaid 1998; Louv 2008; Malone 2007). Lee (2001) gives the blurring of boundaries a positive spin by suggesting that we introduce multiplicity or 'becoming' into our understanding of the adult/child relationship. Through different lenses, Lee (2001, 2005) and Holland (1996) both argue that the child appears in cultural discourse to produce meanings about adulthood. The child itself remains strangely insubstantial – a field of possibilities that is constantly reshaped by power relations.

2.10 The Global Child: Old and New

This section examines how familiar discourses of childhood are reinvented, reshaped and realigned in a post-industrial/post-modern paradigm. I have deliberately excluded discourses which are traditionally strongly associated with modernist early childhood education, such as developmental psychology (Burman 2000). The reason for this is that developmental psychology is a discourse in itself, which produces a historically specific child whose development is predictable and measurable. Much work has already been done to analyse how the dominance of developmental psychology in early childhood education constructs the child as a subject of modernity (Burman 1994; Cannella 1997; Dahlberg et al. 1999; Fendler 2001; Peukert 1999; Walkerdine 1984). More recently, the focus has shifted to global trends which include the rapidly changing economic, social and cultural landscapes of post-industrial societies and newly emerging industrialised nations, such as China, India and Brazil, amongst others. These analyses emphasise the need for multiple perspectives of the child with an emphasis on diversity and the willingness to accept, and work with, complex issues arising within new post-structures, such as networks, mobility and relationality (Prout 2011). These kinds of analyses, however, are only just beginning to reshape understandings of childhood which may be an indication of the solidity of childhood as a modern invention.

2.11 Maintaining the Domain and Challenging the Domain

The persistence of cultural representation of the child as subject of the future or as future subject highlights childhood's deep attachment to modernity. 'The child of modernity has been closely associated with the idea of progress—childhood has been, and still is, intertwined with imagining the future' (Holland 1996). But whereas the modern ideal child has been inscribed as essentially different to and completely dependent on the adult, the child of global modernity emerges through representations of the autonomous and capable child (Pence and Hix-Small 2009). These new representations of the global child transgress the segregated space of modern childhood: the new child still leads the way into the future, forging a youthful path ahead; however, this representation of childhood presents the child as capable, confident and knowledgable. This can be extended to mean that as adults we are now subject to discourses that encourage our desire to be like that child, or to develop some of the modern/global child's characteristics and dispositions, such as a dynamic youthful disposition that is embedded in the new global post-structures of networks, mobility and relationality (Bratich 2009; Depeau 2001; Packer 2003).

2.12 Towards Diverse Childhoods

The emerging global child is not represented through one image or idea – the very nature of desire in consumer culture is to awaken new, different desires; the global child is an assemblage of old and new discourses. By outlining some of the shifts and tensions in contemporary childhood, I continue the argument that current ideas and practices around childhood/the child are constituted through discourses which contradict, reinforce and disrupt modern ideas of what makes childhood (De Block 2007). Some of disruptions of modern childhood coagulate around a new image of the child as far more capable than its modern predecessors. Despite this new emphasis on capability, the global child retains its function as a malleable entity and as subject-in-the-making (Castaneda 2002); however, the subject in question is global and neoliberal. Global and neoliberal shadings create a child who is different and yet similar to its previous incarnations as a modern subject-in-the-making.

Childhood as a constitutive discourse of modernity and of the liberal capitalist world order is deeply entangled in the reorganisation of political and economic structures through discourses of neoliberalism and globalisation. Rather than thinking of childhood as a category which is being reorganised in post-industrial contexts, childhood can be considered as a discourse which constitutes and is constituted by a new economic and political order (Ruddick 2003; Stephens 1995). From a governmentality perspective, the global neoliberal child is produced by, and produces, changing understandings of what it means to be a 'good subject' in global times. Ruddick (2003) suggests that childhood has largely been excluded from critical analyses of global shifts in political and economic rationalities. According to Ruddick, this is an indication of the positioning of childhood on the local level where childhood 'has often been relegated to the private and/or domestic sphere' (1991, p. 334). The private and/or domestic sphere seems far removed, and thus irrelevant, for analyses of macro change such as the restructuring of national economies on a global scale. Childhood remains largely a local or national issue, unless it is discussed as a global project as, for example, in international debates on child labour (Burman 2008). Childhood in global times is marked by, on the one hand, the prevailing ideal of childhood as a protected space where the child is dependent, economically unproductive and under the care and control of the family. On the other hand, the ideal of childhood is increasingly challenged by 'children who, riding waves of global tides, head households, fight in civil wars, and travel alone transnationally' (Chin 2003, p. 310). Faced with the challenges to the ideal of childhood, the cultural response in western nations seems to be a clinging to the ideal rather than a willingness to re-image what globalised childhood may mean.

The images of unchildlike children, or 'children out of bounds' (Chin 2003), that flood middle-class living rooms all over the world during prime-time television have the effect of raising parental anxieties with regard to their own offspring. The desire to protect and shelter middle-class children from the undesired effects of globalisation has fuelled the fear that childhood itself is at risk. The notion of paranoid parenting (Furedi 2001, 2002) captures the western middle-class phobia of

cotton-wooling or 'bubble-wrapping' children (Malone 2007). This means that children have less possibilities of sharing their experiences and understandings with each other, due to an increased emphasis on protecting their imagined innocence. Childhood, specifically middle-class childhood, is in danger of becoming a domain of ever more intense surveillance and parental investment (Ema and Fujigaki 2011; Vincent and Ball 2007; Wise 2004; Yeshua-Katz 2013). One of the many tensions created by the current transformation of childhood is the fact that many children have extensive knowledge of the world which they have to make sense in isolation rather than in conjunction with their peers (Dahlberg et al. 2007). This 'knowing' (but possibly confused) child may then become a challenge to the romantic ideal that, as another effect of globalisation, is making the rounds as the only acceptable version of childhood. The global child seems to be a construct that individualises while it creates totality, while romanticised images of childhood make idealised western childhood appear as a global phenomenon; fewer children, both 'at home' and in developing nations, befit the ideal (Bordonaro and Payne 2012; Sircar and Dutta 2011).

This chapter has argued that it is across discourses and domains that the child functions as an organising principle of adult worlds. Jo-Ann Wallace made the point 20 years ago that in the field of theory, 'the child' as a 'foundational product of the modern episteme, remains an unacknowledged and therefore unexamined organising principle' (Wallace 1995, p. 284). Although some ground has been covered in the past decades, childhood studies scholars continually emphasise that Wallace's argument still stands (Kehily 2009; Prout 2011; Thomas 2007). As long as the child's function remains uncontested and largely invisible, more complex perspectives on the child in theory cannot emerge. The intention throughout the chapter was to problematise the concept of the child by mapping how the child is, and has been, made intelligible in the modern episteme. I have followed diagnostic rather than interventionist desires.

Childhood as a domain has, it seems, suffered from a particular absence of a focus on specificity. Childhood, and being a child, controls and generalises those who are deemed to belong primarily to this domain. To be a child is assumed to be an identity that overrides all other possibilities of being. It is one of those instances when 'identity becomes a set of hard and fast rules that police comportment' (Probyn 1996, p. 23). It is also the one domain that is particularly temporary and spatial in western social realities – everyone has been a child, everyone has experienced the spaces of childhood (for instance, schools), and everyone has very firm beliefs about what ideal childhood should be like and who should experience it. This chapter has argued for critical engagement with the concepts to create spaces in education and beyond where more complex becoming across domains support fresh perspectives of childhood, adulthood and, ultimately, humanness.

References

Ailwood, J. (2008). Learning or earning in the smart state'changing tactics for governing early childhood. *Childhood, 15*(4), 535–551.

Ashenden, S. (2002). Policing perversion: The contemporary governance of paedophilia. *Cultural Values, 6*(1&2), 197–222. doi:10.1080/1362517022019829.

Baker, B. (1998). "Childhood" in the emergence and spread of U.S. public schools. In T. Popkewitz & M. Brennan (Eds.), *Foucault's challenge: Discourse, knowledge and power in education* (pp. 117–143). New York: Teachers College Press.

Baker, B. (2001). (Ap)pointing the canon: Rousseau's Emile, visions of the state, and education. *Educational Theory, 51*(1), 1–43.

Baker, B., & Heyning, K. (2004). Dangerous coagulations? Research, education, and a travelling Foucault. In B. Baker & K. Heyning (Eds.), *Dangerous coagulations? The uses of Foucault in the study of education* (pp. 1–79). New York: Peter Lang.

Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society, 28*(3), 801.

Bloch, M. (2003). Global/local analyses of the construction of "family-child welfare". In M. Bloch, K. Holmlund, I. Moqvist, & T. Popkewitz (Eds.), *Governing children, families and education: Restructuring the welfare state* (pp. 195–230). New York: Palgrave Macmillan Press.

Bloch, M., & Popkewitz, T. (2000). Constructing the parent, teacher, and child discourses of development. In L. DiazSoto (Ed.), *The politics of early childhood* (pp. 7–32). New York: Peter Lang Publishing.

Bloch, M., Kennedy, D., Lightfoot, T., & Weyenberg, D. (Eds.). (2006). *The child in the world/the world in the child: Education and the configuration of a universal, modern, and globalized childhood*. Basingstoke: Palgrave Macmillan.

Bordonaro, L. I., & Payne, R. (2012). Ambiguous agency: Critical perspectives on social interventions with children and youth in Africa. *Chinese Geophysics, 10*(4), 365–372.

Bratich, J. Z. (2009). Multitude: Between innovation and negation. *Journal of Communication Inquiry, 33*(1), 71–75.

Brosterman, N. (1997). *Inventing kindergarten*. New York: Harry N. Abrams.

Buckingham, D. (2011). *The material child: growing up in consumer culture*. Cambridge: Polity Press.

Buhler-Niederberger, D. (2010). Childhood Sociology in ten countries: Current outcomes and future directions. *Current Sociology, 58*(2), 369–384. doi:10.1177/0011392109354250.

Burman, E. (1994). *Deconstructing developmental psychology*. New York: Routledge.

Burman, E. (2000, 29 August – 1 September). Beyond the baby and the bathwater: Postdualistic developmental psychologies for diverse childhoods. Paper presented at the European Early Childhood Research Association, London.

Burman, E. (2008). *Developments. Child, image, nation*. London/New York: Routledge.

Cannella, G. S. (1997). *Deconstructing early childhood: Social justice and revolution*. New York: Peter Lang Publishing.

Cannella, G. S., & Viruru, R. (2003). Childhood and cultural studies: Introduction. *Journal of Curriculum Theorizing, 19*(2), 3–8.

Cannella, G. S., & Viruru, R. (2004). *Childhood and postcolonialisation: Power, education, and contemporary practice*. New York/London: Routledge Falmer.

Caselli, D. (2010). Kindergarten theory: Childhood, affect, critical thought. *Feminist Theory, 11*(3), 241–254.

Castaneda, C. (2002). *Figurations. Child, bodies, worlds*. Durham/London: Duke University Press.

Chin, E. (2003). Children out of bounds in globalising times. *Postcolonial Studies, 6*(3), 309–325.

Cook, D. T. (2005). The dichotomous child in and of commercial culture. *Childhood, 12*(2), 155–159.

Cunningham, H. (2009). A historical sociology of childhood: Developmental thinking, categorization and graphic visualization. *Children and Society, 23*(4), 310–311.

Curti, G. H. (2009). Designing modern childhoods: History, space, and the material culture of children. *Chinese Geophysics, 7*(1), 105–106.

Dahlberg, G., Moss, P., & Pence, A. (Eds.). (1999). *Beyond quality in early childhood education and care: Postmodern perspectives*. London: Falmer Press.

Dahlberg, G., Moss, P., & Pence, A. (2007). *Beyond quality in early childhood education and care: Languages of evaluation.* London/New York: Routledge.

De Block, L. (2007). *Global children, global media: Migration, media and childhood*. New York: Palgrave Macmillan.

Dean, M. (1999). *Governmentality: Power and rule in modern society*. London: Sage Publications.

Depeau, S. (2001). Urban identities and social interaction: A cross-cultural analysis of young people's spatial mobility in Paris, France, and Frankston, Australia. *Local Environment, 6*(1), 81–86. doi:10.1080/13549830120024260.

Duhn, I. (2006). The making of global citizens: Traces of cosmopolitanism in the New Zealand early childhood curriculum, Te Whāriki. *Contemporary Issues In Early Childhood, 7*(3), 191–202.

Duhn, I. (2011). Making 'place' for ecological sustainability in early childhood education. *Environmental Education Research, 18*(1), 19–29. doi:10.1080/13504622.2011.572162.

Ema, A., & Fujigaki, Y. (2011). How far can child surveillance go?: Assessing the parental perceptions of an RFID child monitoring system in Japan. *Surveillance & Society, 9*(1/2), 132–148.

Fendler, L. (2001). Educating flexible souls: The construction of subjectivity through developmentality and interaction. In K. Hultqvist & G. Dahlberg (Eds.), *Governing the child in the new millenium* (pp. 119–142). New York/London: Routledge Falmer.

Foucault, M. (1994). Governmentality. In J. Faubion (Ed.), *Michel Foucault: Power. Essential works of foucault 1954–1984* (pp. 201–222). London: Penguin Books.

Furedi, F. (2001). *Paranoid parenting: Abandon your anxieties and be a good parent*. London: Allan Lane.

Furedi, F. (2002). *Culture of fear: Risk-taking and the morality of low expectations* (revised ed.). London: Continuum.

Grieshaber, S. (2000). The state reinventing the preschool child. *Discourse: Studies in the cultural politics of education, 21*(3), 269–281.

Hearst, A. (1997). Domesticating reason: Children, families and good citizenship. In A. McGillivray (Ed.), *Governing childhood* (pp. 200–224). Aldershot: Dartmouth Publishing.

Heise, U. K. (2008). Sense of place and sense of planet: The environmental imagination of the global: Oxford University Press.

Holland, P. (1996). 'I've just seen a hole in the reality barrier!': Children, childishness and the media in the ruins of the twentieth century. In J. Pilcher & S. Wagg (Eds.), *Thatcher's children? Politics, childhood and society in the 1980s and 1990s* (pp. 155–171). London: Falmer Press.

Hultqvist, K. (1998). A history of the present on children's welfare in Sweden: From Froebel to present-day decentralisation projects. In T. Popkewitz & M. Brennan (Eds.), *Foucault's challenge: Discourse, knowledge, and power in education* (pp. 91–116). New York: Teachers College Press.

James, A., & Prout, A. (Eds.). (1997). *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood* (2nd ed.). London: Falmer Press.

James, A., Jenks, C., & Prout, A. (1998). *Theorising childhood*. Cambridge: Polity Press.

Jenks, C. (1996). *Childhood*. London/New York: Routledge.

Johansson, B. (2011). Doing adulthood in childhood research. Childhood, 0907568211408362.

Kanner, A. (2005). Globalisation and the commercialisation of childhood. *Tikkun, 20*(5), 49–52.

Kehily, M. J. (2009). Understanding childhood: An introduction to some key themes and issue. In M. J. Kehily (Ed.), *An introduction to childhood studies* (2nd ed., pp. 1–16). Maidenhead: Open University Press.

Kincaid, J. (1998). *Erotic innocence: The culture of child molesting*. Durham/London: Duke University Press.

Kjorholt, A. (2002). Small is powerful: Discourses on 'children and participation' in Norway. *Childhood, 9*(1), 63.

Kocher, L., Pacini-Ketchabaw, V., & Kind, S. (2015). Introduction to the special issue on materiality in early childhood studies. *International Journal of Child, Youth and Family Studies, 5*(4.2), 718–721.

Lee, N. (2001). *Childhood and society: Growing up in an age of uncertainty*. Buckingham: Open University Press.

Lee, N. (2005). *Childhood and human value: Development, separation and separability*. Milton Keynes: Open University Press.

Lenz-Taguchi, H. (2010). Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy. In*London*. New York: Routledge.

Lesnik-Oberstein, K. (1994). *Children's literature: Criticism and the fictional child*. Oxford: Clarendon Press.

Louv, R. (2008). Last child in the woods: Saving our children from nature-deficit disorder: Algonquin books.

Malone, K. (2007). The bubble-wrap generation: Children growing up in walled gardens. *Environmental Education Research, 13*(4), 513–527.

May, H. (2006). 'Being Froebelian': An antipodean analysis of the history of advocacy and early childhood. *History of Education: Journal of the History of Education Society, 35*(2), 245–262. doi:10.1080/00467600500528586.

McGillivray, A. (1997). Introduction: governing childhood. In A. McGillivray (Ed.), *Governing childhood* (pp. 1–24). Aldershot: Dartmouth Publishing.

Millei, Z. (2011). Governing through early childhood curriculum "the child" and "Community". *European Education, 43*(1), 33–55.

Moss, P., & Dahlberg, G. (2005). *Ethics and politics in early childhood education*. London/New York: Routledge Falmer.

O'Loughlin, M. (2009). *The subject of childhood*. New York: Peter Lang.

Packer, J. (2003). Disciplining mobility: Governing and safety. In J. Bratich, J. Packer, & C. McCarthy (Eds.), *Foucault, cultural studies and governmentality* (pp. 135–161). New York: State University of New York Press.

Panelli, R. (2010). More-than-human social geographies: Posthuman and other possibilities. *Progress in Human Geography, 34*(1), 79–87. doi:10.1177/0309132509105007.

Pence, A., & Hix-Small, H. (2009). Global children in the shadow of the global child. *International Critical Childhood Policy Studies Journal, 2*(1), 75.

Peukert, U. (1999). Early childhood education as a scientific discipline: A state-of-the-art perspective. *International Journal of Early Years Education, 7*(3), 213–221.

Popkewitz, T. (2003). Governing the child and pedagogicalisation of the parent: A historical excursus into the present. In M. Bloch, K. Holmlund, I. Moqvist, & T. Popkewitz (Eds.), *Governing children, families and education: Restructuring the welfare state* (pp. 35–61). New York: Palgrave Macmillan.

Popkewitz, T., & Bloch, M. (2001). Administering freedom: A history of the present. In K. Hultqvist & G. Dahlberg (Eds.), *Governing the child in the new millenium* (pp. 85–118). New York/London: Routledge Falmer.

Probyn, E. (1996). *Outside belongings*. New York/London: Routledge.

Prout, A. (2003). Participation, policy and childhood. In C. Hallett & A. Prout (Eds.), *Hearing the voices of children: Social policy for a new century* (pp. 1–25). London: Routledge Falmer.

Prout, A. (2005). The future of childhood (Vol. null).

Prout, A. (2011). Taking a step away from modernity: Reconsidering the new sociology of childhood. *Global Studies of Childhood, 1*(1), 4.

Rizzini, I., & Bush, M. (2002). Editorial: Globalization and children. *Childhood, 9*(4), 371–374.

Rose, J. (1994). *The case of Peter Pan or the impossibility of children's fiction* (rev ed.). London: The Macmillan Press.
Rose, N. (1999). *Powers of freedom: Reframing political thought*. Cambridge, UK: Cambridge University Press.
Rossholt, N. (2009). The complexity of bodily events through an ethnographer's gaze: Focusing on the youngest children in pre-school. *Contemp Issues Early Childhood, 10*(1), 55–65.
Ruddick, S. (2003). The politics of aging: globalisation and the restructuring of youth and childhood. *Antipode, 35*(2), 334–362.
Saltmarsh, S. (2009). Becoming economic subjects: Agency, consumption and popular culture in early childhood. *Discourse: Studies in the Cultural Politics of Education, 30*(1), 47–59. doi:10.1080/01596300802643082.
Sircar, O., & Dutta, D. (2011). Beyond compassion: Children of sex workers in Kolkata's Sonagachi. *Childhood, 18*(3), 333–349.
Stables, A. (2008). *Childhood and the philosophy of education*. London/New York: Continuum.
Steedman, C. (1995). *Strange dislocations: Childhood and the idea of human interiority, 1780–1930*. London: Virago Press.
Stephens, S. (1995). Children and the politics of culture in "late capitalism". In S. Stephens (Ed.), *Children and the politics of culture* (pp. 3–48). Princeton: Princeton University Press.
Taylor, A., & Blaise, M. (2014). Queer worlding childhood. *Discourse: Studies in the Cultural Politics of Education, 35*(3), 377–392.
Thomas, N. (2007). Towards a theory of children's participation. *International Journal of Children's Rights, 15*(2), 199–218.
Tobin, J. (1997). The missing discourse of pleasure and desire. In J. Tobin (Ed.), *Making a place for pleasure in early childhood education* (pp. 1–37). New Haven/London: Yale University Press.
Vincent, C., & Ball, S. J. (2007). Making up'the middle-class child: Families, activities and class dispositions. *Sociology, 41*(6), 1061–1077.
Walkerdine, V. (1984). Developmental psychology and the child centred pedagogy. In J. Henriques, W. Holloway, C. Urwin, C. Venn, & V. Walkerdine, *Changing the subject: Psychology, social regulation and subjectivity* (pp. 153–202). London/New York: Methuen.
Wallace, J.-A. (1994). De-scribing the water-babies: 'The child' in post-colonial theory. In C. Tiffin & A. Lawson (Eds.), *De-scribing empire: Post-colonialism and textuality* (pp. 171–184). London/New York: Routledge.
Wallace, J.-A. (1995). Technologies of 'the child': Towards a theory of the child-subject. *Textual Practice, 9*(2), 285–302.
Warner, M. (1994). *Managing monsters*. London: Vintage.
Wise, J. M. (2004). An immense and unexpected field of action: Webcams, surveillance and everyday life. *Cultural Studies, 18*(2), 424–442. doi:10.1080/0950238042000201590.
Yeshua-Katz, D. (2013). *Who's watching? Daily practices of surveillance among contemporary families*. In Margaret K. Nelson & Anita Ilta Garey. Nashville: Vanderbilt University Press, 2009. 298 pp. $27.95. ISBN 9780826516725 (paper). The Information Society, *29*(2), 128–129.
Zornado, J. (2001). *Inventing the child: Culture, ideology, and the story of childhood*. New York/London: Garland Publishing.

Chapter 3
Cultural-Historical and Activity Theories Informing Early Childhood Education

Marilyn Fleer and Nikolai Veresov

Abstract There are many theories that have informed early childhood education, including cultural-historical and activity theories. In this chapter, we present a discussion of cultural-historical and activity theories, beginning with the foundational logic that has informed both these theories – dialectical logic. We focus our discussion specifically on play and learning because this is the period of development being addressed by this handbook. Beginning with the original conception of play, learning and development proposed by Vygotsky, this chapter moves forward to the contemporary context of early childhood education, where we specifically illustrate key concepts from cultural-historical and activity theories through the research and theoretical writing of leading early childhood scholars. Cultural-historical concepts have been extensively used in the contemporary literature, as foundational for the key themes of: *Play pedagogy; Pedagogical models that support the development of play; Play from the perspective of children;* and *Digital play.* Together, these point to how cultural-historical concepts have been used by scholars to inform their work, as well as setting out the challenges and future directions in early childhood education.

Keywords Early childhood • Play • Learning • Development • Cultural-historical theory • Activity theory

3.1 Introduction

L.S. Vygotsky left a huge legacy for the field of early childhood education by generating a theory of development that we have come to know as cultural-historical theory. Activity theory (AT) emerged in order to capture Leontiev's work (Miller 2011), and until recently this theory dominated thinking in the Soviet Union and

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later Russia (Zinchenko 2007). Yet today, both theories can be found used in early childhood education in many different countries of the world. The aim of this chapter is to discuss those key concepts that have come from cultural-historical and activity theories and that have informed early childhood education research. To achieve this goal, this chapter discusses the foundational logic that underpins cultural-historical and activity theories, introduces the seminal works of Vygotsky, Leontiev and Elkonin on play, briefly explores the zone of proximal development and leading activity and examines how contemporary play researchers have drawn upon these concepts to inform their research and models of curriculum or pedagogy.

An increasing awareness of Vygotsky's work began to emerge in the Western world in the 1960s. Scholars published books in English on cultural-historical theory, although it was not always named in this way. The various translations of Vygotsky's original writing (e.g. *Journal of Russian and Eastern European Psychology*; The Collected Works of L.S. Vygotsky) also contributed to this interest in cultural-historical theory and activity theory. A number of journals were formed with the view to publishing papers related to theories and empirical work that drew upon Vygotsky's concepts, but also those of Leontiev (e.g. *Mind, Culture and Activity*; *Cultural-Historical Psychology*; *Outlines: Critical Practice Studies*). These journals published in English have brought well-known works written in Russian to many parts of the world. These journals sit alongside of a range of different journals in different countries that have reproduced and progressed the original work of Vygotsky and Leontiev. Further, regional and later international conferences dedicated to cultural-historical theory and activity theory were held (e.g. International Society for Cultural-Historical Activity Research). The latter bring together all the different continents of the world to share in discussions and present findings informed by cultural-historical and activity theory theories, all of which have been influential in early childhood education.

The keen interest in Vygotsky's work in the West saw a different trajectory for discussing and naming his work to that of the Soviet and later Russia. The journal papers, translation of articles and the Collected works, plus the conferences and congresses, were activities that saw a change in how the original ideas of Vygotsky and Leontiev were discussed and used. Miller (2011) remarks that the secondary commentary published in English is now named as '*Cultural-Historical Activity Theory*, or *CHAT* as it is more colloquially known, and *Sociocultural Theory*' (p. 19; Original emphasis). There exists difference, similarities and tensions in the various groups that subscribe to these emerging terms to name the original theories of Vygotsky or Leontiev. For instance, the field of early childhood education has drawn upon cultural-historical theory, activity theory or sociocultural theory to name how their study designs are framed. The latter has tended to dominate the field more than the former two in Western European and Northern American contexts. In the Nordic and Eastern European countries, we find the term cultural-historical has tended to dominate the early childhood literature (both psychology and early childhood education), but also references to activity theory and sociocultural theory exist.

What is prevalent in the broader education literature are AT, CHAT, sociocultural and cultural-historical theories. However, in this chapter we focus only on activity theory and cultural-historical theory because more early childhood scholars have drawn upon the concepts that come under these two theories. In our discussions of the contemporary literature, we have categorized papers that use the term sociocultural theory under the heading of cultural-historical theory, because the works reviewed tend to fall under this theorisation more than activity theory.

What is common to both cultural-historical theory and activity theory is the use of dialectical logic, which is a non-reductionist materialist (non-dualistic) conceptualization of human development (Fleer 2014c; Stetsenko and Arievitch 2010). We now turn to a brief overview of this key foundational logic in the next section so that a deeper philosophical understanding of cultural-historical and activity theories can be achieved.

3.2 Dialectical Logic: The Foundations of Cultural-Historical and Activity Theories

Cultural-historical theory is a developmental theory since it takes the *very process of mental development* as its subject matter. Development is not a simple change, growth or maturation (Vygotsky 1998, pp. 189); it is a complex dialectical process of sociocultural genesis of human mind. This section outlines several characteristics of a dialectical approach to development, which are general and foundational for cultural-historical studies of cultural development.

3.2.1 Development as the Process of Sociocultural Genesis of Human Mind: Overcoming Dualism

Dialectic as presented in works of Hegel is a general logic of studying any kind of complex processes of development in all its key and foundational aspects. However, psychological development, the development of human mind, has its own specific nature and characteristics; this should be taken into account when we apply a dialectical analysis to this particular domain of development.

In contrast to classical developmental psychological theories, non-classical cultural historical theory considers the social world not as factor influencing the process of development, but as a source of development of higher mental functions of a human being. As Vygotsky puts it:

> …development is not simply a function which can be determined entirely by X units of heredity and Y units of environment. It is an historical complex, which at any stage reflects its past content. In other words, the artificial separation of heredity and environment points us in a fallacious direction; it obscures the fact that development is an uninterrupted process

> which feeds upon itself; that it is not a puppet which can be controlled by jerking two strings. (Vygotsky 1993, p. 253)

Rethinking role of social environment is a key foundational distinguishing feature of cultural-historical theory

> The role of the social environment is the source for the appearance of all specific human properties of the personality gradually acquired by the child or the source of social development of the child… (Vygotsky 1998, p. 203)

The following example illustrates the developmental content of this position. This example, Vygotsky wrote, shows the essence of the process of cultural development expressed in a purely logical form (Vygotsky 1997, pp. 105). In the beginning, the pointing gesture of a child is merely an unsuccessful grasping movement aimed at an object. When the mother comes to the aid of the child and comprehends his movement as a pointing gesture, the situation essentially changes. The child's unsuccessful grasping movement gives rise to a reaction not from the object but from another person. The original meaning of this unsuccessful grasping movement is thus imparted by others. And only afterwards the child him/herself begins to treat this movement as a pointing gesture. Here, the function of the movement itself changes: from a movement directed towards an object, it becomes a movement directed towards another person, a means of communication; the grasping is transformed into a pointing. Thus, the pointing gesture first begins to indicate by movement which is understood by others and only later becomes a pointing gesture for the child him/herself.

In cultural-historical theory, the development of human mind is a 'path along which the social becomes the individual' (Vygotsky 1998, p. 198). Social environment therefore is not considered as a factor in development, but as a source of development (Vygotsky 1998, pp. 203).

Rethinking the status of 'the social' not only creates a pathway of 'distinguishing the natural and the cultural, the essential and the historical, the biological and the social in the mental development' (Vygotsky 1997, p. 2); it creates opportunities to overcome a dualism of two groups of factors (biological and social) existing in a traditional psychological theoretical framework, by introducing a dialectical approach to the study of mental development. In this, the cultural-historical approach overcomes a postulate of external factors and orients research on the internal essence and the origins of development.

3.2.2 Transformation and Qualitative Reorganisation: Overcoming Mechanistic Approach

Development is always a very complex and contradictory process, but, first of all, it is a dialectical process of qualitative change. The process of mental development,

> …is not confined to the scheme 'more-less', but is characterized primarily and specifically by the presence of qualitative neoformations that are subject to their own rhythm and

> require a special measure each time. It is not correct to assume that all development is exhausted by the growth of these basic, elementary functions which are the prerequisites for higher aspects of the personality. (Vygotsky 1998, p. 190)

Second, mental development is not a linear, homogenous process. Simultaneously, there are different levels of development of different psychological processes and functions in the child. At each age, there are functions that are already matured (developed) and there are functions that are in a process of maturation. So there is always a complex nexus of (1) functions that will develop but are currently in an embryonic state, (2) functions that have not yet developed but are in the process of development and (3) developed functions. Metaphorically, they could be defined in turn as 'buds', 'flowers' and 'fruits' of development (Vygotsky 1935, p. 41).

Continuing Vygotsky's metaphor, we could say that the results are 'fruits' of development. However, these 'fruits' are of a very special nature. The result of development is not just new functions that appeared as outcomes at the end. Results of development are not new higher mental functions only, they are 'qualitative neoformations' (Vygotsky 1998, p. 189).

'Neoformation' is a result of reorganisation of whole system of functions, a new type of construction of child's consciousness and mental functions (Vygotsky 1998, pp. 190). This new type of construction is the result of qualitative reorganisation of the whole system. Actually,

> Higher mental functions are not built up as a second story over elementary processes, but are new psychological systems that include a complex merging of elementary functions that will be included in the new system, and themselves begin to act according to new laws; each higher mental function is, thus, a unit[1] of a higher order determined basically by a unique combination of a series of more elementary functions in the new whole. (Vygotsky 1999, p. 43)

Thus, not a new function in itself, or a new higher mental function, but a qualitatively new structure of functions characterises the results of development.

This dialectical understanding orients research to focus on transformations as an important aspect of the process of development. However, not every transformation is of a dialectical nature, as a qualitative change of the whole system; there are transformations that happen within the system as reconfiguration of existing components, parts and elements. Following Hegel's dialectical approach, we could call them 'mechanical transformations'. Human mind is not a mechanical system by its nature, and developmental transformation is not a recombination of existing components. Developmental transformation is a qualitative change of the whole system where a new organ brings reorganisation to the whole system in such a way that the new (reorganised) system becomes a unity of a higher order and begins to act according to new laws. Distinguishing two types of transformations allows for the study of the process of social formation of human mind in two interrelated aspects: (1) as a quantitative change and (2) qualitative reorganisation.

[1] Unity (единство) in Russian original text (Vygotsky 1984, Vol 6, p. 58).

3.2.3 Dialectics of Contradictions: Development as Drama

General philosophical idea of dialectical contradictions as a moving force of development was reconsidered within cultural-historical theory in terms of development as a dramatic process, as a drama.

> …social relations, real relations of people, stand behind all the higher mental functions and their relations (Vygotsky 1997, p. 106). …every higher mental function was external because it was social before it became an internal strictly mental function; it was formerly a social relation between two people. (Vygotsky 1997, p. 105)

This foundational theoretical position was developed into a general genetic law of cultural development of higher mental functions:

> … every function in the cultural development of the child appears on the stage twice, in two planes, first, the social, then the psychological, first between the people as an intermental category, then within the child as a intramental[2] category … (Vygotsky 1997, p. 106)

'The basic principle of the functioning of higher functions (personality) is social, entailing interaction of functions, in place of interaction between people. They can be most fully developed in the form of drama' (Vygotsky 1929/1989, p. 59). The social, interpsychological form of higher mental functions is a dramatic interaction between people; it is an (interpsychological) drama of the personality as a participant in an (interpsychological) drama (Vygotsky 1929/1989, pp. 69).

The dramatic frame of the personality as the unique organisation and hierarchy of higher mental functions is the result of unique dramatic interpsychological collisions that have happened in the life of the human being and their overcoming by a human being, the intrapsychological result of the individual' s unique developmental trajectory. In overcoming social dramatic collisions (dramas of life) human being creates his/her unique personality.

The drama of the personality as a participant in the drama of life is the essential contradiction and the moving force for development. Thus, the intrapsychological consists of internalized dramatic social interactions: 'the dynamic of the personality is drama' (Vygotsky 1929, p. 67). Here an abstract dialectical idea of a contradiction as a moving force of development obtains its concrete psychological content in the concept of the drama of life as a moving force in the development of human personality (Veresov 2016).

A cultural-historical understanding of development as a process of sociocultural genesis of human mind is based on the general principles of Hegel's dialectics. Contradictions existing in various forms of dramatic social events on the interpsychological plane bring qualitative reorganisations to intrapsychological system of the child's higher mental functions. This is a foundational framework for studying development in a cultural-historical theoretical tradition. All concepts of cultural-historical theory, such as 'the social situation of development' and 'zone of proxi-

[2] In Russian original it is interpsychological (интерпсихическая) and intrapsychological (интрапсихическая) (Vygotsky 1983, p. 145)

mal development', reflect different aspects of complex and dynamic processes of development, and therefore, they represent a system of interrelated theoretical tools, which orients the research lens on the dialectics of development (Veresov 2014).

We now turn to a discussion of these interrelated concepts that fall under the lens of dialectics.

3.3 Conceptualising Play

There are three foundational studies on play and its role in the child's development – the articles of Vygotsky (1966, 2016)[3] and Leontiev (1959; 2009)[4] and the book of Elkonin (2005/1978). In this section, we will discuss some key dimensions of research on play that are generated by the theoretical framework developed in these two foundational papers. We begin with a brief analysis of Vygotsky's paper. This relatively small paper does not represent the advanced psychological theory of play that one might expect, but it does contain several key theoretical and methodological ideas which were accepted and developed in both the cultural-historical and activity theory traditions. Specifically, Vygotsky's writing on play represents some directions for a cultural-historical analysis of play. In his work, we find two interrelated analytical foci: (1) the socio-cultural nature and genesis of play itself and (2) its role in the mental development of the child.

The analysis of the socio-cultural nature and genesis of a child's play covers four main aspects that include (1) the view of play as a social and cultural phenomenon; (2) the imaginary situation, as the main distinguishing feature of play; (3) the contradictions in play through studying the genesis of play; and (4) the development of play itself. The role of play in the mental development of the child is discussed through the conceptual lenses of (a) play and zones of proximal development; (b) the discrepancy between the visual field and the field of meanings in play; and (c) the dialectical relationship between meaning and action, as the developmental characteristics of play. In this section, we will mostly discuss two of these – the socio-cultural and historical nature of play and play in relation to ZPD.

3.3.1 Socio-cultural and Historical Conception of Play

The socio-cultural and historical nature and genesis of children's play was the focus of the long-term research of Daniil Elkonin. According to Elkonin, the most important contribution to the theory of role play is that:

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[3] We refer to a new translation of Vygotsky paper on play of 1966 published in the special issue of International research in Early Childhood journal.

[4] This article of Leontiev was published in Russian in 1959 (Leontiev 1959, pp. 270–286).

> …role play develops in the course of society's historical evolution as a result of changes in the child's place in the system of social relationships. It is thus social in origin as well as in nature. Its appearance is associated not with the operation of certain internal, innate, instinctive energy, but rather with well-defined social conditions of the child's life in society (Elkonin 2005/1978, p. 86).

This conclusion, supported by the huge amount of experimental data presented in the 'Psychology of play' (2005/1978), could be considered as a continuation of one of Vygotsky's key ideas, but this conclusion cannot be attributed only to role play, and it seems to have a relevance to all kinds of play.

Another of Elkonin's foundational contribution to the cultural-historical conception of play was through his broadening of Vygotsky's notion of play to include different types of play (such as manipulative play in early infancy) and in developing a conception of developmental order of play as a leading activity linked to particular orientation to reality in early childhood.

Play as a cultural and socio-historical phenomenon, the challenges and contradictions of play, and new types of play in contemporary sociocultural environments, remain central in the research of Smirnova and Gundareva (2004), Smirnova and Ryabkova (2010), Elkoninova and Bazhanova (2007), and Kravtsova (1999, 2004). Some of these research programs contain critical analyses of Elkonin's theory of play; Elkoninova and Bazhanova's (2007) research discovered a connection between an 'ideal form' of play and fairytales. These scholars have progressed the original small paper on play written by Vygotsky, through sharpening theoretical understandings and empirical work in this area.

3.3.2 Contemporary Work on Cultural Expressions of Play

Recent research that draws upon cultural-historical theory, not only within cultures but across cultures, expands the original work of Elkonin (2005/1978). For instance, Pellegrini (2011) in looking primarily at the northern hemisphere continents has argued that research into the development of play has a very short history and that mostly research on play has been embedded in other topics, such as theory of mind, and that a focus on studying play from a multi-disciplinary perspective is needed. Important to expanding this argument is going beyond a particular cultural view of play and considering how play develops within and across different cultures.

Play has been conceptualised as a cultural expression, even within the dominant play practices privileged in the north American context (see Goncu and Gaskins 2007). What is key here is that observed play practices and the derivative theories have tended to be based on only some cultural groups, and the subsequent models of play have become the universal view of how children play and how their play develops. Other ways of playing have been made invisible in this process (Goncu et al. 2007). What is argued is that *play is a cultural activity* (Goncu et al. 1999), a *cultural construction* (Goncu et al. 2007), and a *cultural interpretation of children's everyday lives* (Gaskins et al. 2007), lives that are different in different cultural

communities (Goncu et al. 2007), and where the enculturation process is specific to that community (van Oers 2010).

What has emerged in northern hemisphere continents is that early childhood settings are increasingly becoming more academic (Husa and Kinos 2005), there is more pressure on teachers for raising academic standards (Hedges and Cooper 2014) in contexts of a knowledge economy with new demands (van Oers 2009), and the narrowing view of what is play in the policy arena, where intellectual and imaginative dimensions of play are being considered in new ways. Some have pushed against the policy imperatives to narrow the view of play as being only associated with cognitive development (Husa and Kinos 2005) and have suggested that we need to move beyond the binary between play and learning and consider the socially valued developmental and educational goals of play as being mutually constitutive sociocultural practices (Wood and Hall 2011). What has emerged in the many continents of the northern hemisphere is a focus on the functional value of play, as a pedagogical tool to support children's learning, and a great deal of research has sought to examine this problem from a cultural-historical perspective. *New societal needs have created demands for different kinds of research, and this in turn has resulted in the need for a theorisation of play that can meet these new demands.*

In contrast, some countries in the southern hemisphere have focused on how agentic children are in play-based programmes where the societal values have supported academic learning (Pui-Wah et al. 2015) and where research into the degrees of freedom children have are needed (see van Oers 2010, 2013a). Researchers have found that in play-based programmes in Hong Kong, for example, children spend their time engaged in tightly packed teacher-directed activities and have little opportunity to play with each other in interest corners.

In contexts where cultural-diversity exists not only within the preschool population (e.g. Parmar et al. 2004), but also through new arrivals into a country where family values and goals for play based or academic programs may be different (Adams 2015), we see new kinds of conditions being created and the early development of a learning motive (Adams and Fleer 2016; Wong and Fleer 2012, 2013), and these studies speak differently to understanding the relations between play, learning and development. For instance, Wong and Fleer (2013) found that following Hong Kong immigrant families in Australia, the children developed a learning motive as a result of increased competence. For example, in the case of learning to play the guitar, it was found that with perseverance and practice, and the incremental building of competence, enjoyment of success helped to develop a learning motive for learning to play the guitar. Similarly, Adams and Fleer (2016) found that when Australian families moved to Malaysia, the children entered into formal 3-year-old schooling, and as the children developed competencies in literacy and numeracy, the family play practices changed at home, and a greater amount of academic learning began to appear with a changed motive form play to learning by the children. These findings are consistent with that presented by Parmar et al. (2004) who looked at the play beliefs of families of Asian-heritage (Korea, Pakistan, Nepal and India) and Euro-heritage (not given) background residing in communities in north America and found that the former saw little developmental value in play, whilst the later did.

The Asian-heritage families believed early academic training was important and spent a great deal of time on pre-academic activities with their children, whilst the European heritage families acted as play partners with their children (Parmar et al. 2008). The European heritage families engaged in pretend play with their children and the Asian-heritage participated in constructive play. These studies, as illustrations only, give insights into the complexity of the nature of play, learning and development across cultural communities, showing the need to *move beyond a universal view of play*.

3.3.3 Play and ZPD

An analysis of a series of publications on play shows that a process of the 'development of generative understanding' of Vygotsky's theory is taking place among researchers of play who belong to the cultural-historical tradition. In addition, new developments in the understanding of play in various sociocultural and educational settings are enriching the theoretical framework. Again, we will limit our overview of these developments to a few examples. However, we believe they reflect the main traits of the whole picture. For instance, Chaiklin (2003) notes in relation to ZPD:

> ... one must appreciate the theoretical perspective in which it appeared... That is, we need to understand what Vygotsky meant by 'development' in general, if we are going to understand what he meant by 'zone of proximal development' in particular. In this way, the reader can develop a generative understanding of the theoretical approach, which will be more valuable than a dictionary definition of the concept (Chaiklin 2003, p. 46).

It seems that this generalisation also applies to the conception of children's play. To paraphrase, if we are going to understand Vygotsky's approach to play and its role in child's mental development, we need to draw upon and understand a cultural-historical theory of development, where ZPD is a key concept to both development and for play.

Veresov (2004) introduces 'a hidden dimension' of ZPD in play where the level of potential development of a child cannot be reduced to the task the child can solve in cooperation with more competent peers as it always includes child's individual attitude (personal sense) to the task within the play situation. Lindqvist's (1995) conception of playworlds is another example of an original contribution to the cultural-historical conception of play. Ferholt (2007) explains this contribution as follows:

> Lindqvist's pedagogy is designed to investigate how aesthetic activities can influence children's play, and the nature of the connections between play and the aesthetic forms of drama and literature. She is trying to find a 'common denominator' of play and aesthetic forms, a denominator which she calls 'the aesthetics of play' (Lindqvist 1995). Lindqvist considers one of the most important conclusions of her investigation to be that the development of adult-child joint play is made possible through the creation of a common fiction, which she calls a 'playworld' (1995). The playworld is created through the activity of

bringing the actions and characters in literary texts to life through drama. It is the interactive space in which both children and adults are creatively engaged (Ferholt 2007, p. 17).

The conception of a playworld introduced by Lindquist is rooted in Vygotsky's conception of play and, at the same time, significantly enriches our understanding of play in a child's development (for more on this see Lindqvist 2001, 2003).

Another example of new developments in the cultural-historical conception of play is the study of M. Bredikyte (2011). Researching the zones of proximal development in children's play, she came to the conclusion that a critical feature of any play situation is how much space is left for the children's own initiative, improvisation, co-operation and creativity. In another paper (Hakkarainen and Bredikyte 2008), the authors claim:

Actually we are proposing that the full integrative definition of the ZPD should include one more step: from joint action (problem solving) to child-initiated social experimentation and developmental, qualitative, system level change… The internalization phase is not included in the basic definition of the ZPD as the distance between individual and joint problem solving. Another problem is that individual change is focused on instead of broader cultural units. In play context the necessity of joint experimentation is obvious and an extended concept of the ZPD is needed (p. 9).

Hakkarainen and Bredikyte (2008) agree that the zone of proximal development in play includes experimentation with human values and motives; they suggest an expanded definition of ZPD in play:

This definition proposes two distances: 1) between individual action and joint higher level potential, and 2) between joint higher level potential and qualitative change in personality (p. 10).

A recently published book on play (Schousboe and Winther-Lindqvist 2013) provides us with new theoretical and methodological findings in the cultural-historical approach to play and its development. Despite the ZPD being an influential concept, more often it is only used in ways that suit each researcher's own particular project. In the authors' words:

This key concept is surprisingly rarely discussed, and elementary questions like 'Is the playing child always ahead of its age, ahead of its own normal behaviour?' are often not asked. This seems remarkable if one supposes that all researchers, who have for longer periods observed children at play, have seen children that enjoy stepping into the role of a demanding, crying and extremely unruly baby (Schousboe and Winther-Lindqvist 2013, p. 3).

The chapter by Fleer (2013) introduces the dialectics of individual imagining and collective imagining. This new theoretical perspective develops Vygotsky's conception of play as both a cultural phenomenon and a human activity.

Traditional approaches to play which draw upon maturational or biological theories of development foreground the play activities of children over time, categorizing them into stages. However, these theories have not been able to show concretely and theoretically what occurs across a whole community of players in care and education settings. Play, when conceptualized as a dialectical relation between collective imagining and individual imagining, makes visible how both collective and individual action in play support the development of theoretical knowledge in early childhood group settings. This reading of

> play gives a different conceptualization, building upon earlier empirical and theoretical works which seek to understand play within group settings (Fleer 2013, p. 85).

In the study described by Fleer (2013), she not only introduces new dimensions in understanding of the relationship of two types of imagining, but shows new theoretical dimensions in understanding ZPD through the dialectics of collective and individual actions.

3.3.4 Play as a Leading Activity: Theoretical Advances and Contemporary Studies

Although Vygotsky's paper on play does not provide an explicit explanation of the meaning of 'leading activity', this was the first paper where the idea of play as a leading activity in early childhood appeared. Vygotsky wrote:

> Is play the leading form of activity, or is it simply the predominant activity, in a child of this age? It seems to me that from the point of view of development, play is not the predominant form of activity, but is, in a certain sense, the leading line of development in preschool years (Vygotsky 2016).

We could therefore assume that the concept of the leading activity originated in Vygotsky's paper on play. It was advanced and further developed by Leontyev in his foundational theoretical paper on play (Leontiev 1959, pp. 384–406; Leontyev 2009, pp. 331–354). In this paper, we find the following definition:

> What is a leading activity in general? We call 'leading activities' not just those activities occurring most often at a given stage of development of the child. The leading activity is an activity the development of which brings about major changes in the child's mind and within which mental processes occur that prepare the child's transition to a new and higher stage of his development (Leontyev 2009, p. 334).

Therefore,

> …with respect to play, as to any leading activity in general, our task is not only to explain this activity from the child's mental aptitudes already formed but also to understand, from the origin and development of play itself, the psychic connections that appear and are formed in the child during the period when this is the leading activity (Leontyev 2009, p. 334).

This general idea was further developed by Elkonin by introducing a conception of periodization of psychological development on the basis of a leading activity within the social situation of development (Elkonin 1971) where play is a leading activity in early childhood period[5].

Contemporary studies of play as a leading activity in early childhood and its role in child's mental development include an impressive variety of approaches and empirical research projects. For instance, Duncan and Tarulli undertook an analysis

[5] New translation of this paper was done Veresov in 2000 and is available at https://www.marxists.org/archive/elkonin/works/1971/stages.htm

of the concept of play as a leading activity, comparing the approaches of Vygotsky, Leont'ev and Bakhtin (Duncan and Tarulli 2003). Lubovsky (2009) notes the development of the concept of leading activity in the works of Vygotsky, Leontiev and their followers (Lubovsky 2009). Edwards looks at the relation of play and imagination in children through the lens of the concept of leading activity (Edwards 2011). Research by Kravtsov and Kravtsova (2010) develops Vygotsky's original idea of looking at play and its development as a historical and socio-cultural complex phenomenon. Fleer (2009) looks at a child's play in a wide cultural-historical theoretical perspective:

> Vygotsky's (1966) theory of the role of play in the mental development of children provides powerful new directions for re-thinking how we have conceptualized play. Considering play as the leading activity in the development of young children is different to thinking about play as the 'child's world' or the 'child's work'. A cultural–historical study foregrounds the motives, needs and interests of children alongside of the cultural contexts which privilege and value specific practices (Fleer 2009, p. 14).

Fleer's research provides new insights into understanding play as a leading activity in various cultural communities. This approach is important as it brings to our attention the cultural contexts and content of play and challenges Western perspectives. The thinking moves beyond a universal view of the construct of play. Culture and context are central to the understanding of how play is valued, expressed and used as a pedagogical approach in early childhood education internationally.

In research by van Oers (2013a, b), it is argued that the format of activity is a general characterisation of human activity based on three parameters: involvement, rules, and degrees of freedom. It is assumed that every human activity can be characterised by specifying the level of involvement of the actors, the type of rules that they are following and the degrees of freedom that are allowed them in making their own choices as to the actions to be performed, the goals to achieved, the tools, the rules, etc. From this activity point of view, play can be defined as an activity that is accomplished by highly involved actors, who follow some rules (either implicitly or explicitly) and who have some freedom with regard to the interpretation of the rules and to the choice of other constituents of an activity (like tools, goals, etc.) (van Oers 2013a, pp. 191). This theoretical work on play advances understandings about play as a leading activity and provides the conceptual tools to better understand the role of adults with respect to children's play, to explaining learning and the development of play in the course of human ontogeny (van Oers 2013b, pp. 195–196).

In this first part of the chapter, we have specifically examined concepts from cultural-historical and activity theories that are foundational for understanding play and development, as key for the field of early childhood education. We also examined the conception of play by seminal theorists, such as Vygotsky, Elkonin and Leontiev, and illustrated some key contemporary scholars who have drawn upon these foundations to progress research in play. We now turn to a deeper analysis and coverage of the literature, so that we may determine how researchers have used these concepts for examining the relations between play, learning and development

in early childhood education. We seek to not just present key concepts from cultural-historical and activity theories, but also to analyse and present how these concepts are being used in the field of early childhood education.

3.4 How Do Early Childhood Education Researchers Discuss the Relation Between Play, Learning and Development?

In this part of the chapter, we take a closer look at how researchers have drawn upon the seminal theories and used cultural-historical conception of play and development to solve the central problem facing many countries around the world: 'What is the relation between play and learning' (see Fleer and van Oers, this Volume)? We do this by looking at how researchers have contributed to better understanding how one leading activity changes into another. We examine the empirical insights that can together support an explanatory model for better understanding the relations between play, learning and development in early childhood education. Four key themes form the focus of what can be learned from the relevant literature. They are:

1. *Concepts underpinning pedagogical models that support the development of play*
2. *What concepts have been used to discuss play pedagogy?*
3. *Play and learning from the perspective of children*
4. *Digital play*

These themes have emerged in the empirical and theoretical literature associated with early childhood education that draws upon cultural-historical concepts. They are discussed in turn.

3.4.1 Concepts Underpinning Pedagogical Models that Support the Development of Play

The introductory chapter to this volume is on contrasting perspectives on the relations between play and learning, with a special focus smuggling concepts into play (northern hemisphere) or freeing up instruction to be more playful and motivating for children (southern hemisphere). The research primarily supports conceptualising new pedagogical practices but with a different play-learning orientation. Less attention has been focused on how specifically designed pedagogical models support the development of play itself, and through this develop the child (Hakkarainen 2006). Handbook presents a number of innovat programmes or pedagogical models that feature play, learning and development (see overview by Fleer, Chen and van Oers, Volume 2). In this chapter we concentrate our discussion on those models which draw upon cultural-historical theory or activity theory and which have specifically teased out the relations between play, learning and development.

In conceptualising the dialectical nature of play, Hakkarainen (2006) has argued that there are many contradictions in play, for instance, role-playing being an adult whilst being a child; having a high social position in play, whilst at the same time cooperating equally in play so that the play can proceed; role-playing freely, whilst at the same time role-play with certain rules of behaving; and doing immediately what you want whilst at the same time controlling your own behaviour. In following the logic of cultural-historical theory, these contradictions help to create the conditions for developing the play and through this the overall development of the child. This basic logic forms the foundations of many pedagogical models of play that are informed by cultural-historical or activity theories. When learning is included in the relations between play and development the 'goal is to make learning an integral part of the play structure itself, rather than something separate and compartmentalized' (Hakkarainen 2006, p. 208). The models that follow have sought to integrate learning by theorising pedagogy in ways that are sensitive to the child's motive for play whilst projecting forward into the child's zone of proximal development where learning is the leading motive.

Four key pedagogical models are presented as examples to illustrate pedagogical models that focus on the relations between play, learning and development from a cultural-historical or activity theory perspective. They are Playworlds (Lindqvist 1995, 2003; Hakkarainen and Brėdikytė, Volume 2), the Golden Key Schools (Kravtsov 2008; Kravtsov and Kravtsova, Volume 2), Developmental education (van Oers 2012; see also Pompert and Dobber, Volume 2), and Tools of the Mind (Bodrova and Leong 1998; see also Bodrova and Leong, Volume 2). Each of these is described in detail in Volume 2. In this section, we draw out the key theoretical dimensions only.

Playworlds was originally designed by Lindqvist (1995), with many others drawing upon this foundational pedagogical model in Finland (Hakkarainen et al. 2013; Rainio 2008, 2009), the USA (Ferholt 2009; Ferholt and Lecusay 2010; Nicolopoulou et al. 2010), Italy (Talamo et al. 2010) and Australia (Fleer 2016). The latter being in digital virtual contexts. Theatre pedagogy (Lobman 2003) is central to this model where the adult has a direct role in children's play. This is different to how the adult is conceptualised in the general play literature, where different theories are drawn upon (e.g. maturational theories, where stages of play are biologically determined, and adults get in the way of children's play or it is not play if adults are involved).

Lindqvist (1995) used Vygotsky's conception of play to create a playworld that was designed for children and teachers to jointly enter into, where the play was developed through going on journeys, and real world problems were encountered and had to be solved through both imagination and subject content knowledge. The teacher took an active role in the children's play, and both the journeying and the re-orientation of the teacher to be inside of the imaginary play took a long time. The Vygotskian conception of play (Vygotsky 2016) and his work on the psychology of art (Vygotsky 1971) were foundational for Lindqvist's (1995) model of playworlds. Key ideas were the importance of art (Vygotsky 1971), correspondence between the internal and external (Vygotsky 1971), imagination and reality (Vygotsky 2004) and the imaginary process (Vygotsky 2016). Those that have followed have elabo-

rated the pedagogical role of the adult (Hakkarainen and Bredikyte 2008), the significance of the story chosen to create dramatic tension (Hakkarainen 2010) and adult-child relations (Nicolopoulou et al. 2010), the Socratic dialogue in the playworlds (Ferholt and Lecusay 2010) and the jointly created narrative as a transitory activity system (Hakkarainen 2010; see also Hakkarainen and Bredikyte, Volume 2), and contemporary contexts of virtual worlds (Talamo et al. 2010).

Another pedagogical model that draws on cultural-historical theory is the Golden Key Schools in Russia (Kravtsov 2008; Kravtsov and Kravtsova, Volume 2). The foundations of the Golden Key School rests on the assumption that the model of education will transform children's personal meaning into cultural meaning, where a new sense is given to children's everyday life experiences. The Golden Key Schools are framed on the idea of the family, where multi-aged groups of children aged from three to 12 years are taught together. These groups are between 15 and 25 children. The pedagogical practices focus on the idea of an event, such as a lost letter arriving from a soldier, or a person dresses up as a fairytale character and who sets a challenge, such as 'Can you help me find my fairytale?' The children, their families and the teacher collectively solve the problem over time. In addition to the pedagogical practice of an event, the educational program is organised in the first four years into four components: Year 1: spatial orientation; Year 2: time and history; Year 3: different materials; and Year 4: reflection on actions (Kravtsov and Kravtsova 2011).

The foundational concepts of the Golden Key Schools are: Integrating intellect, affect and emotion and individuality, will and personality (Vygotsky 2005). The central concept that underpins the pedagogical model is the development of elementary and higher psychological functions, where the zone of proximal development is supported by Kravtsova's conception of pair pedagogy and subject positioning (discussed above).

The Dutch name for developmental education is Ontwikkelingsgericht Onderwijs, which translates as *development-oriented schooling* (van Oers 2012). The foundation of Developmental education is not maturational theory, but rather cultural-historical theory. Developmental education is for children aged three to twelve years and is described in detail in Volume 2. This pedagogical model was conceptualised and researched by van Oers over an extensive period in the Netherlands (van Oers and Duijkers 2013; Pompert and Dobber, Volume 2). Developmental education is a play-based curriculum and should not be confused with Davydov's (1988) model of Developmental Education. Developmental education does not design trajectories of subject matter learning for children, but rather is a process of collaborative restructuring of current activities and subject matter to build developmental trajectories. The key pedagogical approach is to collaboratively develop solutions to inquiries that are of interest to children (personal sense) in play-based settings and where the agency of the child is central for taking forward learning and development so that a new cultural sense develops (cultural meaning). The chapter on a cultural-historical methodology of this volume presents an example from van Oers (2008) in which children role-play a shoe shop and encounter a problem of retrieving shoes quickly to fit customers, but the system of storage causes difficulties, and it is not until the children

are introduced to the idea of putting symbols on the shoe boxes that the problem is solved. Discussions about what symbols (personal sense) can be understood by all the children (new cultural sense) generate a need for standardization of symbols, which is both personally and culturally meaningful to the children. This is needed so the play can continue. Careful pedagogical thought is directed to creating the educational conditions which support the development of the child and where child agency is central for developing culturally meaningful practices for the children.

The central concepts that underpin developmental education are the social situation of development, meaningful learning (cultural meaning and sense) and the zone of proximal development. Here Vygotsky's conception of play and the concept of leading activity theorise the pedagogical practices of the model put forward by van Oers (2012). Specifically, the relations between play and learning are characterised in developmental education through a play-based approach to school learning for children aged three to eight years. Role-play in developmental education is theorised by van Oers (van Oers 2010; van Oers and Duijkers 2013) following Leont'ev (1983) conception of play where the shared rules, the degrees of freedom open to children regarding how the activity is to be carried out, and the level of personal involvement is key. They suggest that 'as cultural activities essentially include the function of learning, we can also integrate learning and play, but considering the changes in the playing actions or in the content of the activity as demonstrations of learning' (van Oers and Duijkers 2013, p. 515). Further, van Oers (2012) argues that the child's perezhivanie as the emotional relationship that is established in a particular situation or cultural activity is evident in role-play, and the extent to which the child feels deeply involved, and will actively participate in a personally meaningful way, is key to developmental education. Accordingly, a play-based approach theorised in this way builds up a meaningful and functional social situation for cultural development, and the child takes on a role in the play-based program that she/he feels 'emotionally related to, a role which is supported by a personal imagination of what it means to act out this role' (p. 22).

The model of play and learning developed by Bodrova and Leong (1998) known as the *Tools of the Mind* draws upon cultural-historical theory to theorise play, alongside of conceptualising the pedagogy needed for supporting the development of mature forms of play in preschool settings in the USA. In contrast to maturational views of play dominant in the USA, Bodrova and Leong (1998) discuss the characteristics of play as a cultural phenomenon. Central to the *Tools of the Mind* is the use of play plans as a tool for pedagogically supporting the development of mature forms of play (see also Bodrova and Leong, Volume 2).

In line with Vygotsky's (2016) conception of play, Bodrova and Leong (1998) discuss the characteristic of mature forms of play as featuring children who enter into an imaginary situation where they give new meaning to actions and objects, including people. The imaginary sense given to the objects is different to what and how the physical objects appear to the children. Mature forms of play work with the idea of the imaginary object, or with words rather than objects, whilst less mature forms of play need realistic props in play, as placeholders for supporting the pretense enacted between and with other children. In mature forms of play, agreed rules

and roles are assigned and these stay stable throughout the play. The themes of the play expand, going beyond the obvious roles found in particular settings. For example, in police play, the police officers and the criminal case would be expanded to include the staff and their roles in the police station. In less mature forms of play, children will tend to follow a script, playing in the same way each time. Whilst in mature forms of play which afford the integration of various themes, children will negotiate their play and will plan how the play script should develop. Play maturity can also be seen through the use of children's language during play. Mature forms of play will include specialized play language, as has already been noted by many longstanding play researchers (e.g. metacommunicative language, Bateson 1971). It is observed that children change their intonation, register and even use particular words to signal they are pretending. They also use language to regulate the actions of others, so that the play narrative can continue in particular ways. In mature forms of play, children tend to spend longer discussing the roles of players and rules of play, than actually playing. Further, children stay focused on their play plans and will not be distracted by a routine change, a social diversion or an attractive toy. In contrast, less mature forms of play usually go with the flow of the event and may not return to the play that was previously started by the children, or there are short play themes that change regularly over the course of the play, rather than the development of one play theme.

Important for the development of play in the Tools of the Mind approach is Bodrova and Leong's (1998) conceptualisation of play plans which act as a tool for pedagogically supporting the development of mature forms of play. According to Bodrova and Leong (1998), a play plan is prepared by the child with the support of the teacher. The play plan documents what the child expects to do in their play. The teacher supports the children to describe the imaginary situation and to detail the roles that are to be adopted in the play. They argue that unlike oral plans that can be easily forgotten, documented play plans as a cultural tool for supporting children's play development can be re-examined and discussed during or after the play period. Further, the play plans allow children to document changes in their play themes or roles assigned, thus making more explicit, and therefore conscious to the child, their play. It is argued by Bodrova and Leong (1998) that this also develops children's self-regulation. Play plans also help players to carry their play themes over from one play period to another, thus helping the play themes to develop and become more complex. It has been found by Bodrova and Leong (1998) that when play plans are reviewed after a play period that 'the teacher can model how to reconstruct what happened or suggest new play elements that can be used to extend the play. As a result, children would spend more time in a mature play thus practicing self-regulation through its imaginary situation, roles, and rules' (p. 122). The play plans when combined with subject matter content, such as literacy development, increased outcomes in children's academic competencies have been reported (e.g. Diamond et al. 2007).

Taken together, these pedagogical models have both theorised pedagogy and researched these new models of practice, where the relations between play and

learning have centred on the development of the child. What is unique about these models is that cultural-historical theory has focused their attention on the development of children's play and schooling/pre-schooling (van Oers 2012) and through this careful attention has been given to child agency (van Oers 2008), degrees of freedom in play (van Oers 2013a) but where subject matter content is related to continuing children's play (van Oers 2008; van Oers and Duijkers 2013; Hakkarainen et al. 2013; Rainio 2008, 2009) and where play maturity is key for developing the child (Bodrova and Leong 1998; Kravtsov and Kravtsova 2011) through specially created cultural conditions named as Playworlds (Lindqvist 1995), Tools of the Mind (Bodrova and Leong 1998), Developmental Education (van Oers 2012) and Golden Key Schools (Kravtsov and Kravtsova 2011).

3.4.2 What Concepts Have Been Used to Discuss Play Pedagogy?

In addition to the pedagogical models described, there are researchers who have specifically investigated teacher-child interactions in play based programmes, and these researchers discuss their work in terms of *pedagogical play* (Ridgway et al. 2015), *purposeful play* or *learning through play* (Sim 2015), *play-based learning* (Sumsion et al. 2014), *playful pedagogies* (Goouch 2008), *educational play* (Wood 2014), *inquiry-play* (Hedges 2010), *developmental pedagogy* (Pramling Samuelsson and Pramling 2014) and the *playing-learning child* (Pramling Samuelsson and Carlsson 2008). What these terms point to is the current international need for better theorising the relations between play and learning, where the role of the teacher can be better understood in practice and conceptualised pedagogically.

The *play-pedagogy interface* (Wood 2014) has been quite well researched. For instance, Wood (2014) has examined the discourses of play and learning and proposed that there are three modes of play pedagogy: (1) child initiated; (2) adult guided; and (3) technicist/policy-driven forms of educational play. She argues that each of these modes is framed around particular pedagogical interaction between adults and children. Other research has revealed different pedagogical beliefs about play, such as a*trust-in-the play approach* (no role for the teacher), a *facilitate-play approach* (organising for play by the teacher) and *enhance-learning-outcomes play approach* (where the play goals are narrowly focused on discipline knowledge), and it is argued that there is a need for another way of conceptualising play and learning that is an integrated, responsive model of play intervention (see Trawick-Smith 2012). Integrating play and learning has been a key problem in Sweden where research has sought to examine how this is achieved in practice. It was found that three categories of interaction between children and teachers were observed, explorative interplay (shared imaginary play with the teacher pointing out some-

thing associated with a learning goal), narrative interplay (expansive play in which the teacher expanded the play through introducing learning goals) and formalistic interplay (teacher directed question-answer dialogue, no joint imaginary situation) which together showed that when teachers and children were jointly involved in the same imaginary play, a higher level of integrated play and learning was achieved (Pramling Samuelsson and Pramling 2014).

In the USA where concerns have been expressed about the dominant imperative to increase outcomes for preschool aged children, researchers have examined how teachers systematically integrate play into the learning curriculum for low SES communities, where, for instance, storytelling and story acting practices features, noticing that social competence and the social position of children previously deemed a trouble maker, had improved for programs which integrated play and learning more (Nicolopoulou et al. 2010).

Cultural-historical studies into teacher views and practices associated with their role in children's play have been investigated, showing that adults generally do not involve themselves in children's play in some cultural communities (McInnes et al. 2011). In Australia, for instance, researchers have grappled with how learning and play are enacted in practice, researching explicitly how educators bring together free play and play-based learning (Sumsion et al. 2014) in the context of intentional teaching. The latter has generated a need to reconceptualise the role of teachers in early childhood settings, as taking a more active role. This is in contrast to expectations in, for example, Singapore where 'Purposeful play in the local context requires the need for active involvement on the part of the teachers in an activity that all children like to do best, to play, in order to deliver the objective of education: to learn' (Sim 2015, p. 228). Like intentional teaching in Australia, purposeful play has been explicitly built into the curriculum guidelines. Wood (2010) in the UK has suggested there now is a need to reconceptualise the play-pedagogy relationship away from Government control and more in relation to pedagogical practices that support play complexity. The latter point is picked up by Ridgway et al. (2015) who introduce the idea of agentic imagination and conceptual reciprocity (subject matter content) as a way of dealing with both play and learning as new imperatives for research and practice in early childhood education. This is also picked up by Hedges (2010), but in the context of teacher professional knowledge, who has found that the concept of *play-inquiry* moves teacher professional knowledge from a developmental to a sociocultural theoretical conception of play, thus affording the need for more subject matter knowledge.

What is evident in all the early childhood literature on play that draws upon cultural-historical theory is the imperative in the continents of the north to introduce more concepts in playful ways and in the south the focus is on making learning more playful. Both imperatives focus on finding new ways of conceptualising pedagogy (Fleer and van Oers, this Volume).

3.4.3 Play and Learning from the Perspective of Children

What is unique about each of the pedagogical practices discussed in the previous section is whether they are sensitive to the perspective of children. This is not surprising because central to a cultural-historical theory of play is the child's motive for play as a leading activity in early childhood. There is a plethora of studies that seek to gain the child's perspective; however, these researchers draw upon theories other than cultural historical or activity theories. Yet following the child's intentions in play can also be observed in studies that draw upon cultural-historical theory (e.g. Hedegaard and Fleer 2013; Ridgway et al. 2015) or activity theory (e.g. van Oers 2010). For instance, in Australia, Theobald et al. (2015) investigated children's perspective of play and learning in everyday life and found that children believed them to be intertwined and not separate activities. This was also found in research in Sweden by Pramling Samuelsson and Carlsson (2008), Wallerstedt and Pramling (2012) and Pramling Samuelsson and Johansson (2009). Ridgway et al. (2015) also draw attention to the child's perspective in play and learning in Mexico and Australia by referencing the concepts of intersubjectivity and conceptual reciprocity as a way of capturing the relations between play and learning for the child.

These studies highlight the need for theorising pedagogy in new ways that take into account the change in relations between play and learning. These studies foreground how to create new cultural conditions for supporting children's development through not just play, as was the previous focus in the northern hemisphere, or through learning, as was the focus for the southern hemisphere, but through a new conception of the relation between play and learning. This is discussed further in the next section.

3.4.4 Digital Play

Since the original works of Vygotsky's were written and translated, communities and societies have continued to culturally develop. One of the cultural changes that is worthy of attention when considering early childhood education is the unique context of digital devices and virtual play environments that are accessible tools for play, learning and development of infants, toddlers, pre-schoolers and children in the early years of school. The emerging literature that draws upon cultural-historical theory for informing cultural-practices is still limited and mostly has focused on describing practices in the home or early childhood institutional settings. Research into how digital technologies act as a developmental tool for children is rare, but insights into how digital technologies could potentially change cultural practices for children are evident. For instance, Stephen and Plowman (2014) suggest that digital play has moved discussions to the new possibilities of the:

- Digitally enhanced tangibility of the lived environment of children (sensors, computer chips in devices)
- Play objects that are combining real and virtual worlds (touchable toys using tags for communicating on and off screen)
- Robotic toys with inbuilt and adaptable gesture and speech recognition, including displaying emotional responses
- Augmented reality games where interactive virtual figures are superimposed onto images of the environments in which children are living and playing; and
- Software tools for designing, drawing, and communicating in new ways (e.g. Skype, Vogs)

It is argued that how these new cultural tools change the play and learning of children in a fast changing technological context is yet to be researched. Some have sought to investigate how digital tools can and do integrate into play-based programmes (Edwards 2013; Moore 2014) and if existing software can afford imaginary play opportunities (Verenikina et al. 2010). Exciting research into digital playworlds (see Talamo et al. 2010) shows how theorised and researched models of play and learning open up new possibilities for children's development, alongside of research into how children digitally enhance their play through using digital placeholders and virtual pivots (Fleer 2014a). The latter is also shown through the cultural-historical research of Björk-Willén and Aronsson (2014) who show how children in play draw upon the digital speech patterns of virtual characters and how they also give a personal sense to the figures in virtual play, as if they are play partners. Together, these studies show new relations between play, learning and development that were not available in Vygotsky's time. These studies suggest that digital devices and software can act as a developmental tool and that digital play is a new cultural condition that needs to be better understood. However, the challenge will be advancing the research in a context in which the development in technologies usually outpace the research.

3.5 Contemporary Challenges: How Is the Relation Between Play, Learning and Development Discussed?

In examining the contemporary studies and theoretical papers in early childhood education that have drawn upon cultural-historical theory and activity theory, it is evident that how the motive for play develops into the motive for learning was key to the current research needs of the field. New societal needs have created demands for different kinds of research, and this in turn has resulted in the need for a theorisation of play that can meet these new demands.

What has emerged is a series of studies and theoretical pieces that seek to better theorise pedagogy, as a litmus test of a greater need for having available to early childhood educators a model of play and learning that together acts as a cultural tool for children's development. The terms used include pedagogical

play, purposeful play or learning through play, play-based learning, playful pedagogies, educational play, inquiry-play, developmental pedagogy and the playing-learning child.

The models of pedagogy that have resulted to address the societal need to bring play and learning together have as expected from within a cultural-historical framing conceptualised this relation directly to development. These educational models have not only drawn upon important concepts found in Vygotsky's and Leontiev's theories, but have theorised play and development in relation to learning. In so doing, they have theorised pedagogical practices which support children's play, learning and development in early childhood educational settings. The pedagogical models that act as a cultural tool for supporting development reviewed were Playworlds, Tools of the Mind, Developmental Education and Golden Key Schools. In these models, careful attention has been given to child agency, degrees of freedom in play, but where subject matter content is related to continuing children's play and where play maturity is key for developing the child through specially created cultural conditions. Interestingly, the digital playworld of Talamo et al. (2010) and that broadening of play to include digital placeholders and virtual pivots (Fleer 2014b) together point to how digital devices and software can also act as a developmental tools.

The key problem of the relations between play and learning has been addressed by contemporary researchers through drawing upon powerful concepts from cultural-historical and activity theories. Many have theorised the relation between play and learning, and many have pointed to the problem of how one leading activity changes into another leading activity as a way of capturing children's development. But what is the character of each leading activity and what might be the mechanism by which one leading activity is replaced by another, and finally what might be the interconnections between leading activities and the educational conditions created for the child's development (Kravtsova 2006)?

Vygotsky discussed development in terms of crises and cultural age periods, where preparation from one age period to the next was conceptualised as neoformations (Vygotsky 1998). As was discussed previously, Leontiev elaborated Vygotsky's idea of play as a leading activity, to introduce a series of leading activities, such as learning as a leading activity. Yet how one leading activity changes into another leading activity was not discussed in these works. Elkonin (1971) examined this relation as a stage model, where two different periods dominated, tool elaboration and motives, and through this he sought to integrate Vygotsky's theory of development with Leontiev's theory of activity (see Hakkarainen 2010). But research to explain development within stage theory was not evident to support this model.

Kravtsova (2006, 2010) has discussed the relations between play and learning in the context of self development in the Golden Key Schools, where education is the source for the development of the child and where the child gains a new self-awareness. During a crisis, new formations can be associated with the new self-awareness, where the child begins to regard her or his actions in new ways and where a new social relation with others emerges (Kravtsova 2006). Kravtsova (2010) in elaborating Vygotsky's experimental genetic method (see Fleer and

Veresov, this volume) introduces the projective method for modelling the conditions for supporting the development of inter and intrapsychological functioning in an education context (see Kravtsov and Kravtsova; Volume 2). Through the Golden Key Schools where programmes are future oriented and where communication in multi-age groups allows for what Kravtsova (2010) calls pair pedagogy (2 teachers) and subject positioning between them and the children (e.g. above, below, primordial we, equal), she creates the special future oriented communication (i.e. ZPD) that mirrors the developmental conditions, as defined by Vygotsky, in education contexts. The projective method captures the relations between learning and development, because it simulates the conditions for how 'new psychological formations as special features of consciousness and self-awareness during both lytic and critical ages' changes the child's activity. The changes occur in the child's communication and the new relations with adults, and this is promoted in the Golden Key schools through pair pedagogy (Kravtsova 2006, pp. 6). In this way, Kravtsova (2006, 2010) addresses the problem of the change in the child's activity from play to learning by drawing attention to the new leading psychological formations as the basis for continuous education.

Hakkarainen (2010) explains the relations between play, learning and development as a transitory activity system through narrative learning as a developmental intervention for transition. A transitory activity system draws attention to the relations between learning and development through play. In drawing upon Lindqvist (1995) pedagogical model of playworlds, Hakkarainen (2010) suggests that through children being invited into the imaginary situations and problem scenarios created through playworlds, they find they cannot solve problems by narratives alone (see also Hakkarainen and Bredikyte, Volume 2). The play stops if the children and their teacher do not draw upon a realistic solution, that is, through some learning activity. As such, Hakkarainen (2010) theorises that play or playworlds is the key transitory activity system that speaks directly to the change in relations between play and learning, which leads the child's overall development.

What each of these scholars' point to is the challenge of theorising and researching the unsolved problem of 'what really happens when the previous activity does not make sense any more and the new activity has to replace the old one?' (Hakkarainen 2010, p. 77), or put simply, how do these theoretical models help explain the relations between play, learning and development in education

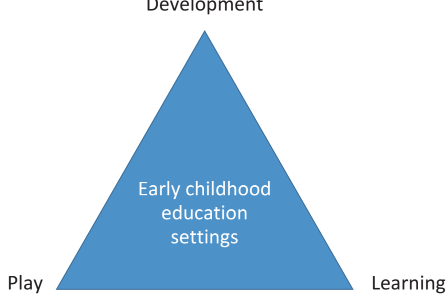

Fig. 3.1 The international problem of what is the relations between play, learning and development in early childhood education settings?

contexts? This theoretical problem is shown in Fig. 3.1 and highlighted in this chapter as a key challenge contextualised concretely for early childhood education settings.

3.6 Conclusion

The theoretical discussions in the first part of this chapter were the backbone for understanding the relations between play, learning and development introduced in the second part of this chapter. The concepts discussed were specific to play and development for early childhood education – the focus of this Handbook. Foundational and contemporary works were introduced in this chapter from the perspective of both cultural-historical and activity theories. More contemporary papers for the former were found, and as such, a more expansive discussion of cultural-historical view of play, learning and development featured.

What can be argued is that play as a cultural activity acts as a cultural interpretation of children's everyday lives and this will be expressed differently in and across the countries of the northern and southern hemispheres. The cultural-historical and activity theory models of pedagogy that have evolved in particular cultural communities to culturally develop children appear to move beyond a universal view of play because the theory of development that underpins them is always a dynamic relation between the social and the individual. The challenge is how to advance research and the development of theory, in a continually changing international context, where the imperative for greater academic outcomes in the north and for more creative and agentic children in the south are in constant motion.

References

Adams, M. (2015). *Play, Pedagogy, Learning and Development: A Cultural Historical Perspective.* Paper presented at the Pacific Early Childhood Education Research Association annual conference (PECERA), Sydney, Australia.

Adams, M., & Fleer, M. (2016a). The relations between a "push down" and "push up" curriculum: A cultural-historical study of home play pedagogy in the context of structured learning in international schools in Malaysia. *Contemporary Issues of Early Childhood, 17*(3), 328–342. https://doi.org/10.1177/1463949116660955.

Bateson, G. (1971). The message 'This is Play.'. In R. E. Herron & B. Sutton-Smith (Eds.), *Child's play* (pp. 261–266). New York: Wiley. (Reprinted from B. Schaffner (Ed.), *Group processes: Transaction of the second conference,* New York: Josiah Macy, Jr. Foundation, 1956).

Björk-Willén, P., & Aronsson, K. (2014). Preschoolers' "animation" of computer games. *Mind, Culture, and Activity, 21*(4), 318–336. doi:10.1080/10749039.2014.952314.

Bodrova, E., & Leong, D. J. (1998). Development of dramatic play in young children and its effect on self-regulation: The Vygotskian approach. *Journal of Early Childhood Teacher Education, 19*(2), 115–124.

Bredikyte, M. (2011). *The zones of proximal development in children's play*. Academic dissertation. University of Oulu, Finland.
Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. In A. Kozulin, B. Gindis, V. Ageyev, & S. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 39–62). Cambridge, UK: Cambridge University Press.
Davydov, V. V. (1988). Problems of developmental teaching: The experience of theoretical and experimental psychological research. *Soviet Education, XXX*(8), 1–97.
Diamond, A., Barnett, W., Thomas, J., & Munro, S. (2007). Preschool program improves cognitive control. *Science, 318*(5855), 1387–1388.
Duncan, R., & Tarulli, D. (2003). Play as the leading activity of the preschool period: Insights from Vygotsky, Leont'ev, and Bakhtin. *Early Education and Development, 14*(3), 271–292.
Edwards, S. (2011). Play as a leading activity: The relationship between imagination and reality in children's contemporary play worlds. *Cambridge Journal of Education, 41*(2), 195–210.
Edwards, S. (2013). Digital play in the early years: A contextual response to the problem of integrating technologies and play-based pedagogies in the early childhood curriculum. *European Early Childhood Education Research Journal, 21*(2), 199–212.
Edwards, S., Cutter-Mackenzie, A., & Hunt, E. (2010). Framing play for learning: Professional reflections on the role of open-ended play in early childhood education. In L. Brooker & S. Edwards (Eds.), *Engaging play* (pp. 136–151). Oxford: Open University Press.
Elkonin, B. D. (1971). Toward the problem of stages in the mental development of the child. *Voprosy psikhologii, 4*, 538–563.
Elkonin, B. D. (2005/1978). The psychology of play. *Journal of Russian and East European psychology*, 43(1) and 43(2). Originally published as Elkonin, D.B. (1978). Psihologiya igry [The psychology of play]. Moscow: Pedagogika.
Elkoninova, L., & Bazhanova, N. (2007). Forma I material suizetno-rolevoi igri doshkolnikov. [The form and the material of preschooler's make-believe play]. *Kulturno-istroricheskaya psihologia [Cultural-Historical Psychology], 2*, 2–11.
Ferholt, B. (2007). *Gunilla Lindqvist's theory of play and contemporary play theory*. Retrieved on 2 September, from http://lchc.ucsd.edu/Projects/PAPER1%20copy-1.pdf
Ferholt, B. (2009). *The development of cognition, emotion, imagination and creativity as made visible through adult-child joint play: Perezhivanie through playworlds.* (Unpublished PhD thesis).University of California, San Diego, USA.
Ferholt, B., & Lecusay, R. (2010). Adult and child development in the Zone of Proximal Development: Socratic dialogue in a playworld. *Mind, Culture, and Activity, 17*(1), 59–83.
Fleer, M. (2009). A cultural-historical perspective on play: Play as a leading activity across cultural communities. In I. Pramling-Samuelsson & M. Fleer (Eds.), *Play and learning in early childhood settings: International perspectives* (pp. 1–19). The Hague: Springer.
Fleer, M. (2013). Collective imagining in play. In I. Schousboe & D. Winther-Lindqvist (Eds.), *Children's play and development: Cultural-historical perspectives* (pp. 73–87). The Hague: Springer.
Fleer, M. (2014a). Beyond developmental geology: A cultural-historical theorization of digital visual technologies for studying young children's development. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children. International perspectives on early childhood education and development series* (pp. 15–34). The Hague: Springer.
Fleer, M. (2014b). The demands and motives afforded through digital play in early childhood activity settings. *Learning, Culture and Social Interaction, 3*, 202–209.
Fleer, M. (2014c). *Theorising play in the early years*. Melbourne: Cambridge University Press.
Fleer, M. (2016). Digital playworlds in an Australia context – supporting double subjectivity. In T. Bruce, M. Bredikyte & P. Hakkarainen (Eds.), *Routledge handbook of play in early childhood*. London: Routledge Press/Taylor and Francis Group.

Gaskins, S., Haight, W., & Lancy, D. F. (2007). The cultural construction of play. In A. Goncu & S. Gaskins (Eds.), *Play and development.Evolutionary, sociocultural, and functional perspectives* (pp. 179–202). Great Britain: Lawrence Erlbaum Assoc.

Goncu, A., & Gaskins, S. (Eds.). (2007). *Play and development. Evolutionary, sociocultural, and functional perspectives*. Great Britain: Lawrence Erlbaum Assoc.

Goncu, A., Tuermer, U., Jain, J., & Johnson, D. (1999). Children's play as cultural activity. In A. Goncu (Ed.), *Children's engagement in the world. Sociocultural perspectives* (pp. 148–170). Cambridge, MA: Cambridge University Press.

Goncu, A., Jain, J., & Tuermer, U. (2007). Children's play as cultural interpretation. In A. Goncu & S. Gaskins (Eds.), *Play and development. Evolutionary, sociocultural, and functional perspectives* (pp. 155–178). Great Britain: Lawrence Erlbaum Assoc.

Goouch, K. (2008). Understanding playful pedagogies, play narratives and play spaces. *Early Years: An International Research Journal, 28*(1), 93–102.

Hakkarainen, P. (2006). Learning and development in play. In J. Einarsdottir & J. T. Wagner (Eds.), *Nordic childhoods and early education. Philosophy, research, policy, and practice in Denmark, Finland, Iceland, Norway and Sweden* (pp. 183–222). Charlotte: Information Age Publishing.

Hakkarainen, P. (2010). Cultural-historical methodology of the study of human development in transitions.*Cultural-Historical*. *Psychology, 4*, 75–89.

Hakkarainen, P., & Bredikyte, M. (2008). The zone of proximal development in play and learning. *Journal of cultural-historical psychology, 4*(4), 2–11.

Hakkarainen, P., Bredikyte, M., Jakkula, K., & Munter, H. (2013). Adult play guidance and children's play development in a narrative play-world. *European Early Childhood Education Research Journal, 21*(2), 213–225.

Hedegaard, M., & Fleer, M. (2013). *Play, leaning and children's development: Everyday life in families and transition to school*. New York: Cambridge University Press.

Hedges, H. (2010). Whose goals and interests? The interface of children's play and teachers' pedagogical practices. In L. Brooker & S. Edwards (Eds.), *Engaging play* (pp. 25–38). Oxford: Open University Press.

Hedges, H., & Cooper, M. (2014). Engaging with holistic curriculum outcomes: Deconstructing 'working theories'. *International Journal of Early Years, 22*(4), 395–408.

Husa, S., & Kinos, J. (2005). Academisation of early childhood education. *Scandinavian Journal of Educational Research, 49*(2), 133–151.

Kravtsov, G. (2008). *A cultural-historical view of play*. Paper presented at the Vygotsky Symposium, Monash University, Peninsula campus, Frankston, Australia.

Kravtsov, G. G., & Kravtsova, E. E. (2010). Play in L.S. Vygotsky's nonclassical psychology. *Journal of Russian and Easter European Psychology, 48*(4), 25–41.

Kravtsov, G. G., & Kravtsova, E. E. (2011). The cultural-historical basis of the 'Golden Key' program. *International Journal of Early Years Education, 19*(1), 27–34.

Kravtsova, E. E. (1999). Preconditions for developmental learning activity at pre-school age. In M. Hedegaard & J. Lompscher (Eds.), *Learning activity and development* (pp. 220–245). Aarhus: Aarhus University Press.

Kravtsova, E. E. (2004). Metodologicheskoye znachenie vzgliadov D. B. Elkonina na detskuyu igru [Methodological significance of El'konin's approach to child's play]. *Mir psihologii i psihologia v mire [World of Psychology and the Psychology in the World], 1*, 68–76.

Kravtsova, E. E. (2006). The concept of age-specific new psychological formations contemporary developmental psychology. *Journal of Russian and East European European Psychology, 44*(6), 6–18.

Kravtsova, E. E. (2010). Cultural-historical/nonclassical basis of the "Golden Key" school program. *Journal of Russian and East European Psychology, 48*(4), 61–75.

Leontiev, A. N. (1959). *Psihologicheskie osnovy doshkolnoi igri [The psychological principles of preschool play]. Problemy razvitia psihiki [Problems of development of mind]*. Moscow: Izatelstvo Akademii pedagogicheskih nauk.

Leont'ev, A. N. (1983). *Izbranye psikhologicheskie proizvedenia [Selected psychological works]* (Vol. 1, pp. 303–324). Moscow: Pedagogika.

Leontyev, A. N. (2009). The psychological principles of preschool play. The development of mind. In M. Cole (Ed.), *Selected works by Alexei Nikolaevich Leontyev* (pp. 331–354). Pacifica: Marxists Internet Archive.

Lindqvist, G. (1995). *The aesthetics of play: A didactic study of play and culture in preschools*. Uppsala: Uppsala University.

Lindqvist, G. (2001). When small children play: How adults dramatize and children create meaning. *Early Years, 21*(1), 7–14.

Lindqvist, G. (2003). Vygotsky's theory of creativity. *Creativity Research Journal, 15*(4), 245–251.

Lobman, C. L. (2003). What should we create today? Improvisational teaching in play-based classrooms. *Early Years, 33*(2), 131–142.

Lubovsky, D. (2009). The concept of leading activity in the works of L. S. Vygotsky and his followers. *Cultural-historical psychology, 11*(4), 2–6.

McInnes, K., Howard, J., Miles, G., & Crowley, K. (2011). Differences in practitioners' understanding of play and how this influences pedagogy and children's perceptions of play. *Early Years, 31*(2), 121–133.

Miller, R. (2011). *Vygotsky in perspective*. Cambridge, UK: Cambridge University Press.

Moore, H. L. C (2014). *Young children's play using digital touch-screen tablets*. Unpublished PhD thesis. The University of Texas, Austin, USA.

Nicolopoulou, A., de Sa, A. B., Ilgaz, H., & Brockmeyer, C. (2010). Using the transformative power of play to edcuate hearts and minds: From Vygotsky to Vivian Paley and beyond. *Mind Culture, and Activity, 17*(1), 42–58.

Parmar, P., Harkness, S., & Super, C. M. (2004). Asian and Euro-American parents' ethnotheories of play and learning: Effects on preschool children's home routines and school behaviour. *International Journal of Behavioural Development, 28*(3), 97–104.

Parmar, P., Harkness, S., & Super, C. M. (2008). Teacher or playmate?Asian immigrant and Euro-American parents' participation in their young children's daily activities. *Social Behavior and Personality, 36*(2), 163–176.

Pellegrini, A. D. (2011). (Ed.) *The Oxford Handbook of the development of play*. Oxford: Oxford University Press.

Pramling Samuelsson, I., & Carlsson, M. A. (2008). The playing learning child: Towards a pedagogy of early childhood. *Scandinavian Journal of Educational Research, 52*(6), 623–641.

Pramling Samuelsson, I., & Johansson, E. (2009). Why do children involve teachers in their play and learning? *European Early Childhood Education Research Journal, 17*(1), 77–94.

Pramling Samuelsson, I., & Pramling, N. (2014). Children's play and learning and developmental pedagogy. In L. Brooker, M. Blaise, & S. Edwards (Eds.), *The sage handbook of play and learning in early childhood* (pp. 169–179). Los Angeles: Sage.

Pui-Wah, D. C., Reunamo, J., Cooper, R., Liu, K., & Vong, P. (2015). Children's agentive orientations in play-based and academically focused preschools in Hong Kong. *Early Child Development and Care*. doi:10.1080/03004430.2015.1028400.

Rainio, A. P. (2008). From resistance to involvement: Examining agency and control in a playworld activity. *Mind, Culture, and Activity, 15*(2), 115–140.

Rainio, A. P. (2009). Horses, girls, and agency: Gender in play pedagogy. *Outlines, 1*, 27–44.

Ridgway, A., Quinones, G., & Li, L. (2015). *Early childhood pedagogical play: A cultural-historical interpretation using visual methodology*. The Hague: Springer.

Schousboe, I., & Winther-Lindqvist, D. (2013). Introduction: Children's play and development. In I. Schousboe & D. Winther-Lindqvist (Eds.), *Children's play and development: Cultural-historical perspectives* (pp. 3–11). The Hague: Springer.

Sim, S. L. (2015). The playful curriculum: Making sense of purposeful play in the twenty-first-century preschool classroom. In C. Koh (Ed.), *Motivation, leadership and curriculum design* (pp. 225–241). The Hague: Springer.

Smirnova, E., & Gundareva, O. (2004). Igra I proizvolnost u sovremennyhdoshkolnikov [Play and self-mastering in contemporary pre-school children]. *Voprosy psihologii [Questions in Psychology], 1*, 91–103.

Smirnova, E., & Ryabkova, I. (2010). Structura i variant suzetnoi igry doshkolnika [The structure and variants of a preschooler's narrative play]. *Psihologicheskaya nauka i obrazovanie [Psychological Science and Education], 3*, 62–70.

Stephen, C., & Plowman, L. (2014). Digital play. In L. Brooker, M. Blaise, & S. Edwards (Eds.), *The Sage handbook of play and learning in early childhood* (pp. 330–341). Los Angeles: Sage.

Stetsenko, A., & Arievitch, I. M. (2010). *Cultural-historical activity theory: Foundational world-view, major principles, and the relevance of sociocultural context*. In S. R. Kirschner & J. Martin (Eds.), *The sociocultural turning psychology: The contextual emergence of mind and self* (pp. 231–252). New York: Cambridge University Press.

Sumsion, J., Grieshaber, S., McArdle, F., & Shield, P. (2014). The 'state of play' in Australia: Early childhood educators and play-based learning. *Australasian Journal of Early Childhood, 39*(3), 4–13.

Talamo, A., Pozzi, S., & Mellini, B. (2010). Uniqueness of experience and virtual playworlds: Playing is not just for fun. *Mind Culture, and Activity, 17*(1), 23–41.

Theobald, M., Danby, S., Einarsdottir, J., Bourne, J., Jones, D., Ross, S., et al. (2015). Children's perspective of play and learning for educational practice. *Education Sciences, 5*(4), 345–360.

Trawick-Smith, J. (2012). Teacher-child play interactions to achieve learning outcomes. In R. C. Pianta (Ed.), *Handbook of early childhood education* (pp. 259–277). London: The Guilford Press.

van Oers, B. (2008). Inscripting predicates: Dealing with meaning in play. In B. van Oers, W. Wardekker, E. Elbers, & R. van der Veer (Eds.), *The transformation of learning: Advances in cultural-historical activity theory* (pp. 370–379). New York: Cambridge University Press.

van Oers, B. (2009). Developmental education: Improving participation in cultural practices. In M. Fleer, M. Hedegaard, & J. Tudge (Eds.), *Childhood studies and the impact of globalization: Policies and practices at Global and Local levels – World Yearbook of Education, 2009* (pp. 293–317). New York: Routledge.

van Oers, B. (2010). Children's enculturation through play. In L. Brooker & S. Edwards (Eds.), *Engaging play* (pp. 195–209). Berkshire: Open University Press.

van Oers, B. (2012). Developmental education: Foundations of a play-based curriculum. In B. van Oers (Ed.), *Developmental education for young children: Concept, practice, and implementation* (pp. 13–26). The Hague: Springer.

van Oers, B. (2013a). Is it play? Towards a reconceptualisation of role play from an activity theory perspective. *European Early Childhood Education Research Journal, 21*(2), 185–198.

van Oers, B. (2013b). An activity theory view on the development of playing. In I. Schousboe & D. Winther-Lindqvist (Eds.), *Children's play and development: Cultural-historical perspectives* (pp. 231–250). The Hague: Springer.

van Oers, B., & Duijkers, D. (2013). Teaching in play-based curriculum: Theory practice and evidence of developmental education for young children. *Journal of Curriculum Studies, 45*(4), 511–534.

Verenikina, I., Herrington, J., Peterson, R., & Mantei, J. (2010). Computers and play in early childhood: Affordance and limitations. *Journal of Interactive Learning Research, 21*(1), 139–159.

Veresov, N. (2004). Zone of proximal development (ZPD): The hidden dimension? In A.-L. Ostern & R. Heilä-Ylikallio (Eds.), *Language as culture: Tensions in time and space* (pp. 13–30). ABO Akademi: Vaasa.

Veresov, N. (2006). Leading activity in developmental psychology: Concept and principle. *Journal of Russian and East European Psychology, 44*(5), 7–25.

Veresov, N. (2014). Refocusing the lens on development: Towards genetic research methodology. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children* (pp. 129–149). Dordrecht: Springer.

Veresov, N. (2016). Duality of categories or dialectical concepts? *Integrative Psychological and Behavioural Science, 50*(2), 224–256. https://doi.org/10.1007/s12124-015-9327-1.
Vygotsky, L. S. (1929). Concrete human psychology. *Soviet Psychology, 27*(2), 53–77.
Vygotsky, L. S. (1935). *Umstvennoe razvitie detei v protsesse obuchenia*. Moscow: UCHPEDGIZ.
Vygotsky, L. S. (1966). Play and its role in the mental development of the child. *Voprosy Psikhologii (Psychology Issues), 12*(6), 62–76.
Vygotsky, L. S. (1971). *The psychology of Art*. Cambridge, MA: MIT Press.
Vygotsky, L. S. (1983). *Sobranie sochinenii [Collected works]* (Vol. 3). Moscow: Pedagogika.
Vygotsky, L. S. (1984). *Sobranie sochinenii [Collected works]* (Vol. 6). Moscow: Pedagogika.
Vygotsky, L. S. (1993). *The collected works of L. S. Vygotsky* (Vol. 2). New York: Plenum.
Vygotsky, L. S. (1997). *The collected works of L. S. Vygotsky* (Vol. 4). New York: Plenum.
Vygotsky, L. S. (1998). *The collected works of L. S. Vygotsky* (Vol. 5). New York: Plenum.
Vygotsky, L. S. (1999). *The collected works of L. S. Vygotsky* (Vol. 6). New York: Plenum.
Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology, 42*(1), 7–97.
Vygotsky, L. S. (2005). Appendix.From the notes of L. S. Vygotsky for lectures on the psychology of preschool children. *Journal of Russian and East European Psychology, 43*(1), 90–97.
Vygotsky, L. S. (2016). Play and its role in the mental development of the child. New translation with introduction and afterword of N. Veresov and M. Barrs. *International Research in Early Childhood, 7*(2), 3–25.
Wallerstedt, C., & Pramling, N. (2012). Learning to play in a goal-directed practice. *Early Years, 32*(1), 5–15.
Wong, P. L., & Fleer, M. (2012). A cultural-historical study of how children from Hong Kong immigrant families develop a learning motive within everyday family practices in Australia. *Mind Culture and Activity, 19*(2), 107–126.
Wong, P. L., & Fleer, M. (2013). The development of learning as the leading activity for Hong Kong immigrant families in Australia. *International Research in Early Childhood Education, 4*, 18–34.
Wood, E. (2010). Reconceptualising the play-pedagogy relationship: From control to complexity. In L. Brooker & S. Edwards (Eds.), *Engaging play* (pp. 11–24). Oxford: Open University Press.
Wood, E. (2014). The play-pedagogy interface in contemporary debates. In L. Brooker, M. Blaise, & S. Edwards (Eds.), *The sage handbook of play and learning in early childhood* (pp. 145–156). Los Angeles: Sage.
Wood, E., & Hall, E. (2011). Drawings as spaces for intellectual play. *International Journal of Early Years Education, 19*(3–4), 267–281.
Zinchenko, V. P. (2007). Thought and word: The approaches of L.S. Vygotsky and G.G. Shpet. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 212–245). Cambridge, UK: Cambridge University Press.

Chapter 4
'Humpty Dumpty': Teaching Strategy or Postcolonial Method – What Do We Know About Power, Voice and Identity Within Early Childhood Education in the Twenty-First Century?

Karen Martin

Abstract Although some would consider postcolonialism redundant because colonialism is considered dead and a paradigm of previous centuries, its discourses and their impacts remain. By applying the well-known nursery rhyme 'Humpty Dumpty', this chapter revives three tenets of postcolonialism, namely, power, identity and voice to explore just how colonial discourses remain entrenched and reified in education and more specifically early childhood education. It asserts that unlike Humpty Dumpty, who could never be put together again, postcolonialism should never be put together, in its varied forms, towards challenging and changing discourses of power, identity and voice unless it is decolonised, thus understanding how early childhood education is as much a colonising tool, asserting power, subjugating identities and silencing voices through the implanting First World early childhood models in Third World contexts. As a discourse, decolonisation must be constructed, framed and led by those whose power, identity and voice are not merely given a place but effectively restored and centred in early childhood education in the twenty-first century.

Keywords Early childhood education • Imperialism • Colonialism • Postcolonialism • Decolonising • Identity • Power • Voice • Ambiguity

4.1 Background

Humpty Dumpty sat on a wall,
Humpty Dumpty had a great fall.

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All the King's horses and all the King's men,
Couldn't put Humpty together again.

It seems rather fitting to discuss postcolonialism and early childhood education with a rhyme that is standard in the repertoires of early childhood educators, even in countries where English is not the dominant language. The verse, 'Humpty Dumpty', has colonised early childhood pedagogy and occupies a prominent position amongst the all-time favourite nursery rhymes used by early childhood educators across generations.

Whilst the verse needs no introduction to the field of early childhood education, the same cannot be said for postcolonial theory (Viruru 2005). What then has postcolonialism got to do with this very popular nursery rhyme? As you'll read, 'Humpty Dumpty' is far more than a ditty for entertaining young children or teaching particular language skills and knowledge. By using a postcolonial approach, it has value for framing an understanding of the widespread and orthodox nature of colonialism, its pervading effects and legacies for all, the emergence of postcolonialism and the implications for the field of early childhood education.

Each line introduces a section, signifying the topics and discussions that follow. The first section pertains to the topics of colonisation and imperialism. This is necessary in order to introduce and discuss the second topic of colonialism. The third section explores postcolonialism and in relation to the discipline of education. The fourth section applies a postcolonial framing to understand how power, identity and voice (tenets of postcolonialism) are understood by early childhood scholars and educators.

4.2 Humpty Dumpty Sat on a Wall: Imperialism, Colonisation and Power

Two central questions arise from this line: who was Humpty Dumpty and why did he sit on the wall? A general online search (as so often required these days) revealed two lines of thought (Vacca Foeda Media 2012). One is that Humpty Dumpty is not a person at all but a small canon, most effective when positioned on a wall. Another is Humpty Dumpty was an important individual of the time, perhaps even a member of the English Royal family. There seems to be some conjecture on the authenticity of either version, so his identity remains a mystery. In early childhood literature, Humpty Dumpty is often depicted as an egg. An egg, being an early phase of a life cycle, is a temporary state of being. It is a fragile container, an incubator, critical for successful transition from embryo to the next phase. So, for an egg, there is a high level of risk involved in sitting on a wall. For Humpty Dumpty, the consequences were dire and irreparable.

However, sitting on a wall does provide elevation and the ability to see areas well beyond it and, then, also areas within. But it is not a random act. Something, and/or someone, prompted Humpty Dumpty to do so, even at great risk to his safety and life. Therein, the wall, although often forgotten, is as important as Humpty Dumpty

to this discussion. Further consideration uncovers four important factors. The first factor is the wall has a dual purpose: to protect the people and the property within and to keep intruders out. The second factor is the wall marks the property of a particular individual or family. The third factor is the wall is an indicator of wealth. It requires a lot of money to build a wall and that is because there is a significant amount of property or an important type of wealth to be guarded. Therefore, the fourth factor is that property, wealth and social standing are signifiers of power.

This same situation of building walls, protecting property, amassing wealth, achieving power and enjoying the benefits of a particular social standing is not something of the past. Where once it was focused on the regions within Europe, by its very nature, it required the acquisition of resources from lands further away. This expansion is referred to as imperialism whereby an empire (e.g. Roman, British, Spanish, Ottoman, French, Greek, Mongolian, Russian, Chinese, Portuguese, Japanese) increased its territories and subsequently its resources to achieve power and ultimate rule (Armstrong 2014; Ballantine and Hammack 2009; Wadham et al. 2007; Young 2012).

According to Wadham, Pudsey and Boyd, colonisation is 'the process of creating colonies in a foreign land to bring that land under the control and subjugation of the home nation' (2007, p. 177). This was achieved through the invasion and occupation by a military force and, inevitably, the exertion of physical violence. It was a strategy used by a number of empires in many locations across the globe such as Africa, Asia, the Middle East, the Caribbean Islands, North America, Canada, the Pacific and South America (Armstrong 2014; Ballantine and Hammack 2009; Fox 2004; Hamadi 2014; Lazarus 1998; Wadham et al. 2007; Young 2012).

However, it wasn't just the land and its resources that were colonised. The people fared no better. Those who survived the military invasion and occupation were exploited (retained within the same territory to work as servants), displaced (pushed off their lands, thus creating a diaspora) or commodified (sent to territories far away as slaves to expedite colonisation there). All of this was driven by an ideology of a supposed superiority and belief in a divine right to rule. It was underpinned by a set of values presuming the racial superiority of 'whites' and, concurrently, the racial inferiority of 'non-whites' (Stam and Shotat 2012; Wadham et al. 2007; Young 2012).

Colonisation was widespread and all pervasive. Not one country, nor one population in the world, has escaped. We are all tangled, directly or indirectly, through the colonisation of lands and peoples that began in Europe and the Middle East as early as the thirteenth century (Armstrong 2014; Stam and Shotat 2012; Young 2012).

When Humpty Dumpty sat on the wall, this marked his ownership and his identity as a person of wealth and, therein, social status. When Humpty Dumpty sat on the wall, it was a strategy of both defence and attack. These are also components of colonisation that an empire claims a territory, marks it as its property, occupies it, controls it and defends it. The relationships between coloniser and colonised are forged in this way. The next section explores this further.

4.3 Humpty Dumpty Had a Great Fall: The What and Where of Colonialism

The search of literature re. 'Humpty Dumpty' also revealed this to be part of a much larger story (as per Baum 1901; Day 1921; Denslow 1903). In each version, Humpty Dumpty has been depicted as an egg, but he is one of a number of main characters and not the sole character. We learn more about Humpty Dumpty in these versions than in a verse of four lines.

What does this second line of the verse have to do with postcolonialism? At first, it would appear very little, especially if the focus remains on the character of Humpty Dumpty. However, here it is the item that was instrumental to the fall, namely, the wall, that is of more relevance as it represents, not colonisation, but that of colonialism. The difference is that colonisation (i.e. invasion and occupation) occurred in the earlier phases of colonialism and involved a particular set of strategies and actions to achieve it, most often the exertion of physical dominance and power. Slavery is a prime example here. An empire used people as a commodity to expand its territories, its influence and its wealth. This slavery benefitted the empire, making numerous individuals and companies in the tobacco, tea, sugar, timber, cotton, gold, diamond and other mining industries very wealthy.

This physical domination was used as a means to control 'the natives' as a subclass to 'whites' (Nieuwenhuys 2013; Yassie 2002). Colonisation endured beyond these physical forms, entrenched through colonial governance and administration, laws, education, language, religion, economy, politics and values and norms, in other words, all the structures and systems of a coloniser's society. Colonisation was transposed by the more sophisticated yet more harmful processes of colonialism. As Hickling-Hudson, Matthews and Woods point out:

> The exercise of colonial power is supported not only by economic and political force but also by the cultural power of a body of literature – scholarly works, political tracts, journalistic and creative texts, travel books, religious and philosophical studies. (2004, p. 5)

These forms of colonialism are harder to see, and so, they are insidious because they penetrate and impact on every part of the lives of those colonised, for example, in giving alien names to the people of a colonial territory (Stam and Shotat 2012) and being forced to speak the coloniser's language (e.g. English, Spanish, Portuguese). Through colonialism, the peoples became their property, and changing their identities ensured its effectiveness. Subsequently, their voices were of no interest or value to the colonisers, only if it facilitated their goals (e.g. people served as guides in the territory).

Where it was foreseeable that imperialism could not endure simply because there were a finite number of 'new worlds' and 'new lands' to invade, occupy and own, this was not the case regarding colonialism. The effects and consequences of World War II reverberated throughout the empires and their colonial territories (Armstrong 2014; Hamadi 2014; Hickling-Hudson et al. 2004; Nieuwenhuys 2013; Tiffin 2004; Wadham et al. 2007). Millions of people were impacted resulting in changes to previously omnipotent empires, constitutive of a 'great fall'.

One form of change appeared when independence was pursued internally through conflict, such as a revolution, to overthrow the colonial regime (e.g. Cuba, Zimbabwe). Another form of change occurred when the colonial powers relinquished the control of the territory, for example, ceding their role (but not necessary control and certainly not their influence and conditioning) and withdrawing (e.g. Hong Kong, India, the Carribbean). Another form of change occurred through the constitution of new states (Armstrong 2014; Wadham et al. 2007): one type being instigated by the former League of Nations, now the Assembly of United Nations (e.g. Israel), and another type was instigated by the colonial rulers (e.g. in the partition of India and Pakistan at the withdrawal of British colonial rule). Former relationships of power, changes to the identities and the assertion of voices of the formerly colonised could no longer be controlled in the usual ways (Lazarus 2011).

Many writers (Fox 2004; Hickling-Hudson et al. 2004; Stam and Shotat 2012; Tickly 2004; Young 2012) assert that colonialism has not fallen, even given the changes and challenges of post-World War II. They maintain that it persists in any relationships of power between the former colonisers and the formerly colonised. This is a very important aspect, because what has seemed like an historical analysis has been necessary to foreground discussions of postcolonialism. There may have been a fall in the omnipotence of imperialism and colonisation as per Humpty Dumpty, but the immense changes that tempered the forms and practices of colonialism serve as reminders that the wall (colonialism and its effects) remains. This brings the discussion to the third line of the verse regarding the emergence of postcolonialism.

4.4 All the King's Horses and All the King's Men: The Who and How of Postcolonialism

In the third line of the verse, there is a shift from the focus of the main character (Humpty Dumpty) and the main feature (the wall) to other characters: the King's cavalry. There is insufficient information to know with certainty why they are there, but it can be surmised their presence (and not merely an assemblage of local farmers and herdsmen) is significant.

The state of most of the world's peoples and its countries after World War II was an impetus for change within many areas, including academia. Scholars not just examined the war itself, or the regimes of colonialism and ideologies of imperialism, but the knowledge systems that engineered them. Scholars interrogated and challenged what had been set as truths that fuelled imperialism and led to two World Wars and numerous civil wars (Pudsey et al. 2007; Lazarus 2011; Tiffin 2004).

Here, scholars (of past and present) do not so much represent the 'King's men', but their work – and our work – requires a loyalty to certain ideas and values. However, the King's men have also attacked and defended (analysed, examined and challenged) former regimes of knowledge as these have been entrenched as truth (Stam and Shotat 2012). Some scholars conceptualise, dream and initiate change. Others fight to diminish the impacts of power, to renew identities and to open spaces

for voices of the previously silenced to be known. These power, identity and voice are some of many tenets of postcolonialism and are given focus in this chapter.

Initially, postcolonialism began as means to understand how power is perpetuated in the written word as:

> a critical approach to the legacy of colonisation on colonised countries using the literature of the colonising countries to show how the colonised people were represented and to justify colonisation. (Wadham et al. 2007, p. 200)

It is largely undisputed that the work of Edward Said, 1978, a Palestinian American, is seminal in postcolonialism (Cannella 2000; Hamadi 2014; Hickling-Hudson et al. 2004; Lazarus 2011; Martinez-San Miguel 2009; Stam and Shotat 2012; Young 2012). Said introduced particular concepts to explain how texts produced by colonisers about the colonised reproduce their own power, identity and voice. One major concept is that of 'Other' (Said 1978 cited in Hamadi 2014, p. 40). When the coloniser wrote about the 'Other', implicitly he/she wrote about himself/herself, often in binaries such as native-modern, savage-civilised, treacherous-brave, evil-good and progressive-ancient.

These writings produced a process of Othering (Cannella and Viruru 2002; Fox 2004; Hamadi 2014). It is through this Othering that the identities of the colonised are produced to justify the colonisation of their lands and the colonialism to extract its resources and gain wealth. (Stam and Shotat 2012).

Colonial texts are written for colonial readers, so the only voice is that of the coloniser. For the colonial reader, the experiences in the territories are fascinating, strange and even disgusting (yet compelling). The colonisers are heroic, romanticism builds and this is rarely questioned (Hamadi 2014).

This notion of 'voice' (Spivak 1990 as cited in Fox 2004, p. 92) is another tenet of postcolonialism. In the dominant literature of the colonialists, the voices of the colonised are rarely included. When this does emerge, it is often where the colonised speak and write to suit and serve a colonial narrative. This is a form of subjugation of identity which was forever impacted (Bhabha 1994 as cited in Matthews and Aberdeen 2004, p. 194).

This has been merely a very simplistic outline of key concepts that underpin a postcolonial approach. A deeper reading shows how scholars apply understandings of the 'postcolonial condition' (Tickly 2004, p. 110) as:

Manifestations of power, identity and voice through binary representations (Fox 2004; Hamadi 2014; Pudsey et al. 2007)

Constructions of knowledge and discourses (Hamadi 2014; Hickling-Hudson et al. 2004; Matthews and Aberdeen 2004)

The maintenance of power in relation to race (Hickling-Hudson et al. 2004; Matthews and Abderdeen 2004; Stam and Shotat 2012)

Anticolonial and decolonising approaches to address the subjugation of colonised peoples (Battiste 2002; Laenui 2002; Martin 2008; Moreton-Robinson 2004; Tuhiwai-Smith 1999; Youngblood-Henderson 2002), contributions from previously colonised and silenced peoples (Fox 2004; Stam and Shotat 2012) and further approaches pertain to:

Non-linear evolvement of postcolonial scholarship (Fox 2004; Lazarus 2011; Stam and Shotat 2012)
The nature and implications of the disruptions and disjunctures in the scholarship of postcolonialism (Fox 2004; Lazarus 2011; Stam and Shotat 2012)
Ambiguity as a feature of postcolonialism (Nieuwenhuys 2013)
The relevance of postcolonialism in the modern world (Lazarus 2011; Tickly 2004; Young 2012)
Relationship to the scholarship of poststructuralism, postmodernism (Lazarus 2011; Stam and Shotat 2012) and cultural studies (Wadham et al. 2007)
Identifying neocolonial ideologies such as capitalism, nationalism and globalisation and their implications (Hamadi 2014; Lazarus 1999, 2011; Tickly 2004; Young 2012)

Scholars in the discipline area of education employ postcolonial approaches with the understanding that schooling is an instrument of colonialism. This scholarship has a keen interest on how Western, Eurocentric regimes of knowledge are reproduced in education, schools, curriculum and teaching (Hickling-Hudson et al. 2004). There is an almost complete agreement this dominance began with the Industrial Revolution to keep children off the streets (Hickling-Hudson et al. 2004; Lazarus 2011). The purpose of schools has not changed significantly because the ideology that underpins this is impermeable. When instituted in a colonial territory, schools also had the task of civilising and training the young, keeping them out of mischief and out of sight of adults (Hickling-Hudson et al. 2004; Matthews and Aberdeen 2004).

Given that schooling is now spreading across the globe, postcolonialism provides scholars with a frame to identify and examine how power is reproduced, either overtly or covertly, in curriculum, texts and teaching resources (Cannella 2000; Cannella and Viruru 2002). The premise here is:

> we cannot assume that colonialism is over, only that colonial relationships continue to order and reorder the cultural and economic hierarchies of knowledge and disciplines. (Hickling-Hudson et al. 2004, p. 3)

The King's cavalry has achieved much, and yet there is much that remains to be done to understand how education remains a device of colonialism (and, therein, hegemony) and also how our roles, as educators, researchers and academics, serve this intentionally or not.

4.5 Couldn't Put Humpty Together Again: Postcolonialism in Early Childhood Education

This brings the discussion to the last line of the verse, the one where the outcome is inevitable but not satisfying. It leaves us in a state of ambiguity because even with the amount of professional skills and knowledge present at the time ('all the King's horses and all the King's men'), there is no way to help Humpty Dumpty.

By convention this section is supposed to bring the discussions and analysis made previously to a cohesive and succinct conclusion. In some ways it does, but in other ways, it doesn't, nor should it because of the very nature of postcolonialism. Thus, there is no set of instructions or strategies. There is, however, a postcolonial framing regarding power, identity and voice in relation to early childhood education.

The relationship between postcolonialism and early childhood education is far from new. It grew in prominence during the decade of the 1990s and then in the early 2000s when some foundational work was generated. Of this, it is the work of the reconceptualists in early childhood education that stands prominent. This began with challenges to the dominance of Western, Eurocentric theories of child development and early childhood programmes and curriculum and the call to 'explore differing cultural and theoretical world-views' (Soto and Swadener 2002, p. 39). An early analysis of this reconceptualist's scholarship identified six 'intersecting discourse spaces' (Soto and Swadener 2002, p. 39). These are scientific orientations (child development); qualitative/interpretative research; early multicultural and bilingual education; advocacy and social justice; critical reconceptualist, feminist and postcolonial theory and liberatory praxis (decolonising the field).

Based on this, attention is mostly at the micro level and contexts where issues pertaining to power, identity and voice between individuals and groups are analysed. There is ambiguity in that these analyses bear no relationship to wider societal, political, economic and especially historical contexts. It isn't surprising that Viruru (2005) argued postcolonialism has had 'minimal impact' (p.7) on early childhood education as an academic field and discipline area. She also argues it has had 'even less on the daily practices of early childhood educators' (Viruru 2005, p. 7).

It seems that although the efforts to resist and thwart the normalising effects of Western, Eurocentric theories in curriculum and teaching have garnered some traction, the same cannot be said for understanding the normalising effects inherent within early childhood education, such as philosophy, values and purposes. An initial postcolonial framing shows how the field has been conditioned, where certain relationships, certain identities and certain voices remain dominant because:

It is a Western, European construct that came into prominence after World War II.

One strand focused on the middle-class mothers and their children. Staff were young, middle-class white women for whom early childhood teaching occurred in a finishing school.

Another strand focused on the physical welfare (not well-being) of young children of impoverished families. It was staffed by nurses and infant carer under the direction of doctors.

Compensatory education was developed and introduced to low socio-economic families from the 1960s (e.g. Head Start in the United States). The philosophy then, as now, was based on the premise that parents were deficient, inadequate and incapable in their roles, and, so, the children needed 'topping up' in cognitive skills, social abilities and health information.

This form of mass provision of programmes and services is assimilatory; it is a colonising force just as much as compulsory schooling.
It is now of global proportions where a Western template has been similarly applied at national and regional levels.

What does this tell us? That we have been conditioned to do things in predictable ways, circumscribed by contexts and conventions from centuries ago beginning with the mass schooling of children and the effects of the Industrial Revolution (Ballantine and Hammack 2009). We have been conditioned, more recently, to do things in long-established and acceptable ways in the care and education of very young children. We have been conditioned to not look at this as an invention of social, political, economic, religious and social times but as simply being a good thing for young children. We have been conditioned to believe that we are good because we do this important work for young children – denying this has anything to do with fulfilling our own personal beliefs and goals, needs and ambitions. To put it another way, we, as early childhood educators, have been colonised and are therein products of this colonialism.

If 'liberatory praxis' (Soto and Swadener 2002, p. 51) is something early childhood scholars and other scholars seek to attain (Stam and Shotat 2012; Young 2012), then this cannot be limited to challenges to theories of child development and knowledge reproduction in curriculum and pedagogy. These are applied at localised level (of teachers and students and sometimes researchers and projects) where postcolonialism has proved of value. Likewise, Cannella and Viruru (2002) suggest a 'critical disposition' (p. 131) is needed by early childhood educators and provide these pertinent questions (pp. 131–132):

What are the underlying assumptions in a particular theory (or body of work, including scholarly works)?
How is the notion of theory a Euro-American, an elitist construct?
Whose interpretations are privileged?
Whose cultures and perspectives are valued?
Whose are denied?
Are there perspectives that would appear to involve rethinking and reconceptualisation whilst actually reinscribing old (or even new) forms of power and oppression?

Note here these questions are aimed at the micro level with regard to power (underlying assumptions, privileged, theory, valued, denied, reinscribing), voice (particular theory, perspectives, interpretations) and identity (Eurocentric, elitist). This may achieve some level of liberation of the individual at that level, but without also examining the macro levels where the very structures and systems where decisions regarding the field of early childhood education are made and then implemented, the liberation will also be micro in nature as it fights against much more powerful systems such as education institutions and governments.

Like the wall Humpty Dumpty sat on, these macrostructures will persist to maintain a dominant position and to preserve those beliefs and values and particular

forms of knowledge that were entrenched centuries ago through colonialism. For example, how is it that an early childhood centre looks much the same throughout the world in difference to the contexts where these are delivered? The replication of a dominant model, a template, is a colonising model. How should a liberatory praxis look, sound and feel at this level? To continue, how is it that models, such as Reggio Emilia, can be decontextualised and exported to other countries, particularly Third and Fourth World populations by First (and Second) World early childhood educators and academics? This is not to be taken as a criticism of the Reggio Emilia model, but rather to make the point that it (and similar models such as Montessori and Steiner education) has become a colonising form of early childhood education when identified by those with power, identity and voice as a solution for the Others. It is often labelled a 'sociocultural' model without understanding the nature of how it is so.

These are important questions because they sit at the nexus of power, identity and voice in early childhood education. They are important not because they pertain to early childhood education but because their answers expose those systems of power, identity, voice, authority and knowledge within this field.

Like the above, these questions shouldn't result in easy answers, but they should invoke ambiguity. This ambiguity is a symptom that our conditioning is being called to the fore. In this state, it is not to be taken as a personal affront, but part of a postcolonial framing where we can identify and uncover the layers of our conditioning to more effectively understand who we are as early childhood educators and scholars, how we do this work, why it is done in those particular ways, what else is possible (Cannella and Viruru 2002) and importantly what else is necessary. To reiterate, this must be done at the micro and macro levels simultaneously (as per Bronfenbrenner's ecological systems model).

Such questions remind us that knowledge is not neutral and, especially, that people are not neutral. Having been conditioned over time in particular ways for particular purposes, a postcolonial approach requires how we look beyond this conditioning to where the uncertainties and the ambiguities exist (Nieuwenhuys 2013; Stam and Shotat 2012). Ambiguity reminds us that not all things can be 'put together again' (as these are surely symptoms of certainty and then normality). Nor does it excuse us to just do nothing, do as we have always done, pretend it didn't happen, blame it on someone else, do anything to cover it up or, worse, get defensive and angry when dominance has been called into question to believe that the term 'culture' only applies to people who do not speak English as a first language and/or have coloured skin and particular facial features (Chamberlin 2002).

Ambiguity, within a postcolonial approach, is a necessary state of being because it sets to the side, the things that are taken for granted (affording power), the usual (affirming identity) and the comfortable (asserting voice). Nieuwenhuys (2013) maintains 'postcolonialism enjoins academics to abandon the high ground position from where they have usually sought to understand the world and to look up from a multiplicity of different, marginal positions' (p. 6).

Where Soto and Swadener referred to 'liberatory praxis' (2002), they also referred to 'decolonizing the field' (2002, p. 39), and yet this seems to only apply to

those labelled, 'Third World', 'Fourth World', marginalised, people of colour and Othered (i.e. anyone who is not white, not Western Euro, not middle class, who is not of the dominant group).

The decolonising work in early childhood, it seems, is the task of the Others as something 'they' do (Stam and Shotat 2012) and is of no real purpose or consequence beyond that (remembering this was a strategy in the colonial territories where native voices were only valuable if they contributed to opening up the frontier). This isn't ambiguous, but the responses from 'the early childhood field' seem to construct and position it as such when it is regarded as a choice/optional, a hobby, an obsession, annoying or unnecessary. Perhaps, this is one reason for the lack of change Viruru (2005) identified all those years ago.

Oddly, decolonisation could be the only discourse unexplored by the wider field of early childhood education (Cannella and Viruru 2002). Decolonising the field of early childhood (i.e. the King's men) would reveal how and where colonialism is reified in our work with young children and families, communities and neighbourhoods, regions and countries and colleagues and officials. Where the reconceptualisation has served to bring the early childhood field to this point, and critical reflection is part of the repertoires for many, it is argued here there is another layer that sits between these two discourses and that is a discourse of decolonisation.

What does this decolonisation look like? At the risk of not providing definitions (apart from stating it is not in relation to the independence experienced in some nations post-World War II), it looks like the questions posed previously by Cannella and Viruru (2002) because the questions themselves serve to frame both a critical analysis and the processes of decolonisation. They expose the extent to which the conditioning has been effected and to which one's conditioning influences decisions as an early childhood educator (e.g. in teaching, curriculum) and/or as an early childhood scholar (e.g. the types of research topics, subsequent questions, methodology and interpretation).

To decolonise is to invite ambiguity into the process and so purposefully experience changes to one's power, identity and voice. As these conditions change, the conditioning becomes more apparent and only then can it be fully understood that same conditioning cannot be 'put together again'. Without this decolonising work, the costs for those who are supposed to benefit are many, unchanged and compounded. Early childhood education remains a promise never fully realised. Decolonisation brings ambiguity to the dominant early childhood principles, because, without it, it is easy to justify taking early childhood education to a Third or Fourth World population without a heightened understanding of one's own conditioning (personal and professional). It is easy to erase the contexts and forms of imperialism, colonisation, colonialism and even neocolonialism experienced by those very same populations (Stam and Shotat 2012). Researchers tread the same precarious path in that their power, identity and voice can be elevated, centred and privileged. As select members of the King's cavalry, so to speak, they are entrenched in and conditioned by discourses and knowledge regimes within the structures and systems of: universities, research, ethics and funding. This is seductive but dangerous work if a decolonisation of the field is the cause for which they are fighting.

At the same time, decolonisation must continue within and amongst early childhood educators and professionals for whom colonialism shouldn't be put together again – people who are First Nations (not Other, Third World, marginalised, Fourth World for these imposed identities surely recentre the dominance of Western/Eastern/Euro colonialism). For these members of the King's cavalry, decolonisation is a means by which to understand the extent to which the impacts of colonialism are so entrenched and the extent to which their identities have been subjugated (often involving three or more generations) and their voices silenced (Hingley 2002). This work is to avoid the profound experience of the colonised replacing the coloniser. This decolonisation has an additional (not different) purpose for sovereignty through power/agency, identity and voice. Therein, models of early childhood programmes do not need to be imported or implanted, but the work of all divisions of the King's cavalry (in the field of early childhood) is not to put things together but to fully understand the historic, social, political, economic, cultural, religious and neocolonial conditioning of any given person, community, region, state and nation as this underpins the goals for liberatory praxis, reconceptualisation and decolonisation of early childhood education, knowledge and research.

4.6 Conclusion

Where to now? An ambiguous question that has an ambiguous reply – we won't know until we're in that space of not a 'postcolonial struggle' (Cannella 2000, p. 218) but where a decolonising framing has become as natural and regular for the field of early childhood education as breaking into the rhyme of Humpty Dumpty.

References

Armstrong, K. (2014). *Fields of blood: Religion and the history of violence*. London: Bodley Head.

Ballantine, J. H., & Hammack, F. M. (2009). *The sociology of education: A systematic analysis* (6th ed.). Englewood Cliffs: Pearson.

Battiste, M. (2002). Introduction: Unfolding the lessons of colonialism. In M. Battiste (Ed.), *Reclaiming Indigenous voice and vision* (pp. xvi–xxx). Vancouver: UBC Press.

Baum, L. F. (1901). *Mother Goose in press*. Retrieved December 3, 2014 from https://www.gutenberg.org/files/5312/5312-h/5312-h.htm.

Cannella, G. S. (2000). Colloquia: Critical and feminist reconstructions of early childhood education: Continuing the conversations. *Contemporary Issues in Early Childhood, 1*(2), 215–221.

Cannella, G. S. (2010). Reconceptualising movements: Foundations for the critical rethinking of childhood policy. *International Critical Childhood Policy Studies, 3*(1), 1–6.

Cannella, G. S., & Viruru, R. (2002). (Euro-American constructions of) Education of children (and adults) around the world: A postcolonial critique. In G. Cannella, J. L. Kincheloe, & K. Anujar (Eds.), *Kidworld: Childhood studies, global perspectives, and education* (pp. 197–213). New York: Peter Lang.

Chamberlin, J. E. (2002). From hand to mouth: The postcolonial politics of oral and written traditions. In M. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 124–141). Vancouver: UBC Press.

Day, C. (1921). *The Crow's nest*. New York: Bounty Books Retrieved December 3, 2014, from https://www.gutenberg.org/files/34180/34180-h/34180-h.htm.

Denslow, W. W. (1903). *Denslow's Humpty Dumpty by W. W. Denslow*. New York: G. W. Dillingham Co. New York. Retrieved December 3, 2014, from https://www.gutenberg.org/files/25883/25883-h/25883-h.htm.

Fox, C. (2004). Tensions in the decolonisation process: Disrupting preconceptions of postcolonial education in the Lao people's democratic republic. In A. Hickling-Hudson, J. Matthews, & A. Woods (Eds.), *Disrupting preconceptions: Postcolonialism and education* (pp. 91–105). Flaxton: Post Pressed.

Hamadi, L. (2014). Edward Said: The postcolonial theory and the literature of decolonization. *European Scientific Journal, 2*, 39–46 Eujournal.org/index.php/esj/article/view/3689/3488.

Hickling-Hudson, A., Matthews, J., & Woods, A. (2004). Education, postcolonialism and disruptions. In A. Hickling-Hudson, J. Matthews, & A. Woods (Eds.), *Disrupting preconceptions: Postcolonialism and education* (pp. 1–16). Flaxton: Post Pressed.

Hingley, I. (2002). Transforming the realities of colonialism: Voyage to self-discovery. In M. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 101–111). Vancouver: UBC Press.

Lazarus, N. (1998). Charting globalisation. *Race and Class, 40*(2–3), 91–109. doi:10.1177/030639689904000207.

Lazarus, N. (2011). What postcolonial theory doesn't say. *Race and Class, 53*(1), 3–27. doi:10.1177/0306396811406778.

Laenui, P. (2002). Processes of decolonization. In M. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 150–160). Vancouver: UBC Press.

Martin, K. L. (2008). *Please knock before you enter: Aboriginal regulation of outsiders and the implications for researchers*. Teneriffe: Post Pressed.

Martinez-San Miguel, Y. (2009). Postcolonialism. *Social Text, 27*(3), 188–193. doi:10.1215/0642472-2009-036.

Matthews, J., & Aberdeen, L. (2004). Race, racialization and settler colonialism. In A. Hickling-Hudson, J. Matthews, & A. Woods (Eds.), *Disrupting preconceptions: Postcolonialism and education* (pp. 193–209). Flaxton: Post Pressed.

Moreton-Robinson, A. (2004). Whiteness, epistemology and indigenous representation. In A. Moreton-Robinson (Ed.), *Whitening race* (pp. 75–88). Canberra: Aboriginal Studies Press.

Nieuwenhuys, O. (2013). Theorizing childhood(s): Why we need postcolonial perspectives. *Childhood, 20*(3), 3–8. doi:10.1177/0907568212465534.

Pudsey, J., Wadham, B., & Boyd, R. (2007). Culture and education in a global world. In B. Wadham, J. Pudsey, & R. Boyd (Eds.), *Culture and education* (pp. 34–61). Frenchs Forest: Pearson.

Said, E. (1978). *Orientalism*. New York: Pantheon Books.

Soto, L. D., & Swadener, B. B. (2002). Toward liberatory early childhood theory, research and praxis: decolonizing a field. *Contemporary issues in early childhood, 3*(*1*), 38–66.

Stam, R., & Shotat, E. (2012). When and wither postcolonial theory? *New Literary History, 43*(2), 371–390. doi:10.1353/nlh.2012.0010.

Tickly, L. (2004). Globalisation and education in sub-Saraharian Africa: A postcolonial analysis. In A. Hickling-Hudson, J. Matthews, & A. Woods (Eds.), *Disrupting preconceptions: Postcolonialism and education* (pp. 109–126). Flaxton: Post Pressed.

Tiffin, H. (2004). The benev(i)olence of imperial education. In A. Hickling-Hudson, J. Matthews, & A. Woods (Eds.), *Disrupting preconceptions: Postcolonialism and education* (pp. 143–154). Flaxton: Post Pressed.

Tuhiwai-Smith, L. (1999). *Decolonising indigenous research methodologies*. London: Zen.

Viruru, R. (2005). The impact of postcolonial theory on early childhood education. *Journal of Education, 35*, 7–29.

Vacca Foeda Media (2012). *The original of Humpty Dumpty*. Retrieved December 3, 2014, from www.todayifoundout./index.php/2013/04/the-origin-of-humpty-dumpty/

Wadham, B., & Boyd, R. (2007). 'We grew here…you flew here': Race, nation an education. (pp. 167–211). In B. Wadham, J. Pudsey, & R. Boyd (Eds.), *Culture and education* (pp. 176–211). Pearson: Frenchs Forest.

Yassie, R. (2002). Indigenous peoples and postcolonial colonialism. In M. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 39–49). Vancouver: UBC Press.

Young, R. J. C. (2012). Postcolonial remains. *New Literary History, 43*(1), 19–42. doi:10.1353/nlh.2012.0009.

Youngblood-Henderson, J. (2002). Postcolonial ghost dancing: Diagnosing European colonialism. In M. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 58–76). Vancouver: UBC Press.

Chapter 5
Engaging with the Conceptual Tools and Challenges of Poststructural Theories

Affrica Taylor

Abstract This chapter outlines the challenges that various poststructural theories pose to the dominant discourses of early childhood education. It discusses where poststructural theory comes from, identifies the key poststructural philosophers, and discusses how their ideas first entered the field of early childhood education. It reviews how early childhood scholars have engaged with key poststructuralist ideas and concepts, such as: 'discourse, knowledge and power'; 'whiteness and othering'; 'subjectification'; 'sex/gender performativity'; 'desire and becoming'; and 'assemblages and rhizomes'. It concludes by reflecting upon the recent challenges that the 'material' and the 'animal' turns are now posing to poststructuralism.

5.1 Introduction

Scholars that engage with the conceptual tools of poststructural theories do so in order to critically interrogate modern western society's dominant discourses and the norms and truth claims that these discourses produce. Within early childhood education, this means calling into question the dominant discourses, norms and truths about childhood and learning that emerged from the behavioural sciences in the twentieth century.

Poststructural theories were not originally formulated or presented as theories per se. Rather, they grew out of a series of ongoing and generative philosophical conversations that have travelled widely within the humanities and social sciences

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over the last 50 years or so. They effectively function as 'anti-theories' – as a cumulative set of questioning interventions that provoke us to rethink the universalist truth claims of western scientific knowledge systems. The most solid thing these 'troubling' poststructural conversations offer is a set of new conceptual tools to help us think differently. I will be unpacking some of the key conceptual tools in this chapter.

Poststructural theories do not appeal to everyone. They have many detractors. However, because of their viral nature, there are very few fields within the social sciences and humanities that remain unaffected by them. The field of early childhood education is no exception. Even though poststructuralist conversations first started to make inroads into early childhood education in the late 1980s (RECE 2014), a relatively small proportion of early childhood education scholars have engaged with them. They remain like a foreign language to many, as they have their roots in the esoteric world of (European) Continental philosophy, not in the empirical and structuralist traditions of the behavioural sciences that directly inform mainstream early childhood educational theory and practice.

The terminology of poststructural conversations and the ideas that they espouse are notoriously challenging. This is because they have cumulatively assembled a new vocabulary, or in some cases reappropriated existing words, for doing their interrogative work. This new vocabulary provides the conceptual 'tools of their trade'. It allows those that join poststructural conversations to critique the taken-for-granted meaning-making traditions of dominant western academic traditions. It is therefore not surprising that poststructural thought has gained traction in the peripheral, questioning spaces of early childhood education.

These are spaces that are more closely aligned with the critical traditions of social inquiry (sociology) than with human development theory (psychology), which make it their business to question the status quo by exposing the dynamics of power differentials. Armed with a new toolbox of analytical concepts, many poststructuralists within the field of early childhood education now refer to themselves as being a part of the 'reconceptualist' movement (Canella 2010; Bloch et al. 2014). They are reconceptualizing not only the established development theories in early childhood education but also their former critical frameworks for challenging these theories.

I begin this chapter by providing an overview of poststructuralism's viral conversations in order to situate their uptake within the interrogative spaces of early childhood education. I discuss where poststructuralist ideas came from and their important relationship to the traditions of structuralist thinking. Poststructuralist theory is intensely conceptual and reflexive. In the remainder of this chapter, I unpack the key concepts that facilitate poststructuralism's challenges to mainstream western thinking and extrapolate upon the ways that these conceptually based poststructuralist interventions have reshaped existing critical perspectives within the field of early childhood education. I conclude the paper by touching upon the reconfigurations, mutations and challenges that poststructuralism itself is currently experiencing.

In the spirit of poststructuralist thinking, I begin with the caveat that my overview of poststructuralist theory in early childhood education will be *partial*

(in the double sense of being incomplete as well as being reflective of my particular experiences), it will be *contingent* (conditional on the circumstances in which it was written and is read), and it will be *contestable* (as no one can have the definitive last word on the exact nature of poststructuralist traditions).

5.2 Where Did Poststructuralist Theory Come From?

The body of thinking that is now loosely clustered under the umbrella term of poststructuralist theory emerged from the traditions of Continental philosophy in the latter part of the twentieth century. It is primarily associated with celebrated paradigm-shifting European thinkers such as Jacque Derrida (1968), Michel Foucault (1972, 1977, 1980) and Gilles Deleuze (1991, 1994), although none of these scholars referred to themselves as poststructuralists. There are also many influential second-generation poststructuralist theorists, who have led extended engagements with the ideas of these philosophers within their own disciplinary locations. They include (but are not limited to) scholars such as Edward Said (1978) from postcolonial studies, Stuart Hall (1992) from cultural studies, Judith Butler (1990) and Donna Haraway (1991) from feminist philosophy and feminist queer theory, James Clifford (1988) from anthropology and Nikolas Rose (1999) from sociology and political theory. In the field of education, some of the notable scholars who first engaged with poststructuralist theory are Michael Apple (1982), Bronwyn Davies (1989), Stanley Aronowitz and Henry Giroux (1991), Patti Lather (1991), Henry Giroux and Peter McLaren (1989, 1993), Jennifer Gore (1993), Steven Ball (1990), Thomas Popkewitz and Marie Brennan (1998) and Elizabeth St. Pierre and Wanda Pillow (1999).[1]

Regardless of disciplinary location, all poststructural theorists partake in a critically reflexive mode of contemporary intellectual practice that deconstructs the form, function and effects of modern western epistemologies *from within*. More specifically, they critique the epistemologies of structuralism – a modern western academic disciplinary tradition. Contrary to popular belief, the 'post' prefix does not simply indicate a neat and complete temporal 'afterwards' of structuralism. Instead, the 'post' of poststructuralism signifies a mode of thinking that is born out of, makes a series of breaks with, but also remains in a questioning relationship with structuralist research and theory. An appreciation that the 'post' relationship is an inverse and constitutive one (not just an after-the-fact one) goes some way towards understanding that the mind-bending qualities of poststructuralist thinking are part and parcel of turning familiar (structuralist) ideas inside out. Because poststructuralism is born out of the structuralist project and premises, it also helps to have a basic understanding of what these are.

[1] For a detailed account of the emergence of poststructural theory and its influence upon the field of education, see Peters and Burbules (2004).

In the most general terms, structuralist theories systematically apply scientific methods in a quest to discover the foundational structuring laws, rules and patterns of social phenomena and human behaviour. Structuralist methods and modes of theorizing, therefore, are modelled upon those of the natural sciences. So are its fundamental premises. Structuralism is founded upon the premise that the social world (like the natural world) is structured by essential or innate rules or laws, which have universal applicability. Structuralist theorists have pursued this project and applied this premise in a diversity of disciplinary fields. For instance, Ferdinand de Saussure's (1916/1983) theory of structural linguistics details the innate and universal signification processes of all human languages. Karl Marx's (1867/2009) critical theory of political economy reveals how capitalism's economic infrastructure essentially determines all exploitative social power relations. Claude Levi-Strauss' (1958/1963) theory of structural anthropology identifies the innate kinship relations and rules that govern all human cultures. And most pertinent to the field of early childhood education, Jean Piaget's (1936) psychological theories of human cognition propose that there is a hard-wired universal structure to children's staged growth and development.

Poststructuralists challenge structuralism's 'grand theories' for their unacknowledged Eurocentric conceits and for their lofty presumptions to have discovered essential, innate and universal truths about social phenomena through objective (western) scientific inquiry. In lieu of claiming objectivity and universality – or to put it in more cynical terms, the 'god trick' of a transcendent view from nowhere that applies to everyone, everywhere – poststructuralists emphasize the 'partialities' and 'situatedness' of all knowledge production (Haraway 1988).

They not only resist the veracity of structuralism's essentialist and universalist claims, but they turn the spotlight back onto the premises of structuralism's theorizing traditions. These, they claim, reveal more about the imperialist tendencies of the modern western intellectual project, and more about the reproductive processes of the west's own theoretical/disciplinary cultural traditions, than they do about the universal and innate truths, laws, rules and relationships that they claim to have discovered. In other words, rather than engaging with the *substance* of structuralism's universalist truth claims, poststructuralists refocus upon the historical, political, social and cultural conditions and contexts in which these substantive truths are *constructed*. They set out to unveil or *deconstruct* them in order to better understand their social and political *effects*.

5.3 Where Did Poststructural Theory First Appear in Early Childhood Education?

In the cognate fields of psychology, education and early childhood studies, Jean Piaget's (1936) foundational and universalist truth claims about the innate developmental stages of childhood quickly became the front line for poststructuralist

critique. UK critical psychology scholar, Valerie Walkerdine (1988), was the first to use the tools of poststructuralism to contest the truth claims of developmental psychology from within.[2] European and Canadian early childhood scholars Gunilla Dahlberg, Peter Moss and Alan Pence contested the push towards predetermined standards of 'quality' in early childhood education and care and asked challenging questions about the kinds of knowledges that have become the benchmarks of 'quality' claims (1999). Drawing upon their own schooling in Continental philosophy, Swedish scholars, Kenneth Hultqvist and Gunilla Dahlberg (2001) offered a strong overarching critique of the scientific truth claims that dominated the field of early childhood education. Their bold assertion 'There is no natural or evolutionary child, only the historically produced discourses and power relations that constitute the child as an object and subject of knowledge, practice and political intervention' (p. 9) is an exemplar of pioneering poststructuralist critique in the field of early childhood studies.[3]

Marianne Bloch (1991) was one of the first to critique developmentalism's hold on the US field of early childhood education. Shortly afterwards, contributors to Shirley Kessler's and Beth Blue Swadener's 1992 edited collection, *Reconceptualizing the Early Childhood Curriculum: Beginning the Dialogue*, argued that the national guidelines for 'developmentally appropriate practices' (DAP), based upon Piaget's stages of cognitive development, promote Eurocentric cultural norms and values as universal ones and ignore the cultural, linguistic and socio-economic diversity of North American childhoods. As a follow-up, Gaile Cannella's 1997 book, *Deconstructing Early Childhood Education: Social Justice and Revolution*, utilized poststructuralism's deconstructive methods to expose the ways that the dominant discourses, or the monocultural 'grand narratives' that circulate in the field of early childhood education (particularly DAP), privilege dominant culture children, reconfirm the knowledge and power of dominant cultures and disempower and marginalize minority children and knowledges.

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[2] As a feminist, as well as a critical psychologist, Walkerdine's interest subsequently turned to applying a poststructural lens to the construction of gender in childhood. Her groundbreaking book *Daddy's Girl: Young Girls and Popular Culture* (1997) was the first to combine a feminist poststructural psychoanalytic perspective (a feminist reworking of Freud and Lacan) with a poststructural textual analysis in order to deepen understanding of the complex ways in which western cultures of fantasy and desire produce young girls' subjectivities.

[3] Gunilla Dahlberg and Peter Moss have been major drivers of the European chapter of poststructuralist early childhood research and scholarship. In 2005, they launched the highly successful 'Contesting Early Childhood' Routledge series with their book *Ethics and Politics in Early Childhood Education.* This series, which they co-edit, has published 13 titles. Many of these are commissioned works, which Dahlberg and Moss have championed because they bring new strands of poststructural thinking into the field of early childhood education. This series also includes many works that showcase the practical application of poststructuralist Continental philosophical traditions within Reggio Emilia and Reggio Emilia-inspired early childhood settings. This uptake of poststructuralist ideas within European early childhood educational settings is reflective of their embeddedness within the milieu of Continental philosophical traditions.

As pioneers of social justice and equity in early childhood education, many of these scholars had shifted from structuralist, Marxist-inflected critiques of education's role in reproducing social inequities into poststructuralist critiques. Poststructural theories offered them a new working set of conceptual tools.[4]

5.4 Poststructuralism's Theoretical 'Toolbox'

All theories use specialized terms or key concepts as the 'tools of their trade'. It is these key concepts that allow them to put their theories to work. Poststructuralist theories are no different in this regard, although it often noted that the concepts that they use – whether newly invented or reappropriated – are often quite challenging and difficult to understand (Peters and Burbules 2004). In this section, I unpack a selection of conceptual tools from the poststructural theoretical 'toolbox' that are commonly used by early childhood education scholars. But first, I reflect on the purpose of using concepts as theoretical tools.

In a 1972 conversation between prominent (poststructuralist) French philosophers, Michel Foucault and Gilles Deleuze, about 'intellectuals and power', Deleuze declares: 'A theory is exactly like a box of tools… It must function. And not for itself'. He goes on to clarify that if a set of theoretical tools is not to become a set of self-serving instruments used to maintain the status quo and to firm up established inequitable power relations, it must open up and 'multiply' avenues for thought and action. Theoretical tools should not be used foreclose on alternative possibilities, as structuralism's 'totalizing' theories do. Deleuze infers that the point of assembling and using a theoretical toolbox is not to slavishly apply the conceptual tools in a mechanistic way, but to use them in an experimental way – to pose new kinds of questions and to provoke new ways of thinking (Nealon and Giroux 2012, p. 8). In another context, Foucault refers to all his writings as 'little toolboxes'. He encourages his readers to put his conceptual tools to work in a subversive way: '… to use this sentence or that idea as a screwdriver or spanner to short-circuit, discredit or smash systems of power' (cited in Mills 1997, p. 17).

So what kinds of new questions and subversive thinking might these key poststructuralist conceptual tools open up for the field of early childhood education? The remaining sections are organized around these conceptual tools. As well as unpacking some of poststructuralism's key concepts and exploring the destabilizing

[4] Unlike in Europe, where (poststructuralist) Continental philosophies were congruent with and thus easily integrated into the existing cultural practices of Reggio-inspired early childhood education, in the USA, poststructuralism was primarily engaged as an analytic for sharpening existing sociological critiques of education. Pioneering US early childhood social justice scholars such as Bloch, Swadener and Cannella put poststructuralism's powerful deconstructive tools to use to deepen understandings about the ways in which the racialized, classed and gendered divisions and inequities that characterize US history and multicultural society are embodied, enacted and reproduced within early childhood education settings.

questions and thinking they afford, I offer an overview of the ways they have been taken up and applied within the field of early childhood education.

5.5 Discourse, Knowledge and Power

Discourse is one of poststructuralism's most central, provocative and indispensable 'short-circuiting' tools. In fact it is so central and game-changing that the arrival of poststructural theory within the social sciences is sometimes referred to as the 'discursive turn'. But what does this mean? In everyday usage, discourse has a straightforward meaning. It generally refers to a form of communication – either spoken or written. It can be a speech, or a written text, or a conversation, or even a body of disciplinary knowledge – such as an educational theory of child development.

Heavily influenced by Foucault's complex and expanded understandings, poststructuralist theorists have reappropriated the concept of discourse. They are not simply referring to forms of communication but to 'practices that systematically form the objects of which they speak' (Foucault 1972: 49). This reframing of discourse is a radical conceptual move, because it refutes that there is a pre-existing set of truths (laws or rules) about the social world that are waiting to be discovered, and which discourses simply describe. The twist is that discourses, in the Foucauldian sense, are seen to shape the worlds that they presume to describe. They are powerful and productive practices, all the more so as they obscure and/or disavow their own generative functions. It is this shift from understanding discourses (including academic discourses) as a vehicle for describing the world that already exists to an understanding that discourses actively make and shape the world they name, which is referred to as the 'discursive turn'.

In early childhood education, poststructuralists reframe child development theories as powerful productive discourses of dominant western culture. To stress that developmental theories are the target of their poststructural interrogation, some early childhood poststructuralists explicitly call themselves postdevelopmentalists (Blaise 2010; Noland and Kilderry 2010). Instead of accepting developmentalism's foundational premises as universal truths, they reposition the theories as truth-producing discourses and focus upon their *practices* and *effects*. The practices include the reiterative telling, writing, discussions and learning about child development, which form the basis of most early childhood education and training programmes; the endorsement of developmentally appropriate practices in early year curriculum frameworks and guidelines; and, of course, the multifarious modes through which developmental perspectives are applied in early childhood education and care settings (see Bloch et al. 2004; Lee and Vagle 2012).

The effects of these discursive practices are twofold. Firstly, they figuratively position the 'developing child' as a central object of knowledge in textbooks, in education and training courses and in professional conversations. The objectified figure of the 'developing child', as represented in the textbook or in the curriculum framework, then functions as a norm. And like all norms, it has normative effects.

It becomes the benchmark for determining if children are 'normal' or need 'fixing' (Blaise 2010). This has particular implications for children who are not from the dominant culture, as I will soon discuss in more detail.

The second effect is that children come to know themselves in relation to the practising of developmentalism's norms and benchmarks. The ubiquitous application of developmental practices within early childhood education establishes the grounds of intelligibility whereby children themselves become the 'knowing subjects' of child development theory. They understand that 'normal' children should be able to do certain things at certain times and they measure themselves as developing (or not) according to the established norms. In simple terms, developmental discourses have the effect of (at least partially) shaping children's own identities (Bradbury 2013; Srinivasan 2014). This is a process I elaborate upon in the following section about subject formation.

It is not possible to appreciate the productive effects of discourses outside of the mutually constitutive operations of *knowledge* and *power* (Mills 1997). As education's core business is knowledge production, it is a prime field in which to study the relations between discourse, knowledge and power (Popkewitz and Brennan 1998; Ball 2013). As Foucault himself points out: 'Every education system is a political means of maintaining or modifying the appropriateness of discourses with the knowledge and power they bring with them' (Foucault 1972, p. 46). The curriculum, in particular, determines which kinds of discourses are deemed appropriate and reified as regulatory regimes of truth/knowledge/power and which are deemed inappropriate and thus excluded. It functions as a kind of gatekeeper of knowledge and truth.

Early childhood education scholars influenced by Foucault's insistence on the relationship between discourse, knowledge and power have framed the universalization of (white, middle-class) western knowledge about the 'normal development' of the individual child as a political act and have been quick to point out that it automatically excludes and/or devalues alternative non-western cultural knowledges about children and childhood (Bloch et al. 2006, 2014; Cannella 1997; Grieshaber and Cannella 2001; Robinson and Diaz-Jones 2006; MacNaughton 2005).

Australian Aboriginal early childhood scholar, Karen Martin, has a keen understanding of the powerful exclusionary effects of western developmental discourses. Picking up on the insights that poststructuralist critiques offer, Martin (2007) details the ways in which ancient indigenous relational understandings of childhood and learning are discounted when western individualist and developmental discourses are imposed on Aboriginal children. She claims this is entirely consistent with the ways in which colonialist discourses have historically rendered Aboriginal people's knowledges invisible. Martin argues that in early childhood education, the discounting of all but the dominant white developmental discourses of childhood and learning serves to perpetuate and regulate colonial power relations in the present.

Such exclusions are widespread. Childhood anthropologist Elizabeth Montgomery points out that within the multitude of cultures and related childhood discourses that exist across the world, very few are commensurate with the western

developmental model (Montgomery 2009). It is through systematically excluding non-western discourses of childhood (for instance, through discounting, devaluing or simply ignoring them), and concomitantly claiming the universal applicability of their own understandings, that western developmental theories continue to constitute and reiterate their dominance in the field of power, that is, early childhood education.

However, rather than concede that these discursive power relations are monolithic and immutable, it is also important to note, as Foucault (1980) stresses, that the relationship between discourses and power is anything but fixed and stable. He takes pains to point out that 'Discourses are not once and for all subservient to power or raised up against it, any more than silences are. We must make allowances for the complex and unstable process whereby discourse can be both an instrument and an effect of power, but also a hindrance, a stumbling block, a point of resistance and a starting point for an opposing strategy. Discourse transmits and produces power; it reinforces it, but also undermines it and exposes it, renders it fragile and makes it possible to thwart' (Foucault 1977, pp. 100–101). In other words, in the face of the dominant discourses that operate in any social context and at any given time, there is always the possibility for an emergent power play of resistant or oppositional discourses. This is another reason why poststructuralists regard the nexus of discourse, knowledge and power as both regulatory and productive.

Those who engage with poststructuralist theory, itself a resistant form of discourse, do so in order to deconstruct and thus destabilize powerful discourses and to expose their regulatory regimes of knowledge/power. In so doing, they enter into a power play, identifying the vulnerable, weak points of dominant discourses in order to thwart them and to foster resistant and oppositional discourses. This is precisely what Kerry Robinson and Cris Diaz-Jones (2006) do in their book *Diversity and Difference in Early Childhood Education*, which systematically explains and applies Foucault's analytical tools, not only to expose the knowledge/power dynamics that marginalize children from non-dominant social and cultural backgrounds but also to encourage and support other early childhood scholars and practitioners to do the same. Glenda MacNaughton's (2005) book, *Doing Foucault in Early Childhood Studies*, has an explicitly activist agenda. She writes in order to demonstrate how Foucauldian understandings about the nexus of discourse, knowledge and power can be applied to the practice of early childhood education. Drawing on the critically reflective pedagogical practices of a group of early childhood educators, she describes how poststructurally informed practitioners can identify and resist the (often unintended) exclusionary side effects of dominant approaches and ensure that their pedagogies are more inclusive.

5.6 Whiteness and Othering

Resistance to the dominance of white western discourses drives the second-generation poststructural fields of critical postcolonial theory and critical whiteness theory. Scholars engaging with these theories frequently use the key concept of

Othering to name and destabilize the strategies and effects of racialized discourses, knowledges and fields of power. A critique of the process of Othering originated from Edward Said's (1978) application of Foucault's philosophies to the history of western colonialism. In his seminal book, *Orientalism*, Said (1978) stresses that colonization was not only enacted through brute force but also by sustained discursive violence. He notes that colonialist discourses (including the discourses of academic disciplines such as history, geography, English literature and anthropology) have produced dominant western knowledges about colonized people as inferiorized Others. Thus Othering refers to the process whereby assumed-to-be superior (white) western subjects quickly became the knowing subjects about colonized (non-white) Others. This racialized discourse/knowledge/power relationship not only justified the acts of European colonization, but it has perpetuated the radically uneven west/east (or north/south) colonialist relations that persist in the present.

More recently, critical whiteness scholars have analysed the relationship between Othering and unnamed whiteness within multicultural postcolonial societies in which the dominant culture is white. Instead of naming ourselves/themselves as white, it is common for members of the dominant white cultural group to identify by nationality, as not belonging to any particular racialized identity group. The identification of racialized identities is reserved for non-white Others. When the field of power is white, the assumption is that majority white culture subjects/discourses/ knowledges are just 'normal', whereas minority non-white culture subjects/discourses/ knowledges are perpetually Other to the (unnamed) white norms.

Within early childhood education, there are a number of scholars who have used the critical concepts of Othering and whiteness to reposition child development theory as a part of the ongoing (white) western imperial project of bringing 'progress' and 'development' to the rest of the world (Taylor and Pacini-Ketchabaw 2015a). One of the first to do this was Radhika Viruru (2001), whose book *Early Childhood Education: Postcolonial Perspectives from India* interrogates the normative and universalist assumptions of western developmental discourses. Viruru exposes the ways that these dominant discourses disempower, marginalize or Other children from non-western cultures while claiming to represent the interests of all children. Published a few years later, her co-authored book *Childhood and Postcolonization* explores the constitutive relationship between colonialist discourses, power and the construction of childhood within North American early childhood education (Cannella and Viruru 2004).

In Australia, contributors to *'Race' and Early Childhood Education*, edited by Glenda MacNaughton and Karina Davis (2009), deploy the tools of critical whiteness theory[5] to deepen understandings of the ways in which white Australian

[5] Critical whiteness theory emerged in the late twentieth century in the USA, largely in response to the profound racialized divisions that African-American slavery has left upon US society. It focuses upon whiteness as a construct used to justify a belief in (white) racial superiority and the concomitant oppression of black and coloured peoples. It is also used to deconstruct the persistent assumptions and the ongoing legacies and effects of white privilege. It continues to be a central critical analytic tool for challenging ongoing white privilege and racialization in the US education system (see, for instance, Persky and Viruru 2015). Critical whiteness theory also has strong reso-

children maintain a hegemonic position in early childhood education despite Australia's prevailing multicultural and diversity discourses. They focus upon the ways in which Australian children's perceptions of whiteness are directly related to patterns of peer inclusion and exclusion (Davis et al. 2009) and also challenge white early childhood educators to critically reflect upon the ways in which they might be unintentionally 'Othering' non-white children (Davis 2009). More recently, Prasanna Srinivasan (2014) analyses the discourses that shape the identities of Australian children who do not belong to the dominant white culture. In her book *Early Childhood in Postcolonial Australia*, she details the specific ways in which non-white immigrant Australian children are Othered and assigned to marginalized national identities (see also MacNaughton et al. 2010; Taylor 2005; Robinson and Diaz-Jones 2006).

The tools of critical postcolonial and whiteness theories help early childhood scholars to drill down into the sedimented inequalities that have been laid down by the histories of colonialism and other forms of racial persecution, violence and forced diaspora, which still underpin culturally diverse early childhood contexts despite the surface rhetoric of inclusion and diversity (Grieshaber and Cannella 2001; Mutua and Swadener 2004; Pacini-Ketchabaw et al. 2011; Pacini-Ketchabaw 2012; Pacini-Ketchabaw and Viruru 2010; Ritchie and Skerrett 2013). In the recent edited collection *Unsettling the Colonial Places and Spaces of Early Childhood Education* (Pacini-Ketchabaw and Taylor 2015), contributors reflect upon the ubiquitous and often covert ways in which colonialist discourses lurk in early childhood educational contexts in contemporary settler colonial societies.[6] For instance, Emily Ashton (2015) considers how in Canada, even curricula that purport to be inclusive and to celebrate diversity can conceal unexamined white settler norms and inadvertently position those children who appear to embody diversity as 'Other'. Fikile Nxumalo (2015) considers how indigenous stories are routinely erased from children's encounters with 'natural' place in settler colonized societies. As a decolonizing strategy, she proposes early childhood educators deliberately learn how to 'refigure' indigenous presences when taking children for walks in colonized natural places. Another contributor, Jennie Ritchie (2015), who is a long-time exponent of counter-colonial early childhood education in Aotearoa, New Zealand, details how

nance amongst Australian early childhood scholars. This is because the longstanding 'White Australia Policy' (which denied Indigenous people rights as national citizens until 1967 and sought to restrict immigration to whites only) has fundamentally shaped the Australian national imaginary and is still played out in early childhood educational settings (see Taylor 2005).

[6] Settler colonial societies are the ones in which the colonial settlers and their descendants have claimed and maintained sovereignty and now outnumber the dispossessed indigenous peoples they originally colonized. Most settler colonial societies are also immigrant multicultural societies. However, it is the white settlers' languages, laws, systems of government, knowledge and faith systems that maintain a hegemonic hold on the conduct and identity of these culturally diverse nations. Poststructural scholars living in white settler colonial societies such as Canada, New Zealand, Australia and to a lesser extent the USA (because of the additional foundational legacies of slavery) have contributed new insights into the ways in which colonial legacies and dominant white settler discourses function to perpetuate specifically racialized forms of knowledge and power within their early childhood education contexts.

pervasive colonialist legacies continue to undermine the aspirations of Te Whāriki to function as a genuinely bicultural and bilingual Māori-Pakeha curriculum (see also Ritchie and Rau 2007; Ritchie and Skerrett 2013).

5.7 Subjectification

The concept of subjectification is central to poststructural theory. This is the process whereby 'human beings are made subjects' (Foucault 1982, p. 212). It is important to note that Foucault's productive concept of the 'made' human subject is a radical departure from the (Cartesian) notion of the individual subject as born with biologically determined, innate, fixed and essential characteristics (awaiting 'development'). This point of departure around understandings of the subject is very pertinent for the field of early childhood education, as the prevailing structuralist notion of the individual child as a pre-existing subject waiting to unfold is foundational to child development theories.

In discussing the relations between subjects and power, Foucault (1982) declares that his main project was to elucidate the modes of subjectification. He identifies three main modes. The first are the scientific discourses that produce knowledge about human subjects, as I have already discussed in relation to child development theory. The second are the 'dividing practices', which use binary logic to produce dominant and subordinated human subjects (p. 212). These are the modes that I have discussed above in relation to the Othering of non-white children. The third is the mode by which modern western subjects become self-regulating, or self-disciplining, without the need for coercive power. This was of particular interest to Foucault. He notes that it is the liberalist discourse of the individual as autonomous, free and agentic that plays a cameo role in producing the self-regulating western subject. This is not to say that we *are* free and self-determining individuals, but to recognize that we are compliant subjects because we *believe* ourselves to be free and autonomous. In line with these arguments, he proposes that liberal individualist discourses (such as the discourse of the individual as exercising free-will and self-determining agency) are prime modalities for governing the modern western subject (see also Rose 1999).

A number of early childhood education scholars have engaged with these ideas. For instance, the edited collection *Governing the Child in the New Millennium* by Hultqvist and Dahlberg (2001) features writings that variously trace the ways in which liberalism's dominant educational, policy, legal and cultural discourses of childhood have produced self-governing child subjectivities and bodies (see also Bloch et al. 2004). Drawing upon Nicolas Rose's (1999) Foucauldian-inspired work on liberal democratic governance, Zsuzsa Millei (2011) explores the tensions that exist within liberalist early childhood discourses around the contradictory notions of discipline, guidance, autonomy, choice and freedom. Along with Rebecca Rabi, she considers how children embody such tensions and how they become self-disciplining subjects as they navigate the discourses of 'choice' that proliferate,

paradoxically, around the discipline and punishment regimes of educational institutions (Millei and Rabi 2010).

5.8 Sex/Gender Performativity

Feminist poststructuralist theorists are particularly interested in the ways in which we become gendered and/or sexed subjects. They see the process of gendering as core to the development of our sense of selfhood, and they also see it as a process that is highly regulated by a proliferation of geohistorically specific gender/sex discourses. Judith Butler (1990) stresses that our gender subjectivities and identities are not only produced through the discourses we inhabit, but they are relational, and we actively take part in performing or doing them. This means that our gender identities are not simply outward manifestations of who we really are on the inside; they are something that we continually work on and *do* in our relations with others. We make ourselves into gendered subjects, for instance, by repeatedly performing ourselves as certain kinds of girls, boys, men and women according to the prevailing discourses. Moreover, our gender identities are 'doings' or 'performances' that we enact for others as much as for ourselves.

Such gender 'performances' or 'doings' begin in early childhood. Bronwyn Davies (1989) was one of the first feminist educators to engage with poststructuralist theory and to use it to throw new light on the complex ways in which children negotiate prevailing gender discourses – many of which are contradictory and operate in tension with each other. Her book, *Frogs, Snails and Feminist Tails: Preschool Children and Gender*, uses observations of children's play and their reactions to a gender-transgressive feminist retelling of a fairy tale to analyse the ways in which young children actively shape and reshape their own gender identities in response to the (sometimes contradictory) gender discourses that they are exposed to. Davies' work was one of the first in the early childhood field to sidestep the structuralist 'nature/nurture' debate about children's gender identification, which pivots around proportioning causality to either biology and/or socialization. Instead, she engaged with the tools of poststructuralist theory to analyse the powerful and productive effects of gender discourses in producing young gendered subjects.

Other feminist scholars followed suite. Glenda MacNaughton's (2000) book, *Rethinking Gender in Early Childhood Education*, explicitly revisits the poststructuralist gender analysis offered by Davies a decade earlier, similarly arguing that gender is not natural, but a complex set of discursively constructed power relations. With a focus upon the ways in which gender continues to be narrowly regulated in early childhood, despite gender equity policies, MacNaughton asserts that it is 'the regime of truth about the "developing child" … [that] hampers feminist interventions' (p. 6). This is because developmentalism's focus upon the 'natural' processes of childhood masks its complicity in perpetuating discursively constituted cultural norms, including deeply entrenched cultural gender stereotypes. MacNaughton's book offers early childhood educators practical ways of identifying how dominant

gender discourses infiltrate early childhood settings under the guise of 'natural' girl and boy behaviours and for intervening to ensure that these discourses do not regulate children's gender identities, behaviours and relationships in covertly limiting and negative ways.

In an extension of her Foucault-inspired ideas about the performativity of gender, Judith Butler (1990) insists that the conventional performance of normative gender binaries (of 'correctly doing' masculinity and femininity) relies upon the structuring logic of normative heterosexuality (which she also refers to as heteronormativity or hegemonic heterosexuality). In other words, gender binaries only make sense within the broader context of hegemonic heterosexuality. Her observations have strongly influenced the emergence of another branch of feminist poststructural thinking that is often referred to as 'queer theory'. Queer theory scholars seek to 'trouble' or destabilize the heteronormative assumptions that prop up gender binaries.

While many would insist that sexuality is neither relevant nor developmentally appropriate in early childhood, some poststructural early childhood scholars have used queer theory to further understandings about the gendering of young children within heteronormative early childhood contexts. One of the first to do this was Mindy Blaise (2005). Her book, *Playing It Straight*, explores how prevailing gender discourses in an infant classroom are framed by the norms of heterosexuality. Blaise argues that children are not only learning how to perform their gender in the early years of education, but they are simultaneously learning how to perform it via the dominant norms of heterosexuality, or via what Butler calls 'the heterosexual matrix' (Butler 1990). From her extended study, Blaise observes that children enact themselves not just as girls and boys but predominantly as *heterosexual* girls and boys.[7] In a similar vein, Emma Renold (2006) also draws upon queer theory to detail the means by which children regulate each others' gender performances through enforcing heterosexual norms in the school playground, and Carmel Richardson and I observe how normative notions of the heterosexual family both structure the architecture of 'home corner' in the early childhood centre and infuse the gendered play of girls and boys (Taylor and Richardson 2005).

Kerry Robinson (2005, 2013) is another early childhood scholar who engages with queer theory. Her work focuses upon exposing the contradictions inherent in adults' attitudes and beliefs about children's sexuality. She draws upon queer theory in order to extrapolate upon the ways in which heteronormative discourses reinforce discourses of childhood innocence while simultaneously (and paradoxically) disavowing the significance of (hetero)sexuality in young children's gender identity construction (see also Renold et al. 2014). All of these scholars engage with the

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[7] Following her original longitudinal study of gender/sexuality performances in an infant's classroom, Blaise (2013a, 2014) has gone on to further extrapolate upon the reasons why it is important to acknowledge that children's engagement with prevailing heteronormative sexual discourses plays a formative role in the construction of gender. Against the grain of prevailing developmentalist beliefs that sexuality is only relevant in adolescence, she has consistently argued that efforts to achieve gender equity in the early years of education would be much more effective if they recognized the significance of young children's simultaneous negotiations of gender and sexuality discourses (see, for instance, Blaise and Taylor 2012).

critical tools offered by queer theory in order to encourage early childhood educators to deepen understandings of the complexities that underpin sex/gender stereotyping and to expose the buried assumptions that can stand in the way of dislodging these stereotypes and fully embracing gender/sexuality diversity (Blaise and Taylor 2012).

5.9 Desire and Becoming

While Foucault himself insisted that liberal governance can and does produce resistant and subversive subjectivities, as well as the more common compliant subjects, many scholars who apply his concepts tend to emphasize the ways in which dominant discourses regulate subjects and reproduce social norms and inequities. With an underlying interest in education for social justice, they focus upon the power relations that are part and parcel of the subjectification process. Most of the early childhood poststructural scholars whose work I have so far reviewed maintain such a focus. Those who seek more fluid, open and creative possibilities tend to engage with the conceptual tool box offered by Foucault's contemporary, Deleuze and his collaborator Guattari. In a departure from Foucault's focus upon power and subjectification, Deleuze (2006) emphasizes the primacy of desire over power. For Deleuze, desire is the central productive force that is constantly destabilizing forms of subjectivity and which drives becoming. This is the desire to become other. In Deleuze's (1991) cartographies of the subject, nothing stands still. Desire propels lateral movements or lines of flight across the surface of relations, constantly seeking new forms of otherness and seeking new becomings.

Needless to say, the mercurial Deleuzian concept of desire-driven and relational becoming is radically different from developmental psychology's structuralist notion of the child becoming sequentially more rational through a set of predetermined cognitive stages until she/he reaches the end point of adulthood. Deleuze's alternate conceptualization of becoming is very attractive to many poststructuralist early childhood education scholars as it affords open-ended, transformative, fluid and affective ways of approaching children's subjectivities and seems to mirror the desire-propelled modes through which children relate to and move through the world around them (Olsson 2009; Blaise 2013b; Renold and Mellor 2013; Sellers 2013; Lenz Taguchi 2014). Moreover, as Deleuze's concept of becoming is inherently relational, it offers a complete break with developmentalism's focus upon the individual child as a unified subject and as the primary unit of study. Viewed through a Deleuzian lens, children's becomings are continually emerging from relations with others within the milieus, places or communities in which they are located (Davies 2014; Somerville 2011; Pacini-Ketchabaw 2010). Becoming is not a solitary human process. It is only through their relations with others in the world around them (not all of them human) that children's subjectivities emerge through 'becoming worldly with' (Giugni 2011).

UK early childhood scholar, Liz Jones (2013), states that she consciously engages with Deleuze's concept of becoming as a way of resisting the tendency to foreclose on understandings about children subjectivities and to remain open to their unfolding desires and embodied relations. In reflecting upon what is happening during a children's dress-up princess play event, she takes heed of Deleuze's and Guattari's (1987) insistence that becoming is not about seeking correspondence in relation to others or about seeking to literally resemble or imitate others, but is a relation of experimentation and potential that can take us beyond the threshold of knowable identity. Australian arts educator, Linda Knight (2013), uses Deleuze's insistence that becoming has no beginning or end point, to refute more conventional interpretations of children's drawings as offering a window into children's stages of cognitive development. She rereads a series of children drawings in order to reveal how the children that create them are always in relation to others around them and 'always in the midst of being formed' (p. 261).

In her Deleuzian- and Reggio Emilia-inspired book *Listening to Children: Being and Becoming*, Bronwyn Davies (2014) speaks about the importance of staying open to the not yet known. Rather than searching for evidence that conforms to a predetermined developmentalist script, she suggests that the Deleuzian concept of becoming enables early childhood scholars to follow children's desires for real-world relations and to focus upon the kinds of emergent becomings that exceed predictability and full-known ability.

5.10 Assemblages and Rhizomes

There are many Deleuzian concepts that have helped scholars to think differently about the business as usual of early childhood education – far too many to cover here.[8] I have selected just two more to mention – the key concepts of assemblages and rhizomes. Both of these concepts extend and deepen understandings of children's becomings. According to Deleuze and Guattari (1987), human becomings take place within relational assemblages of heterogeneous elements, such as objects,

[8] There is a considerable body of educational scholarship that engages with the multitude of provocative concepts that make up Deleuze's and Guattari's 'toolbox' for thinking differently – including concepts such as affect, nomadic subjects, de-territorialization, schizoanalysis, bodies without organs, etc. (see, for instance, Carlin and Wallin 2014; Semestsky 2006; Semestsky and Masny 2013). Many leading Deleuzian educational scholars also engage with the second-generational works of feminist Deleuzian philosophers such as Rosi Braidotti (2011), Claire Colebrook (2002) and Elizabeth Grosz (2008). Excellent examples of the application of feminist Deleuzian work to education can be found in Rebecca Coleman's and Jessica Ringrose's 2013 edited collection *Deleuze and Research Methodologies* (which includes early childhood chapters by Emma Renold & David Mellor and Mindy Blaise) and in 'Thinking with Deleuze in Qualitative Research' a special issue of the *International Journal of Qualitative Education*, edited by Massei and McCoy 2010. The 2013 special issue of *Global Studies of Childhood* on 'Deleuze in the Early Years', edited by Liz Jones and Judith Duncan, includes works by leading early childhood scholars from a number of different countries, who engage with a wide range of Deleuzian concepts.

other living bodies, affects, practices and semiotics. Like Foucault's conceptualization of discourses, these assemblages always *do* something; they produce effects.

This collective and generative notion of an assemblage has been fruitful for many childhood scholars. It allows them to break away from an exclusive focus upon the child and to take account of the complexity of relational events that constitute children's lives and produce specific effects. Alan Prout (2005) was one of the first to theorize the ways in which children's lives are constituted through ever-shifting assemblages of heterogeneous cultural, social, biological and technological elements. For instance, in detailing how the assemblage of childhoods, classrooms, genetics, psychopharmaceuticals and information and communication technologies has produced the diagnosis of ADHD and, in turn, produced new child identities and medicated and altered many children's bodies, he illustrates how newly emerging childhood understandings and experiences are the direct effect of new and emerging socio-bio-technical assemblages.

Other scholars have also put the Deleuzian notion of assemblage to use in their applied studies in early childhood settings. In a microstudy of infants in an Australian family day-care home, Ben Bradley et al. (2012) describe the event of mealtime as an assemblage that includes not only the babies but also the bottles, highchairs, technologies, regulations, a carer, food, gravity, etc. An appreciation of these complexly assembled relations allowed them to tease apart some of the layered effects of connection, power and becoming. In their ethnographic study of a Welsh childcare centre, Emma Renold and David Mellor (2013) focus upon the affective and actively embodied aspects of nursery room assemblages. They describe infants' relations within the nursery environment as an assembled series of multisensory doings: 'a complex affective assemblage of other bodies and things' (p. 24). Liselotte Olsson (2009) concludes her extended Deleuzian study of young children's relational learning in a Swedish early childhood centre by characterizing learning itself as the effect of mutable 'assemblages of desire' (pp. 133–178). In reflecting on her collaborative research in New Zealand early childhood settings, Iris Duhn (2012) similarly concludes that it is assemblages of vibrant material, elements and forces that simultaneously shape early childhood places and pedagogies.

The assemblages that Deleuze and Guattari (1987) have in mind are never fixed. Their elements are always reconfiguring and transmuting. Deleuze and Guattari (1987) related concept of the rhizome helps to further elucidate how these surface movements and reconfiguring assemblages unfold. Taking the botanical form of rhizomes (plants that propagate through horizontal underground root systems) as their point of reference, they describe rhizomatic thinking as thinking that moves in horizontal lines across the surface, proliferating in multiple lateral directions, but which nevertheless always remains interconnected. They suggest that rhizomatic thinking offers us a way of thinking nonhierarchically about multiplicity and connectivity and propose it as an alternative to structuralist tree root (or top/down) modes of thought that are always searching for origins and causes. It is rhizomatic thinking that has helped early childhood scholar, Marg Sellers (2013), to reconceptualize the relationship between children and the Te Whariki curriculum in Aotearoa, New Zealand, and guided Jennifer Sumsion and Sue Grieshaber (2012) in mapping

lines of connection within the Australian Early Years Learning Framework. As an extension of rhizomatic thinking, it is rhizomatic analysis that has enabled MacNaughton et al. (2010) to offer multiple readings of children's racialized identity and its implication in power relations and to thereby think differently about children's subjectivities.

5.11 Recent Challenges to Poststructural Theory

The conceptual shifts in early childhood scholarship that have been largely enabled by the work of Deleuze and Guattari are echoed throughout the social sciences and humanities. Their notion of assemblages of interconnected human and non-human entities and forces, in particular, has encouraged poststructural scholars to broaden the hitherto exclusive focus upon human meaning-making practices and subject formation that characterize scholarship within the 'discursive turn'. Their insistence upon the mutually constitutive relations between all elements of the assemblage – human and non-human – has contributed towards further retheorizations of relational and distributed agency, taking it well beyond the framings of exceptional human rationality and clever human meaning-making practices. In general, their ways of thinking differently have helped to decentre the human in poststructural thinking. They have helped us to become more aware of the dangers of overdetermining the extent to which discourses (human meaning-making practices) shape our worlds and not paying enough attention to the ways in which the non-human (more-than-discursive) world also acts upon and shapes us.[9]

Across the social sciences and humanities, there is growing awareness of the ways in which the discursive turn has inadvertently reiterated the nature/culture divide, by separating humans and our activities off from the rest of the world (for a commentary specifically related to childhood studies, see Prout 2005; Lenz Taguchi 2010; Taylor 2013a, b). Both the 'material turn' and the 'animal turn' are now posing challenges to the anthropocentrisms of poststructural thinking. Within early childhood education, Hillevi Lenz Taguchi's (2010) engagement with feminist science scholars' re-theorizations of human/material relations, in particular with feminist science scholar, Karen Barad's (2007) work on the productive intra-actions of meaning and matter, has generated a new interest in the pedagogical intra-actions

[9] It is important to note, however, that Deleuze and Guattari are not the sole inspiration for scholarship that pushes beyond the human-centric limits of poststructuralist thinking. The boundary-blurring feminist science philosophies of Donna Haraway (1991, 2008), for instance, have long been extremely influential throughout the social sciences. In early childhood education, they have influenced scholars with an interest in children's relations with the more than human, for instance, a number of contributors to Taylor et al. (2012) special issue of *Global Childhood Studies*. The work of science studies scholar and actor network theorist Bruno Latour (1993, 2005) has also played a major role in displacing the human-centric notion of exclusive (and rational) human agency with a distributed notion of collective (human and non-human) agency. Latour's work has in turn inspired the influential work of leading childhood studies scholar, Alan Prout (2005).

between children and materials. The material turn has been of particular interest to those working in early childhood arts education (Clark 2012; MacRae 2012; Pacini-Ketchabaw et al. 2015) but has also prompted retheorizations of the material/discursive aspects of children's learning more generally, including their language learning (Davies 2014; Rautio and Winston 2015).

The animal turn has come to early childhood education predominantly via an engagement with the multispecies relational philosophies of Donna Haraway (2008). Unlike Deleuze's more abstracted relational philosophies, Haraway emphasizes that the entanglement of human lives with other species is most significantly felt on the ground and in the ordinary everyday lived relations that are triggered 'when species meet' (2008). This makes Haraway's ideas particularly applicable to empirical research that is concerned with everyday child/animal and child/plant relations, such as the situated 'common world' research[10] that traces children's relations with other species within their immediate environments (Pacini-Ketchabaw et al. 2014; Pacini-Ketchabaw and Taylor 2015; Taylor 2011, 2013a, b, 2014a, b; Taylor and Pacini-Ketchabaw 2015b; Taylor et al. 2013). The emergence of multispecies ethnographies that trace the mutually affecting relations between young children, plants and animals (Pacini-Ketchabaw et al. 2016) and hybrid studies that apply queer interventions at the nexus of material/animal/plant/child relations (Taylor and Blaise 2014) represent some of the recent initiatives within the field of early childhood education to challenge the anthropocentrisms of poststructuralism, by blurring the boundaries between nature and culture, decentring the child and actively engaging with notions of more-than-human agency.

5.12 Conclusion

In this chapter, I have set out to chart how the philosophical conversations that cumulatively challenged the premises, certainties and universalism of the twentieth-century structuralist theories, and thereby became known as poststructural theory, have travelled across disciplines in the social sciences and humanities and into the field of early childhood education. I have unpacked a number of the key critical concepts from the toolbox of poststructural theory and its cognate fields such as postcolonial theory, critical whiteness theory, queer theory and post-humanist theory and provided an overview of how these concepts have been engaged with and applied in early childhood scholarship and research. In each case, these tools have been used to uncover the blind spots of earlier conceptualizations and theorizations from within. The task has always been to question prevailing truths and norms about what it means to be human, including the norms and truths about childhood and learning.

[10] The possibilities for reconstructive research that 'reassembles' children along with other creatures and entities in their 'common worlds' are extrapolated in my book *Reconfiguring the Natures of Childhood* (Taylor 2013b). For more information about 'common world' early childhood researchers and projects, see the Common World Childhoods Research Collective (2015).

By ending with a very brief outline of the current challenges that the material turn and the animal turn pose to poststructuralist theory in early childhood education – namely, its propensity to inadvertently perpetuate the nature/culture divide through focusing upon the cultures of human meaning-making and agencies – I hope I have demonstrated that this philosophical 'conversation' is by no means over.

References

Apple, M. (1982). *Education and power*. New York: Routledge.

Aronowitz, S., & Giroux, H. A. (1991). *Postmodern education*. Minneapolis: University of Minnesota Press.

Ashton, E. (2015) Troubling settlerness in early childhood education. In V. Pacini-Ketchabaw & A. Taylor (Eds.), *Unsettling the colonial places and spaces of early childhood education.* e-book. New York: Routledge.

Ball, S. J. (Ed.). (1990). *Foucault and education: Disciplines and knowledge*. New York/London: Routledge.

Ball, S. J. (2013). Introducing monsieur foucault. In S. J. Ball (Ed.), *Foucault and education: Discourse and knowledge* (pp. 1–8). New York/London: Routledge.

Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press.

Blaise, M. (2005). *Playing it straight: Uncovering gender discourses in the early childhood classroom*. New York: Routledge.

Blaise, M. (2010). Creating postdevelopmental logic for mapping gender and sexuality in early chilhood. In S. Edwards & L. Brooker (Eds.), *Engaging play* (pp. 80–95). Maidenhead: Open University Press.

Blaise, M. (2013a). Charting new territories: Re-assembling childhood sexuality in the early years. *Gender and Education, 25*(7), 801–817.

Blaise, M. (2013b). Activating micropolitical processes in the early years: (Re)assembling bodies and participant observations. In R. Coleman & J. Ringrose (Eds.), *Deleuze and research methodologies* (pp. 184–200). Edinburgh: Edinburgh University Press.

Blaise, M. (2014). Interfering with gendered development: A timely intervention. Special issue: Negotiation of gender in early childhood settings. *International Journal of Early Childhood, 46*(3) 317–326.

Blaise, M. & Taylor, A. (2012, January). Using queer theory to rethink gender equity in early childhood education. *Research in Review. Young Children, 67*(1), 88–97.

Bloch, M. (1991). Critical science and the history of child development's influence on early education research. *Early Education and Development, 2*(2), 95–97.

Bloch, M., Holmlund, K., Moqvist, I., & Popkewitz, T. (Eds.). (2004). *Restructuring the governing patterns of the child, education, and the welfare state*. New York: Palgrave MacMillan.

Bloch, M., Kennedy, D., Lightfoot, T., & Wyenberg, D. (Eds.). (2006). *The child in the world/the world in the child: Education and the configuration of a universal, modern and globalized childhood*. New York: Palgrave MacMillan.

Bloch, M., Swadener, B. B., & Cannella, G. S. (Eds.). (2014). *Reconceptualising early childhood care & education: A reader*. Oxford: PeterLang.

Bradbury, A. (2013). *Understanding early years inequality: Policy, assessment and young children's identities*. New York/London: Routledge.

Bradley, B., Sumsion, J., Stratigos, T., & Elwick, S. (2012). Baby events: Assembling descriptions of infants in family day care. *Contemporary Issues in Early Childhood, 13*(2), 141–153.

Braidotti, R. (2011). *Nomadic subjects: Embodiment and sexual difference in contemporary feminist theory* (2nd ed.). New York: Columbia University Press.

Butler, J. (1990). *Gender trouble*. New York: Routledge.

Canella, G. S. (2010). Reconceptualizing movements: Foundations for the critical rethinking of childhood policy. *International Critical Childhood Policy Studies, 3*(1), 1–6.

Cannella, G. S. (1997). *Deconstructing early childhood education: Social justice and revolution*. New York: Peter Lang.

Cannella, G. S., & Viruru, R. (2004). *Childhood and postcolonization: Power, education and contemporary practice*. New York: Routledge Falmer.

Carlin, M., & Wallin, J. (Eds.). (2014). *Deleuze & Guattari, politics and education: For a people-yet-to-come*. London: Bloomsbury Academic.

Clark, V. (2012). Becoming nomadic through experimental art making with children. *Contemporary Issues in Early Childhood, 13*(2), 132–140.

Clifford, J. (1988). *The predicament of culture: Twentieth century ethnography, literature and art*. New York: Harvard University Press.

Colebrook, C. (2002). *Gille Deleuze*. New York/London: Routledge.

Coleman, R., & Ringrose, J. (Eds.). (2013). *Deleuze and research methodologies*. Edinburgh: Edinburgh University Press.

Common World Childhoods Research Collective. (2015). *Common World Childhoods Research Collective website*. Retrieved from: http://commonworlds.net/

Dahlberg, G., & Moss, P. (2005). *Ethics and politics in early childhood education*. New York/London: Routledge.

Dahlberg, G., Moss, P., & Pence, A. (1999). *Beyond quality in early childhood education and care: Postmodern perspectives*. London: Falmer Press.

Davies, B. (1989). *Frogs, snails and feminist tales: Preschool children and gender*. Sydney: Allen and Unwin.

Davies, B. (2014). *Listening to children: Being and becoming*. New York/London: Routledge.

Davis, K. (2009). (Un)masking cultural identities: A challenge for white early childhood educators. In G. M. MacNaughton & K. Davis (Eds.), *Race and early childhood education: An international approach to identity, politics, and pedagogy* (pp. 113–126). New York: Palgrave MacMillan.

Davis, K., MacNaughton, G., & Smith, K. (2009). The dynamics of whiteness: Children locating within/without. In G. M. MacNaughton & K. Davis (Eds.), *Race and early childhood education: An international approach to identity, politics, and pedagogy* (pp. 49–66). New York: Palgrave MacMillan.

de Saussure, F. (1916/1983). *Course in general linguistics* (compiled C. Bally & A. Shechehaye). Peru US: Open Court Publishing.

Deleuze, G. (1991). *Empiricism and subjectivity* (C. Boundas, Trans.). New York: Columbia University Press.

Deleuze, G. (1994). *Difference and repetition* (P. Patton, Trans.). London: Atlone Presss.

Deleuze, G. (2006). *Two regimes of madness: Texts and interviews 1975–1995*. Los Angeles: Semiotext(e).

Deleuze, G. & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia* (B. Massumi, Trans.). London: Continuum.

Derrida, J. (1968). *Writing and difference* (A. Bass, Trans.). Chicago: Chicago University Press.

Duhn, I. (2012). Places for pedagogies: Pedagogies for places. *Contemporary Issues in Early Childhood, 13*(2), 99–107.

Foucault, M. (1972). *The archaeology of knowledge* (A. M. Sheridan Smith, Trans.). London: Tavistock.

Foucault, M. (1977). *Discipline and punish*. New York: Pantheon.

Foucault, M. (1980). In C. Gordon (Ed.), *Power/knowledge: Selected interviews and other writings, 1972–1977*. Brighton: Harvester.

Foucault, M. (1982). Afterword: The subject and power. In H. L. Dreyfus & P. Rabinow (Eds.), *Michel Foucault: Structuralism and hermeneutics*. Chicago: University of Chicago Press.

Foucault, M., & Deleuze, G. (1972) *Intellectuals and power: A conversation between Michel Foucault and Gilles Deleuze*. Retrieved from: https://libcom.org/library/intellectuals-power-a-conversation-between-michel-foucault-and-gilles-deleuze

Giroux, H., & McLaren, P. (1989). *Critical pedagogy, the state, and cultural struggle*. Albany: State University of New York Press.

Giroux, H., & McLaren, P. (1993). *Between borders: Pedagogies and the politics of cultural studies*. New York: Routledge.

Giugni, M. (2011). Becoming worldly with': An encounter with the early years learning framework. *Contemporary Issues in Early Childhood, 12*(1), 11–27.

Gore, J. (1993). *The struggle for pedagogies: Critical and feminist discourses as regimes of truth*. New York: Routledge.

Grieshaber, S., & Cannella, G. S. (Eds.). (2001). *Embracing identities in early childhood education: Diversity and possibilities*. New York: Teachers College Press.

Grosz, E. (2008). *Chaos, territory, art: Deleuze and the framing of the earth*. New York: Columbia University Press.

Hall, S. (1992). Cultural studies and its theoretical legacies. In L. Grossberg, C. Nelson, & P. Treichler (Eds.), *Cultural studies* (pp. 277–294). New York/London: Routledge.

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies, 14*(3), 575–599.

Haraway, D. J. (1991). *Simians, cyborgs and women: The reinvention of nature*. New York: Routledge.

Haraway, D. J. (2008). *When species meet*. Minneapolis/London: University of Minnesota Press.

Hultqvist, K., & Dahlberg, G. (Eds.). (2001). *Governing the child in the new millennium*. New York/London: Routledge.

Jones, L. (2013). Becoming child/becoming dress. *Global Studies of Childhood, 3*(3), 289–296.

Kessler, S., & Swadener, B. B. (Eds.). (1992). *Reconceptualizing the early childhood curriculum: Beginning the dialogue*. New York: Teachers College Press.

Knight, L. (2013). Not as it seems: Using Deleuzian concepts of the imaginary to rethink children's drawing. *Global Studies of Childhood, 3*(3), 254–264.

Lather, P. (1991). *Getting smart: Feminist research and pedagogy within/in the postmodern*. New York: Routledge.

Latour, B. (1993). *We have never been modern*. Cambridge,MA/London: Havard University Press.

Latour, B. (2005). *Reassembling the social: An introduction to actor network theory*. Oxford/New York: Oxford University Press.

Lee, K., & Vagle, M. D. (Eds.). (2012). *Developmentalism in early childhood and middle grades education: Critical conversations on readiness and responsiveness*. New York: Palgrave MacMillan.

Lenz Taguchi, H. (2010). *Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy*. London/New York: Routledge.

Lenz Taguchi, H. (2014). New materialisms and play. In L. Brooker, M. Blaise, & S. Edwards (Eds.), *The Sage handbook of play and learning in early childhood* (pp. 79–90). London: Sage.

Levi-Strauss, F. (1958). *Structural anthropology*. New York: Doubleday Anchor Books.

MacNaughton, G. (2000). *Rethinking gender in early childhood education*. Sydney: Allen and Unwin.

MacNaughton, G. (2005). *Doing Foucault in early childhood studies: Applying post-structural ideas*. London/New York: Routledge.

MacNaughton, G. M., & Davis, K. (Eds.). (2009). *Race and early childhood education: An international approach to identity, politics, and pedagogy*. New York: Palgrave MacMillan.

MacNaughton, G., Davis, K. & Smith, K. (2010). Working and reworking children's performance of 'Whiteness' in early childhood education. In M. O'Loughlin & R. Johnson (Eds.), *Working the space in between: Pedagogical possibilities in rethinking children's subjectivity*. SUNY Press.

MacRae, C. (2012). Encounters with a (life)less baby doll: Rethinking relations of agency through a collectively lived moment. *Contemporary Issues in Early Childhood, 13*(2), 120–131.

Martin, K. (2007). Ma(r)king tracks and reconceptualising Aboriginal early childhood education: An Aboriginal Australian perspective. *Childrenz Issues, 11*(1), 15–20.
Marx, K. (1867). *Das kapital*. Washington, DC: Regnery Publishing.
Massei, L., & McCoy, K. (2010). Thinking with Deleuze in qualitative research. *International Journal of Qualitative Education, 23*(5), 503–509.
Millei, Z. (2011). Thinking differently about guidance: Power, children's autonomy and democratic environments. *Journal of Early Childhood Research, 10*(1), 88–99.
Millei, Z., & Rabi, R. (2010). Embodied logic: Understanding discipline through constituting the subjects of discipline. In Z. Millei, T. Griffiths, & R. Parkes (Eds.), *Retheorizing discipline in education: Problems, politics and possibilities* (pp. 27–42). New York: Peter Lang.
Mills, S. (1997). *Discourse*. London/New York: Routledge.
Montgomery, H. (2009). What is a child. In*Introduction to childhood: Anthropological perspectives on children's lives* (pp. 50–78). Malden/Oxford: Wiley-Blackwell.
Mutua, K., & Swadener, B. B. (2004). *Decolonizing research in cross-cultural contexts: Critical personal narratives*. Albany: State University of New York Press.
Nealon, J. T., & Giroux, S. S. (2012). *The theory toolbox: Critical concepts for the humanities, arts and social sciences*. Plymouth: Rowman & Littlefield.
Noland, A., & Kilderry, A. (2010). Postdevelopmentalism and professional learning: Implications for understanding the relationship between play and pedagogy. In S. Edwards & L. Brooker (Eds.), *Engaging play* (pp. 108–121). Maidenhead: Open University Press.
Nxumalo, F. (2015). Forest stories: Restorying encounters with 'natural' places in early childhood education. In V. Pacini-Ketchabaw & A. Taylor (Eds.), *Unsettling the colonial places and spaces of early childhood education in settler colonial societies* (pp. 21–42). New York: Routledge.
Olsson, L. M. (2009). *Movement and experimentation in young children's learning: Deleuze and Guattari in early childhood education*. London/New York: Routledge.
Pacini-Ketchabaw, V. (Ed.). (2010). *Flows, rhythms, and intensities of early childhood education curriculum*. New York: Peter Lang.
Pacini-Ketchabaw, V. (2012). Postcolonial entanglements: Unruling stories. *Child & Youth Services, 33*, 313–316.
Pacini-Ketchabaw, V., & Taylor, A. (Eds.). (2015). *Unsettling the colonial places and spaces of early childhood education*. New York: Routledge.
Pacini-Ketchabaw, V., & Viruru, R. (2010). The ambivalence of citizenship in early childhood education: Anti-racist, transnational feminist and postcolonial contributions. In G. Cannella & L. D. Soto (Eds.), *Childhoods: A handbook* (pp. 265–280). New York: Peter Lang.
Pacini-Ketchabaw, V., Nxumalo, F., & Rowan, C. (2011). Nomadic research practices in early childhood: Interrupting racisms and colonialisms. *Reconceptualizing Educational Research Methodology, 2*(1), 19–33.
Pacini-Ketchabaw, V., di Tomasso, L., & Nxumalo, F. (2014). Bear-child stories in late liberal colonialist spaces of childhood. *Canadian Children, 38*(3), 26–55.
Pacini-Ketchabaw, V., Kind, S., & Kocher, L. (2015). *Encounters with materials in early education*. New York: Routledge.
Pacini-Ketchabaw, V., Taylor, A., & Blaise, M. (2016). Decentring the human in multispecies ethnographies. In C. Taylor & C. Hughes (Eds.), *Posthuman research practices*. Houndmills/Basingstoke/Hampshire: Palgrave MacMillan.
Persky, J. C. & Viruru, R. (2015). Teaching in the borderlands: Stories from Texas. In V. Pacini-Ketchabaw & A. Taylor (Eds.) *Unsettling the colonial places and spaces of early childhood education*. e-book. New York: Routledge.
Peters, M. A., & Burbules, N. C. (2004). *Poststructuralism and educational research*. Oxford: Rowman and Littlefield.
Piaget, J. (1936). *Origins of intelligence in the child*. London: Routledge & Kegan Paul.
Popkewitz, T., & Brennan, M. (Eds.). (1998). *Foucault's challenge: Discourse, knowledge, and power in education*. New York: Teachers College Press.
Prout, A. (2005). *The future of childhood*. London/New York: RoutledgeFalmer.

Rautio, P., & Winston, J. (2015). Things and children in play: Improvisions with language and matter. *Discourse: Studies in the Cultural Politics of Education, 36*(2).
RECE. (2014). *Reconceptualising early childhood education: A brief introduction*. Retrieved from: http://www.receinternational.org/about.html#sthash.KOY2o3Q4.dpbs
Renold, E. (2006). They won't let us play … unless you're going out with one of Them: Girls, boys and Butler's "heterosexual matrix" in the primary years. *British Journal of Sociology of Education, 27*(4), 489–509.
Renold, E., & Mellor, D. (2013). Deleuze and Guattari in the nursery: Towards a multi-sensory mapping of gendered bodies and becomings. In R. Coleman & J. Ringrose (Eds.), *Deleuze and research methodologies* (pp. 23–41). Edinburgh: Edinburgh University Press.
Renold, E., Ringrose, J., & Egan, D. (Eds.). (2014). *Children, sexuality and the 'sexualisation of culture*. Basingstoke: Palgrave.
Ritchie, J. (2015). Dis-entangling? Re-entanglement? Tackling the pervasiveness of colonialism in early childhood (teacher) education in Aotearoa. In V. Pacini-Ketchabaw & A. Taylor (Eds.), *Unsettling the colonial places and spaces of early childhood education.* e-book. New York: Routledge.
Ritchie, J., & Rau, C. (2007). Mā wai ngā hua? 'Participation' in early childhood in Aotearoa/New Zealand. *International Journal of Educational Policy, Research, & Practice: Reconceptualizing Childhood Studies, 8*(1), 101–116.
Ritchie, J., & Skerrett, M. (2013). *Early childhood education in Aotearoa New Zealand*. New York: Palgrave Pivot.
Robinson, K. H. (2005). Queerying gender: Heteronormativity in early childhood education. *Australian Journal of Early Childhood, 30*(2), 19–28.
Robinson, K. (2013). *Innocence, knowledge and the construction of childhood: The contradictory nature of sexuality and censorship in children's contemporary lives*. London/New York: Routledge.
Robinson, K., & Diaz-Jones, C. (2006). *Diversity and difference in early childhood education*. Maidenhead/New York: Open University Press.
Rose, N. (1999). *Powers of freedom: Reframing political thought*. Cambridge/New York: Cambridge University Press.
Said, E. (1978). *Orientalism*. New York: Pantheon.
Sellers, M. (2013). *Young children becoming curriculum: Deleuze, Te Whariki and curricular understandings*. London/New York: Routledge.
Semestsky, I. (2006). *Deleuze, education and becoming*. Rotterdam: Sense Publishers.
Semestsky, I., & Masny, D. (Eds.). (2013). *Deleuze and education*. Edinburgh: Edinburgh University Press.
Somerville, M. (2011). Becoming-frog: Learning place in primary school. In M. Somerville, B. Davis, K. Power, S. Gannon, & P. de Carteret (Eds.), *Place, pedagogy, change* (pp. 65–80). Rotterdam/Boston/Taipei: Sense Publishers.
Srinivasan, P. (2014). *Early childhood in postcolonial Australia: Children's contested identities*. New York: Palgrave MacMillan.
St. Pierre, E., & Pillow, W. (Eds.). (1999). *Working the ruins: Feminist poststructural theory and methods in education*. New York: Routledge.
Sumsion, J., & Grieshaber, S. (2012) *The early years learning framework: Hopes, politics and a preliminary rhizomatic mapping*. AARE Conference Publication. Retrieved from: http://www.aare.edu.au/publications-database.php/7168/the-early-years-learning-framework-hopes-politics-and-a-preliminary-rhizomatic-mapping
Taylor, A. (2005). Situating whiteness critique in Australian early childhood: The cultural politics of "Aussie" kids in the sand pit. *International journal of equity and innovation in early childhood, 3*(1), 5–17.
Taylor, A. (2011). Reconceptualising the 'nature' of childhood. *Childhood: A Journal of Global Child Research, 18*(4), 420–433.

Taylor, A. (2013a). Caterpillar Childhoods. Engaging with the otherwise worlds of Central Australian Aboriginal children. *Global Studies of Childhood, 3*(4), 366–379.

Taylor, A. (2013b). *Reconfiguring the natures of childhood*. London/New York: Routledge.

Taylor, A. (2014a). Situated and entangled childhoods: Imagining and materializing children's common world relations. In M. Bloch, E. Blue Swadner, & G. Canella (Eds.), *Reconceptualizing early childhood care and education: Critical questions, new imaginaries and social activism* (pp. 121–130). New York: Peter Lang.

Taylor, A. (2014b). Settler children, kangaroos and the cultural politics of Australian national belonging. *Global Studies of Childhood, 4*(3), 169–182.

Taylor, A., & Blaise, M. (2014). Queer worlding childhood. *Discourse: Studies in the Cultural Politics of Education, 35*(3), 377–392.

Taylor, A., & Pacini-Ketchabaw, V. (2015a). Unsettling the colonial places and spaces of early childhood education in settler colonial societies. In V. Pacini-Ketchabaw & A. Taylor (Eds.) *Unsettling the colonial places and spaces of early childhood education.* e-book. New York: Routledge.

Taylor, A., & Pacini-Ketchabaw, V. (2015b). Learning with children, ants, and worms in the anthropocene: Towards a common world pedagogy of multispecies vulnerability. *Pedagogy, Culture, Society, 23*(4), 507–529. http://dx.doi.org/10.1080/14681366.2015.1039050

Taylor, A., & Richardson, C. (2005). Queering home corner. *Contemporary Issues in Early Childhood, 6*(2), 163–174.

Taylor, A., Pacini-Ketchabaw, V., & Blaise, M. (2012). Children's relations with the more-than-human world. *Contemporary Issues in Early Childhood, 13*(2), 81–85.

Taylor, A., Blaise, M., & Giugni, M. (2013). 'Haraway's "bag lady story-telling": Relocating childhood and learning within a 'post-human landscape'. *Discourse: Studies in the Cultural Politics of Education, 34*(1), 48–62.

Viruru, R. (2001). *Early childhood education: Postcolonial perspectives from India*. London: Sage.

Walkerdine, V. (1988). *The mastery of reason: Cognitive development and the production of rationality*. London: Routledge.

Walkerdine, V. (1997). *Daddy's girl: Young girls and popular culture*. London: MacMillan Press.

Chapter 6
Early Years Education in the Anthropocene: An Ecophenomenology of Children's Experience

Phillip G. Payne

Abstract The intersections of early years curriculum, pedagogy, policy and their research must now confront two seemingly intractable but mutually constitutive global problems within their materially 'grounded' geocultural-historical circumstances and conditions. The 'lives' of children embedded in the socioecological contexts of families, homes, meals, schools, playgrounds and neighbourhoods are 'fast' (dromosphere) 'heating up' (Anthropocene). Without alternatives, the accelerating and intensifying consequences are deeply disturbing. This chapter addresses a *vital* need in early childhood education and research. There is a compelling 'early intervention' warrant for critical problem identification, theory building, methodological innovation and empirically qualified insights into the increasingly vulnerable body~time~space *scapes* of childhood in the now complex, accelerated, climactic and abstracted/digitalized 'everyday' of their precariously 'lived experiences'. Empirically informed theoretical development of an *environmental* education and its *ecopedagogies* capable of *slowly* sustaining an intergenerational ethic is overdue. This chapter anticipates the formatively sensitive development of an experience-rich education (and research within it) that is ecopedagogically meaningful to children's immersion in various body~time~space scapes in, and with, a still vibrant nature that, in so doing, critically (en)*counters* the deeply problematic dromospherical advent of the Anthropocene.

Keywords Ecopheneomenology • Ecopedagogy • Childhood scapes • Ontology-epistemology-methodology • Body-time-space • Dromosphere • Anthropocene

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6.1 Clockwork Children

'Children need wild, unlimited hours but this unenclosed time is in short supply for many, who are diarized…' (Griffiths 2013, p. 109) and, quoting from Jean-Jacques Rousseau's classic *Emile* (1762), '*Shall I venture to state…the most important, the most useful rule of all education? It is not to gain time, but to lose it*' (Italics mine). Griffiths (2013, p. 110) continues, 'A clockwork child loses a metaphysical freedom, the sense of autonomy and the inner sovereignty of the hours…'.

6.2 Time Dissonance

Alberto Melucci (1996) draws our attention to the problem of children's time introduced above by identifying three recurrent symbolic representations of the inexpressible dimensions of time created by historical cultures. These are:

○ The *circle*, as that which was cosmologically experienced in tribal societies as the existentially 'felt' of the cyclical renewal of all things, unfolding primordially as a repeatable atemporal event over different (re)cycles – breathing, sleeping, suns and moons, tides and seasonal variations all of which intrinsically 'matter' to those deeply embodied and lived rhythms of physiological, biological, social and ecological nature.

➔ The *arrow* is the progressively unilinear durations of monological, objective, external, quantified, measurable and predictable western, industrialized, techno-scientifically organized time 're'presented analogically by the calendar, clocks, hours and minutes of modernity's rationally expressed, mechanistic, disciplined and strictly timetabled social formations, cultural arrangements and teleological worldview.

• The *dot* of the digitally instantaneous of disconnected blips, chaotic bytes (or bites) and amnesic memories cybered into the globally always present of now and nano postmodern times-spaces.

6.3 Raising an Unhurried Child

Carl Honore (2004) sums up a fundamental problem confronting children's • post-modern lives when he asserts, 'Rescuing the next generation from the cult of speed means reinventing our whole philosophy of childhood' (p. 236).

These images, metaphors and their figurations are all 'now' presenced simultaneously in the embodied, lived present/moment – our flowing *interior* organic times ○; our *socially* constructed and mechanically regulated family, school, work and leisure times ➔; and our globally *exterior*ized mobile 'real times'. • Inner-social-global times and their chaotically intensified spaces, maybe splaces, are compressed

and concentrated in the everyday. Their intensifications compete for, and in, our accelerated selves. Overlaps, contradictions and fragmentation between O➔• abound in the now hyper-individualized performative and, increasingly, techno-teleological 'posthuman' condition (Braidotti 2013). The (c)rush on the instant of the turbocharged present/now sunders our nature-culture bodies and may well be an underlying source of a number of new pathologies, human, social, cultural, environmental and, even, now and in the future, anthropogenically ecological. We have a problem!

6.4 Dromosphere

Dromology is the study of speed and how the technologically driven acceleration of time now instrumentally objectified and commodified, as a competitive 'race' against anything and everything, changes the nature of 'things', including its beings, both animate and inanimate. Paul Virilio's (1977/2006, 2007/2010) studies of the science of speed investigated the manipulation and material control of 'speed' to win wars: His "dromosphere" describes the imploding world of that accelerating human 'race against time' and is embodied in the now 'naturalized' and normalized 'fast' of daily living in, not coincidentally, 'first' world nations. Time, and space, don't 'wait' the dromospherical race - as children no longer reimagine Aesop's tortoise 'winning' its patient "test of speed" with the lair of the hare. Nor do fast human bodies and their war against nature's rhythms in the omnipresent dromosphere. Bear/bare witness to the new natural and normal; the speed of the internet, the 'fast food' industry; the now 'on-line on-demands' for/of every'thing' on and in 'screen culture'; Google it; the selfie; Instagram. Speed dating; speed reading; web surfing; three minute theses; fast degrees. Fast schooling? Click on/off infotainment. Down/upload it. Fast children, faster childhood, parenting and teaching? A posthuman race, and war, against time and the spaces of nature as were once natural? Dromocracy as 'naturally' normalized? Or, self-catalyzed, destructive "accelerationism" – the implosion of global, neoliberal, techno-capitalism? (Noys 2014). Interpreting Paul Virilio (1977/2006, 2007/2010).

6.5 Vibrant Matter

Jane Bennett in *Vibrant Matter* (2010) provides a vital clue to the 'slow' contribution of ecophenomenology to the 'fast' problem of children's accelerated and intensified lives when she asserted, '…it can take shape again, for a version of this idea already found expression in childhood experiences of a world populated by animate things rather than passive objects…a latent belief in the spontaneity of nature' (p. vii).

This chapter addresses a vital need in early childhood education in the Anthropocene.[1] There is a compelling need for critical problem identification, theory building, methodological innovation and empirically qualified insights about the increasingly vulnerable body~time~space scapes of childhood in the now complex, accelerated, climactic and abstracted 'everyday' of their precariously 'lived experiences'. The insights and 'outcomes' of those critical inquiries will inform the development of an alternative 'early intervention' form of environmental education capable of slowly sustaining the next generations. The warrant for an empirically qualified theoretically informed and experience-rich education meaningful to children's experiences of body~time~space (non)relations in and with a still vibrant nature mirrors the warrant for educational interventions to (en)counter the deeply problematic dromospherical advent of the Anthropocene. Jussi Parikka's (2015) *Anthrobscene* throws the needed material light on the 'deep time' geophysical consequences for the environmental wasteland created by the mining of minerals and chemicals required by the abstracted media/communications technology industry and their toxic sedimentations in a new surface strata of the globe's geology and geography. Even 'education for sustainable development' through its unbridled celebration of a 'technics of experience' masquerading as 'learning' endorsed through the rapid pedagogical (sic) uptake of information and communications technologies (ICT) in environmental education, globally 'online' curriculum perpetuates this intellectually barren wasteland (Payne 2003a).

There is, therefore, very good reason to be critical of how and in what ways the ecologically paradoxical experiences of ➔~• body~time~space relations are structured instrumentally, technically, deterministically and economically by global, technocratic, performative and consumerist forces – all ingredients of the 'stealth revolution' of neoliberalism (e.g. Brown 2015). On the 'othered' side of this fast time phenomenon, the deep time of 'nature', even in its romance of the past/passed, might well be at its predictable 'death' (Merchant 1980) or 'end' (McKibben 1990) due to its intersections with catalytic culture (e.g. Soper 1995; Soule and Lease 1995; Weiss and Haber 1999). But, maybe, remnant and memoried versions of nature do 'live on' in human and 'non' or 'more-than-human' things, like our pulse, flesh, a tortoise, a rock, the moon and its dust, memories of significant experience at the beach when a kid, or climbing a tree, or eating a fresh apple fallen from the

[1] The Anthropocene denotes the geological epoch (following the 11,700 year long Holocene before the present) in which human activity is acknowledged as having a significant impact on the earth's ecosystems. The time of the onset of the Anthropocene is debated, some claiming it commenced with the advent of the Industrial Revolution in the eighteenth century; others post World War II as many nation states industrialized their economies. Anthropogenic global warming and its contribution to climate disruption is only one amongst numerous 'environmental' problems confronting the collective being of things, including desertification of lands, toxification of oceans, chemicalization of air, water, soil; loss of biodiversity and increase in species extinctions and endangerments (Christoff and Eckersley 2013). Common 'namings' for these 'outer' problems of nature include 'environmental crisis' but, phenomenologically/existentially, 'inner' and 'social' natures must be included in the notion of 'ecologically problematic human condition' as it less abstractly alerts us to the embodied experience of the human sources and accelerating/fast global consequences of the modern Anthropocene and its numerous derivatives.

branch above – all of which still 'matter' a great deal. And what about that 'inner' playful nature of children and childhood where times did not 'matter', following Griffiths, Rousseau, Honore and Bennett, to name just a few who help us sense the problems of childhood now confronting us if children are to be 'sustained'.

Either way, and in between somewhere/how, we need to grapple with an escalating intergenerational problem about how the relations of human and non-human natures are (re)configured by numerous accelerants in those hyperintensified, individualized and dissonant body~time~space transitions (Payne 2010a). And how early years education and research has a vital role to play. This contribution demands greater researcher reflexivity about the researched. It proposes a post-critical framing of an early interventionist ecophenomenological study of children's experience. This post-critical vantage point provides for the inquiry into, critique of, and development of a constructive educational response to the ecologically problematic human condition outlined in the above introduction.

Todays' children will assume responsibility for what appears to be an increasingly intractable 'socioecological' problem about the disconnection and 'divorce' of those embodied relations. A 'reconciliation' of inner, social and exterior natures is called for. The centrality of 'first' ○ nature in children's lives must be discovered, or recovered, so that it does not become a distant 'other' or 'more than' a receding memory, nostalgic romance, etc. but, rather, a vibrant actant reanimating children's vital ecobecoming. If so, now needed in various conceptions and constructions of early years education are keener and timely insights and generative evidences about the slower human experience of animate times and wild spaces of nature – human and non-human (Grusin 2015) as such environmental experiences of temporal and spatial processes and consequences are bodily enacted in and through toddlers~children's movement (e.g. Johnson 2008). The insights highlighted in this chapter are key conceptual ingredients of the theory building and methodological innovation efforts now called for if we are to (re)generate a meaning-rich, formatively and normatively aware intergenerational ethic for the 'sustainable' global future (Payne 2010a, b).

6.6 A Digress to Method

Figure 6.1 maps the basic thematic contours of the 'big' problem outlined above. It orients the reader to the 'wild' (e.g. Abram 2010; Griffiths 2006), 'alien' (e.g. Bogust 2012) and even 'uncanny' (Trigg 2012) concepts animating this chapter.[2]

[2] Beyond metaphor often used here, Paul James (2006) provides a detailed theoretical account of the ontologies of time, space and their embodiments in the different social formations of tribalism, traditionalism, modernism and postmodernism. Time~space representation commenced through human's capacities to create analogical means of understanding and proceeded interpretively and then explanatorily through genealogical, mythological, cosmological, empty, relative and virtual time~space understandings, while for the embodiments of these time~space 'layers', James replaces the latter three with metaphorical, biotechnological and cybertechnological bodies.

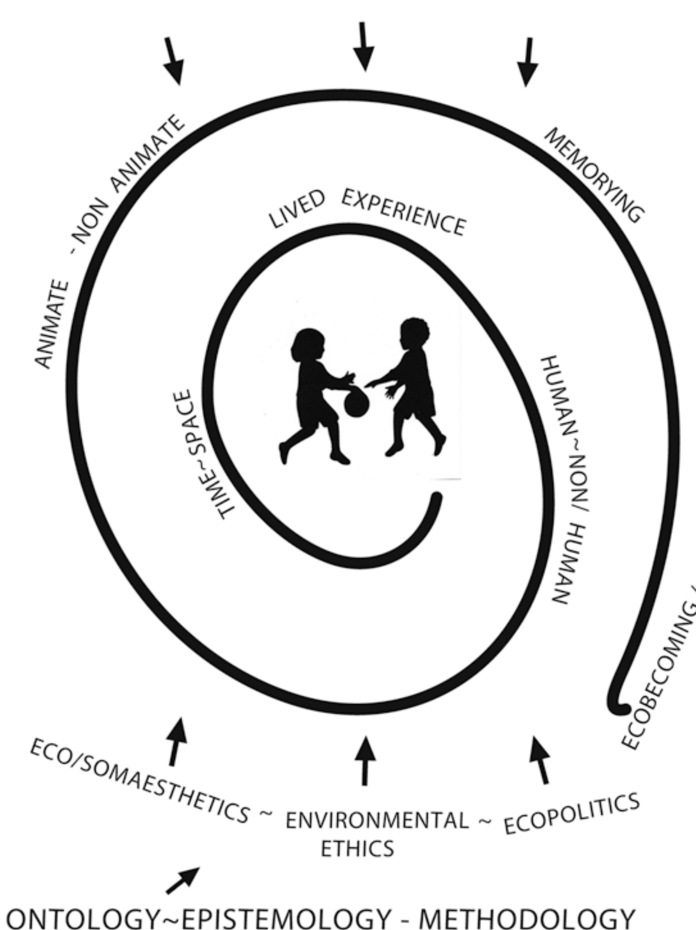

Fig. 6.1 A post-critical ecophenomenology (from 'a critical ecological ontology for inquiry', Payne – numerous)

Central to James theorization is that a contemporary onto-epistemic layer does not replace the preceding layer but gradually dominates it, causing it to recede, or fade. There is a cumulative effect of escalating the 'abstraction' of social and ecological relations but, clearly, for example, the current layer of postmodernity • is now a technologically chaotic and globally dissonant (re)shaper of the still dominant, modern ➔ body~time~space relations. James argues the crucially relevant point that we, as hyperindividualized and atomistic selves, are constituted increasingly as 'abstractions' beyond the preceding layers as, consequently, so are our 'extended' social and ecological relations, their 'loss' being a key concern of this chapter. For example, a great deal has been written about the death, rape, colonizing, end, new and beyond 'nature' giving rise to multiple natures. Simplistic mass slogans and uncritical educational efforts and interventions to '(re)connect' (children/adults) with nature must be seen in this heavily abstracted human, social and environmental condition – as 'ecologically problematic'.

My empirically qualified interests in theorizing children's experiences from the 'grounds up' of nature hones in the environmental design of pedagogies of the 'irreal' – the 'real' that is unreal and the 'unreal' that is real (Payne 2010c).[3]

This thematic mapping of a post-critical ecophenomenology for inquiry and critique is derived, here, from a broad survey of how 'classical' phenomenology has recently 'turned' to a 'post' phenomenological (e.g. Ihde 1993) vantage point. It, speculatively with some needed empirical qualification for the non-anthropocentric and ecocentric purposes here, incorporates elements of a nascent 'ecophenomenology' (Brown and Toadvine 2003) whose theoretical incorporation critically extends the contemporary critical discourse of environmental education, revisionary impulses in early years education and empirical insights into children's experiences of environmental learning. With the assistance of 'new' theory sprinkled through this assemblage of themes and concepts, this chapter arrives tentatively at a critical ecophenomenology for inquiry, critique and theoretical and methodological development sufficient to address the problem posed and questions raised in the introduction. This partially historicized 'post-critical environmental education' (e.g. Hart 2005) concludes with a summary of the key methodological challenges for critical inquiry in early years education. Figure 6.2 illustrates these. That is, there is a concerted effort in this chapter to link (a) the historical trajectories of education and critical environmental education within a post-eco-phenomenological hermeneutic of 'new' theory and (b) 'emergent' methodological deliberation consistent with (partially) addressing, from an ecocentric philosophical perspective, the otherwise intractable anthropocentric problem of the dromospherical Anthropocene and *Anthrobscene*.[4]

[3] Those 'remarkable' and 'edgy' embodied/experiential pedagogies I have used with children (and adults) over the past decades emphasize the movement/mobile experiences of exploration, rediscovery and reimagination in/of nature's things. Its pedagogical eco/somaesthetic and, subsequently, 'story-like' narrating of experiences affectively and physically felt in the outdoors is indicative of yet another of the 'turns' animating the post-critical-'magical realism.' Gabriel Garcia-Marquez is a well-known literary exponent. Robert Ingpen, artist, illustrator and conservationist as well as recipient of the Hans Christian Andersen Medal in 1987 for lasting contributions to children's literature, inspires my work in the imaginative pedagogies of the irreal (Payne 2010c). Arguably, magical realisms are an element of what Gratton (2013) refers to as a 'post-deconstructive realism' within the speculative realisms movement but might more satisfactorily linked with the literary imaginations and ecopoetics of environmental criticism (Buell 2005) and ecocriticism (Garrard 2004) as understood in children's culture (Dobrin and Kidd 2004) and storying of their emplacements (Cutter-Mackenzie et al. 2010).

[4] Methodological issues emerging from using different theories, including some mentioned here, to interpret data are well demonstrated in, for example, Jackson and Mazzei's (2012) 'reading' of how qualitative research is conducted and what it represents. Jackson and Mazzei's deployment of various theories to 'read' and represent the same data to foreground interpretive and representational differences highlights a fundamental problem grappled with in this post-critical chapter. The data set they use is limited to interview only. I emphasize the persistent anthropocentric problem of 'correlationism' in theory building and methodological development with anti-correlationism as a way of highlighting the gap between *being* and *thought,* or *experience* and its *representations.* 'Knowledge', as typically assumed, is, therefore, problematic, partial and always contingent, but necessary in education, requiring a far more expansive expression of meaning-making and aesthetics of self-social-ecological I explore here and temporarily conclude with as an 'end-in-view' for ethical early years environmental education.

Fig. 6.2 A cultural-global-ecological design of inquiry, critique and methodological reflexivity

Figure 6.1 highlights some of the relevant key ideas of the largely unknown philosophical orientation of interpretive or hermeneutic phenomenology. Amongst more established movements of contemporary western 'thought' such as positivism and deconstructionism, the interpretive approach to inquiry underpins the post-critical 'ends-in-view' of a slower environmental and early years education (and research) described above. Phenomenology, as an 'access' point to the 'lived' of 'experience', has its anthropocentric limitations, like any inscribed thought pattern, and, hence, requires supplementation with various other critical 'theorizations' whose non-anthropocentric and ecological dimensions are required for the twin imperatives of theory building, as reflexive inquiry undertaken by the researcher/reflective practitioner, and methodological development, as inquiry deliberation about how the 'researched' (human and non-human over time~space relationalities) are positioned in such research.

The dromospherical rush of the Anthrop/obscene really complicates for any researcher the question of what framing and naming concepts 'matter' most in reconceptualizing our current views of education. The dominant assumptions in education thought (in the Anglo-'west/north with which I am most familiar) now demand intense scrutiny for interpreting how its major dominate, if not hegemonic, concepts' act to reconstitute what this chapter finds deeply problematic at that intergenerational level of the lack of an (eco) aesthetics~ethics~politics of education. Indeed, in early years education, what are children being 'developed' for and upon what assumptions about their 'growth' and 'experience?' The rapidly accelerating transition from the relative stability of the Holocene to the 'Anthro'p/obscene is telling, in more ways than one, about how we currently live experience, via contemporary western thought and its practices. The presumed 'anthropocentrism' (and offshoot of patriarchal andromorphisms) of human-centred 'education' must be 'checked' for what those 'isms' convey to young 'learners' in their subjectifications, be they in families or in schooling, particularly through the 'medium' and shallow prism of the accelerated quest for children's technoliteracies. And, if need be upon deeper scrutiny, qualified severely for what those constructs do to 'development', such as the child's brain and its chemistry as a consequence of 'screen culture' for 'learning' (Greenfield 2011). In turn, what then are the consequences (theoretically and practically) for 'education' and efforts to develop personal, social, global and ecological 'sustainability' when the term sustainability is regarded critically as little more than an increasingly hollow slogan in education, including its consequential pedagogical deployment in shallow 'places' (e.g. Payne 2003b, 2006, 2014, 2015).

From a post-critical perspective, 'sustainable development', children's 'growth', 'maximizing potential', enabling or 'empowering' 'agency' and 'relations' or 'connections', 'screen culture' and so on suddenly take on an 'identity' quite different to that so often innocently presumed in education. What do those uncritically presumed educational concepts 'do' pedagogically (as distinct from 'ecologically') for children and in those fragile and vulnerable formative senses of self, brain, body and learning and the social, the environmental and their interrelated and emergent agencies?

Alternatively, wild ideas like non-anthropocentrism and ecocentrism are troubling 'worldview' concepts that serve to destabilize, at least, the hegemonic assumptions and framing conceptions made by researchers and reflective practitioners about the researched. Ecophenomenological inquiry of the type described here 'grounds' the transcendental loftiness of 'worldview' abstraction in the immanent actualities of the materially real and creative agencies of its things in the everyday. This post-critical destabilization of conventional wisdoms, practices, assumed inheritances and legacies undertaken in this chapter undoubtedly requires further conceptual/theoretical and methodological 'working up' in numerous 'applied' contexts such as early years education policy, or pedagogical development in schooling, or parenting in different socioeconomic or cultural-geographic circumstances and, closer to home for this readership, even, in play theory and the 'environmental design' of playgrounds, amongst its many things!

For those interested in the theoretical and methodological commensurabilities of a revitalized, animated early years education and its research, the critical ecophenomenological access point developed here will explain why and, partially justify, how it 'fits' a slow response in early years education to the heavy ecological footprints of the dromospherical Anthrop/obscene. The incorporation of a series of rewilding concepts into revitalized theory building and research development, with emergent methodological deliberation, underpin a particular dispositional approach to the framing of alternative orientations within the post-critical inquiry fashioned here. Simply, the big 'sting in the tail' here is phenomenology's historical 'rejection' of the scientism of empiricism achieved through the meteoric rise in modernity of the now dominant positivist-experimentalist movement of western thought. It is ingrained in much 'said' about children and 'practiced' for them, on their behalf. The sting is potentially a nasty one at the subjugated sense of self (e.g. Butler 2015) of the researcher/pedagogue where we often 'misrecognize ourselves', and our educational purposes, in how we 'post-intellectually' go about framing research and positioning the researched (Cooper 2002). Indeed, we do not need to look too far in, for example, education and development to see how much the fast, faster of automatically 'accelerated' but always made invisible body~time~space relations are not only fostered but celebrated and privileged in the various 'enclosures' of curriculum, schooling, testing, parenting and family functioning.

Researcher reflexivity? My framing and, following a Deweyan-inspired pragmatically reconstructive 'end-in-view' of mapping, contouring and navigating the subterrain and terrain of a critical ecological phenomenology is acutely aware of one of the main critiques of phenomenology's alleged 'naivete' and anthropocentric 'limits'. To be sure, that limit lies in interpreting and describing lived experience only in the moment in the absence of taking into account numerous other structural factors, historical forces and ecological misunderstandings or misgivings influencing and shaping our individual subjectivities, identities and, phenomenologically speaking, individual and collective senses of being and becoming. Post-critical ecophenomenology is one response to this limitation, while other theory turns mentioned all-too-briefly here are more than alert to the flaws of traditional phenomenologies.

The term 'critical' is crucial notwithstanding its variations of meanings (and practices). Rather than being viewed as a retreat from modern critical theory (e.g. Held 1980; Dallmayr 1991) as some have concluded, post-critical here extends and advances the political warrant 'of' and 'for' an environmental education, and the reflexivity required for the ecocentrism it demands, within making a clear research of the politics of ontology, epistemology and methodology (Fig. 6.2). Irrespective, the excavating of the 'openness' of such subterranic naivete (or alleged 'innocence' of childlike experiences) is not necessarily a major problem when aspects of the most contemporary stratospheric 'high' theory touched on throughout this chapter 'mirror' the animated, vital, imaginative, creative and speculative manner in which children 'be' before and sometimes 'playfully' during the 'hold' of other structural factors and 'grip' of historical forces. Those thwarts to metaphysical 'becoming' are neatly captured in Griffiths' reference to how 'enclosures' found in children's ter-

rain consume the spontaneity of animation Bennett seeks to recover. Nonetheless, the post-phenomenological incorporation of the 'critical' and the 'ecological' asks the researcher to bring to presence the grounded richness of children's deep and meaningful experience as well as their (dis)affections imposed by structural/historical and cultural problems such as 'class', ethnicity, physicality, ability, language, religion, species, land/water/air and mobility/fluidity/liquidity issues. Alleged childlike innocence/naivete and sociohistorical risk/vulnerability go enigmatically and precariously hand in hand. They require teasing out if early years education is to be reanimated and vibrant.

Fortunately, for those more conventional critical purposes, various intellectual and theoretical resources are available in environmental, cultural, feminist, animal, postcolonial and other theorizations of the 'postmodern condition', as a characterization of advanced techno-industrial, globalizing 'societies'. The trick here, however, is not to simply download such theory but, from the ecophenomenological grounds of young children's bodied experiences and lives in nature, and inquiry into it, inductively and adductively reinterpret the relevance of such critical theory. An example is Virilio's 'dromology'.

6.7 The (Sub)terrain

The 'ecocritical' version of environmental education has waxed and waned over the past 30 years – predictably so. Discursively, some only in environmental education and its research have remained 'true' to the field's formative identity established in the early 1980s where its primary purposes were not only to educate in/with, about and for the environment but serve as an overdue educational critique of any 'education' that reproduced or reconstituted various socioecological problems, issues and their various injustices (e.g. Huckle 2014; Robottom 1987, 2014; Payne 2015). Critical curriculum theory in environmental education, however, has fallen on 'hard times' (Payne 2006), like most reconstructive efforts in (environmental) education that are critical of the neoliberalization of education (e.g. Hursh et al. 2015) and its policies (e.g. Payne 2016), including funding, schooling as well as in its corporatization of 'post-intellectual' university research, publishing, teaching and 'cognitive capitalism' efforts (e.g. Cooper et al. 2002).

Unlike recent efforts in education to re-enthuse the more general, less critical, field of environmental education, such as Louv's (2005) 'children's nature deficit disorder', the alternative (eco)phenomenology of children's experience of time~space outlined in this chapter eclectically injects a substantial dose of critical theorizing about the dromospherically manuf(r)actured experiences of the postmodern time~space 'poverty' condition of children's lives in their 'un-places' (Trigg 2012) or 'non-places' (Auge 1995). These (dis)places of children's lives are devoid of ○ nature but replete with its derivative ➔• natures. The existential and partially ontological warrant for a 'counter' ecophenomenology of children's 'authentically' (sic) lived experiences in and of the 'lifeworld' (including remnant/memoried 'first

nature') calls ethically for a renewed ecopolitical vibrancy of things that affectively and aesthetically as well as ethically and politically enliven the 'matter' of children's lives according to how those researched 'subjects' are framed as curriculum, pedagogical and research problems and, more precisely, questions.

Troubling questions about the problematic status and 'quality' of children's time experiences in various spaces have not been posed, as the following review reveals. More assertively than what so far has been introduced, those sharper research sub-questions about the 'subjects' of inquiry/critique need to probe the socio-environmental 'design' of the meaningfulness (or not) of the experiences of children (and adults or the elderly) as they are 'felt' and practiced enigmatically, paradoxically and (non)ecologically in the 'everyday' (Ginsborg 2005) of various contexts, including the home (Blunt and Dowling 2006) or postmodern oikos (Payne 2009), the neighbourhood, the playground, the school, the classroom, outside and inside and here and there. To reiterate, at stake, in not posing research questions of a non-anthropocentric type is, probably, the loss of metaphysical freedom and inner sovereignty that Griffiths (perhaps Pestalozzi, Froebel, Steiner, etc.) alert us to. At risk, is ignoring children's 'agency' as beings or actancy as an ecobecoming within the unavoidability of nature's things; things that Bennett seeks to rematerialize politically as a gesture to the 'reinventing afresh' a philosophy of childhood which Honore (2004) insists upon in resisting the dromospherical cult, race and war of speed.

For the specific questions probed here and tactically recycled throughout this chapter, deafening silences and alliances in educational discourse persist about children's largely invisible or hidden vulnerabilities to the often abstract, paradoxical and contradictory experiences of 'micro/bodied' **O** time~space – as that layer of primordial experience is recalibrated within the 'meso/social' ➔ time~spaces of the structured, routinized and timetabled every day that schooling supports – as each of those two body~time~space layers are then confusingly accelerated, intensified, compressed and individualized by the technologies of 'macro/global' • time~space and its technics of experience in education (Payne 2003a, b). The 'scientism of children' discourse can't grasp (or comprehend) this crucial subterrain of needed inquiry and critique, as this subterrain is often 'affectively' pre-rational/discursive in its bodily felt somaesthetic sensitivity and 'eco/somaesthetic' complexity (Payne 2013). In this enigmatically layered manner of what it now paradoxically is in the postmodern to be a •➔ child, 'uneducated' or 'unlived' about **O** 'nature' and inexperienced in its slow times~spaces, the quest for a reconciliation of its 'inner', 'social' and 'outer' versions might be partially reclaimed in a richer meaning-making manner for early intervention environmental education and its research.

Terrain? This 'ecological' stage of 'development' envisioned here has, indeed, been promoted for some time. Critical progress on disclosing the duplicity of the increasingly fast cultures of children's lives is, ironically, far too slow! Brofenbrenner's (1979) formulation of a (social) 'ecology' only touches anthropocentrically and reductively upon aspects of the subterranic ends-in-view pursued non-anthropocentrically and ecocentrically in this chapter. Brofenbrenner's theoretical framing of 'development' (like Piaget and Vygotsky) has, indeed, undergone major 'recontextualization' efforts over the past 30 years. Like my critical and eco-

logical supplementation of phenomenology's naivete, these admirable efforts in mainstream theory of children (and education) incorporate broader social and cultural contexts and issues (e.g. Gershoff et al. 2014; Saracho 2014). But, they still exclude the environmentally 'ecological' issues relevant to the subterranic sources and global consequences of the Anthrop/obscene and dromosphere, and numerous other examples of the ecologically problematic human condition such as anthropogenic climate destabilization, toxification of lands, acidification of water, as these 'resource problems' and accompanying socio-cultural issues are experienced differently in various circumstances in different historical~geocultural~ecop olitical contexts as 'locations of knowledge' (e.g. Canaparo 2009).

Contouring the moving terrain? Despite its stealth absorption into the neoliberalization of education, the critical legacies of environmental education and its research provide, potentially, a timely response to these gaps in early years education about those existential dilemmas, risks and disjunctures now normalized and 'naturalized' in young children's lives. This curriculum field of education, like phenomenological philosophy, is relatively unknown in early years education. Promising developments are still available and are considered later. Environmental education and its research have a four-decade-long history (Stevenson et al. 2013) that, unfortunately, remains on the margins of mainstream education discourses, possibly because it serves as an untimely critique of much of it, as indicated earlier! This marginalization of environmental education reoccurs despite numerous studies of a 'socially critical' type in the 1980s and 1990s of younger children's active engagements in problem-solving of local environmental problems and social issues through interdisciplinary participatory action research type programs in primary/elementary and secondary schools. This highly active curriculum and pedagogical development in schooling was often facilitated externally by teacher education academics, or as a consequence of professional development and research development (e.g. Robottom 1987; Fien 1993; Robottom and Hart 1993; Reid et al. 2008; Payne 2015).

Children's 'relations' or 'connectedness' with nature and their agencies are receiving attention in innovative practices of environmental education and education for sustainability. For example, 'outdoor' schools without walls for very young children are being piloted in Canada (Blenkinsop and Piersol 2013); 'forest' kindergartens and schools are found in different European countries and 'bush' schools for toddlers now exist in Australia. All, it seems, provide rich outdoor experiences for children in, and of, or about nature but, perhaps, not ecocentrically with and for it. These environmental schools remain underresearched and, probably, undertheorized in that 'newer' critical dromospherical context of the Anthrop/obscene. Irrespective, claims, often anecdotal or rhetorical, are frequently made in these alternative outdoor and experiential/immersive educations about the children's learning 'outcomes' of greater engagement, wonder, creativity, thinking, interactions, wellbeing and understanding of academic knowledge. If validated by research (of the type recommended here, amongst other interpretive and qualitative possibilities), there are likely to be far-reaching implications for any 'new' ethic of caring, parenting, pedagogy, schooling and socializing. If so, greater attention might also be paid post-critically to how the environmental designs and ecopedagogies of play-

grounds, gardens, parks and related urban, city and rural amenities in which our children socioecologically might become over such time(s)~space(s).

More precisely for the body~time~space relationality questions highlighted here, the signs are promising as new theory emerges, as alluded to throughout this chapter. Anecdotally, empirically and theoretically, the promise of repairing culture-nature relations lies in the ecopedagogical creation of 'slow(er)' bodied time in various nature spaces and outdoor places, as that notion of a body~time~space relationality might 'replicate' the ○ ontological subterrain of epistemological conditions adequate to an alternative early environmental education for socioecological sustainability. In moving the subterrain of inquiry, the temporal scales of our memorying and becoming (Grosz 1999) of wild, alien, uncanny and irreal experiences of the vital environments of vibrant nature are worth speculating about for further inquiry into both the enablements and constraints of those body~space relations of children's dromospherical timescapes within the Anthrop/obscene. Numerous disjunctures exist in and between these assorted layers of temporal and spatial movement. This chapter, therefore, assertively problematizes for researcher reflexivity the researched subterrain of that temporal spatiality, or geographies of children's time.

6.8 Moving the Terrain and Its Contours

The dominant positivist-inspired psychological focus on developmental and operational perspectives of children's temporal (and spatial) cognition (e.g. McCormack 2014) barely acknowledges these ontologically 'bodied' existential concerns. The ecophenomenological, reconceptualist orientation to 'experience' is gaining traction in the discourse of environmental education research (Sauve 2005; Lotz-Sisitka et al. 2013; Payne 2013). Environmental philosophy (Thomson 2006) is now viewed as one of the key contemporary issues in phenomenology and existentialism (Dreyfus and Wrathall 2006). The 'lifeworld and lived experience' (Jay 2006) and 'temporality' (Brough and Blattner 2006) are identified as two of the central concepts of the main movements in phenomenology while 'affectivity' (Han-Pile 2006) and the 'body' (Hofffman 2006), as well as claims on authenticity, are included in the main movements of existentialism. Typically, however, phenomenology and existentialism are anthropocentric. Post-phenomenology (Ihde 1993) partially rectifies this limit and informs the 'post-critical' orientation pursued here that incorporates 'moves' and 'turns' if, indeed, the non-anthropocentric, inclusively non-human and ecocentric 'worldviews' are to be clarified within the discourses of education and early years education. Conceptual clarification of complex, ground-breaking ideas is only partially adequate if the 'praxis' commitments and interests of materialist approaches to critical theory are to be sustained.

The needed empirical basis underpinning and critically qualifying this ecophenomenological inquiry draws selectively, given the limitations of this chapter, on a series of small-scale research projects undertaken over the past three decades about the nexus of critical environmental education theory development, slow ecopeda-

gogy practices and ecocentric reinterpretations of emerging genres of interpretive inquiry and critique in educational research. These projects are part of a much larger research program titled a critical ecological ontology for educational inquiry, or 'named' simply as an education for being for the environment (e.g. Payne 1999a, 2005a, 2006). In addition, those studies of oftentimes 'insignificant' (Payne 1999b) childhood experiences in and of nature should also be viewed within the 'significant life experience' research literature so well established in environmental education, following Tanner's (1980) 'classic' study (see below), extending most recently to studies of the student experience of environmental learning (Rickinson et al. 2009). Aspects of the phenomenological approach and ecophenomenological orientation prioritized in this chapter can be found in closely related children's research (Hart 1979; Sobel 1993; Kahn and Kellert 2002; Chawla 2001; Barratt-Hacking and Barratt 2007).

This, therefore, politically 'untimely' (Grosz 2004; Payne 2013) interventionist chapter about a critical ecophenomenology of children's experience of nature's relations proceeds with an overview of phenomenology, as it has only sparingly informed the (western) ➔ modern and • postmodern discourses of education and its research over the past 50 years. Children's lived experiences of time~space have rarely been investigated, most of all from the critical perspective of dromology in the Anthrop/obscene. Those risk-intensive 'major events' are further elaborated in a post-critical (Hart 2005, 2013) manner by incorporating ideas found in recent major turns in theory in the post-humanities, social sciences and arts. One key is 'post'-phenomenology (Ihde 1993) because it deals emphatically with (human) experience from the grounds up. These theoretical turns coalesce around a 'non'-anthropocentric and 'constrained constructivist' (and non-subjectivist) interest in ontologies of objects within a renewed materialist concern about the status of agency (Coole and Frost 2010). Pertinent matters for critically reflexive inquiry, theory building and research development are raised in the final part of this chapter.

6.9 Contour Tracking and Navigation: Phenomenology and Education

Gaston Bachelard's *The Poetics of Space* (Bachelard 1958/1964) captured well the historical mood of twentieth century phenomenology in providing an alternative approach to and understanding of the human and non-human condition. His proposal to interpret how we (aesthetically) experience intimate places and poetically represent them implores us to 'forget' our 'learning' of the growing rationalism and authority of science while also breaking from the habits of conventional philosophical research. Central to Bachelard's thesis is the lyrical need for a reimagination of social spaces and nature's things. Bachelard's 'travel to the land of motionless childhood' exemplifies his immediate relevance here (see also Bukatman 2012). His emphasis on the intimacy of the house and its daydreaming as a 'frozen' memory

over time~space calls for extension into those more natural environments upon which houses and their oikos are also dwelled in or inhabited socioecologically in the postmodern (Payne 2009). Phenomenologists of perception like Maurice Merleau-Ponty (1945/2002, 1968, 2003) consistently broach the 'other' and 'facticity' of things 'already there' in themselves, often 'invisible' in nature, that are 'lived' perceptually in the 'world'. 'Things' and their intrinsic actancy and ecological creativity now occupy centre stage of the most contemporary high theory indirectly informing this chapter and, more particularly, how the important notion of (children's) agency and intra-agencies might be reworked in very different ways. Perception and reception occur. And, as already indicated and will become patently clear in regard to the theory building and research development purposes of this chapter, it was Martin Heidegger (1927/1962, p. 60) who declared 'Phenomenology is our way of access to what is to be the theme of ontology, and it is our way of giving it demonstrative precision. Only as phenomenology, is ontology possible'.

Hinted at only above, numerous criticisms of classical phenomenology persist, in particular its alleged anthropocentrism (human consciousness, perception) and allegedly 'naïve' claims on 'authenticity' and 'subjectivity' (e.g. Adorno 1964/1973; Sparrow 2014). Rapproachements have been sought in critical theory leading into 'critical ontology' (Fay 1987; Dallmayr 1991) and 'post-phenomenology' (Ihde 1993). Ihde's *Postphenomenology* is pragmatically attentive to the contemporary issues of 'technology and the lifeworld' (Ihde 1990) and has a strong underlying concern about the 'environment' and how the instrumental realism of technoscience creates new hermeneutic demands on the technics of experience and its embodied praxis. The (dis)connect with self/nature is evident in Ihde's post-phenomenological 'revealing'. The new wave of speculative realists have deepened the critique of the lingering anthropocentrism of phenomenology through their deconstruction of the assumed 'correlationism' of (human) being and thought, notwithstanding the broader post-phenomenological interest in things in (them)selves (e.g. Shaviro 2014).

In education, the development of critical curriculum theory via a 'critical ecological ontology' for inquiry (Payne 1995, 1997, 1999a, 2006) is consistent with this trend, including acknowledgement of the 'lifeworld textualism' correlationism problem (Payne 2005c), as is the rise of post-critical inquiry and research (Hart 2005, 2013). Ecophenomenology, as characterized here, therefore, is a 'manner' or 'style' of thinking reflexively that, more recently, post-critically searches for an ecocentric approach to interpretation, representation and methodological deliberation and development. The quest for non-anthropocentrism and ecocentrism, therefore, draws selectively and unevenly across critical, poststructural and phenomenological perspectives as they are being reshaped by the current wave of theoretical turns. A critical ecophenomenology in education pragmatically incorporates the interests of critical environmental education in enabling socioecological and environmental justices.

In historicizing this chapter to give phenomenology its due in education, the pragmatic linking of philosophical phenomenology, existentialism, hermeneutics and educational theory and curriculum/pedagogical practice has been sporadic over

the past five decades. The focus on children is limited. Before 'post'-phenomenology, Denton's (1974) collected essays is one concentrated foray. Kneller (1984) included phenomenology as one of eight 'movements of thought' in modern education. Husserl, Heidegger, Sartre, Buber, Freire and Merleau-Ponty are identified as classic figures. The latter is viewed as most relevant here in that Merleau-Ponty's philosophizing did account for children's 'lived bodies', their immersive prereflective perceptions and movements in different environments through which objects are manipulated and generalizations are conceptually made through discovery that, in turn over time, 'sediment' thinking, acting and perceiving a relative 'lifeworld'. Temporally, the adult's world is seen as an 'elaboration' of the world of the child. Yet, interestingly, conventional understandings dictate that adulthood is reified against childhood where, according to Kennedy (2006b), childhood appears as and in the 'shadow of the enlightened man'.

Hermeneutics is another of Kneller's (1984) movements of thought. Dilthey, Gadamer, Heidegger, Ricoeur and Kuhn are discussed. Hermeneutics is promoted as a method with variations. Interpreting children and their lives is not included, only assumed in Kneller's otherwise important mapping of the philosophical terrain of education. Importantly, Denton's (1974) essays include a chapter by Leroy Troutner. Troutner's (1974) interpretive phenomenology focused presciently on the question of time and education and, in particular, probed two interrelated questions of relevance here. The first deals with the how of a child's living of time (see also Burton 2011) and is posed normatively in terms of the 'primordiality' and 'authenticity' of the child's becoming, following Heidegger's extensive investigations of Dasein, the question of being. Troutner's second question examined how the child learns time and what kind of time is learned as a particular expression of the relative cultures from which the past, present and future of time are conceptualized, manufactured and lived in society. For example, I recall being instructed in my early years education of how to 'tell the time' on analogic clock/'watch' faces of ➔. No(thing) else sticks in my memory. I wonder how • digital time is now taught and learned (by parents, teachers) and what meanings of or about are ascribed by young children to the ever-pulsating blips of the moment. Following Troutner's concerns about the pedagogies of time, these constructed modes of fast temporality are cast normatively as 'inauthentic', leading, allegedly, to the increased atomization and fragmentation of life, resulting in the loss of significance and meaning. For Troutner, these troubling insights are a significant consequence of the existential phenomenological analysis of time.

Pinar and Reynolds' (1992) phenomenology is another edited contribution to education theory and includes a genealogical history of phenomenology and post-structuralism in curriculum studies. The North American contributions of Dwayne Huebner, Maxine Greene, Madeleine Grumet and other 'second-generation' scholars like David Jardine, an early visionary, persistent advocate and outstanding exponent of (eco)phenomenological hermeneutics in (environmental) education and ecopedagogy (e.g. Jardine 2000), are outlined. Children go missing, or inferred only, in Pinar and Reynolds' 12 chapters.

6.10 Grounded Contours: Ecophenomenology and Education

In some respects, the prefix ‘eco’ is unwarranted because the ontologies presupposed by many phenomenologists (try to) endorse a deeply grounded form of philosophical ‘monism’, contra dualisms privileged epistemologically and axiologically in much western anthropocentric/humanist thought. This attempted non-dualism opposes the ‘dualism’ often attributed to the Cartesian-inspired thinking about the authority and sovereignty of scientism and empiricism. Monism and dualism invoke starkly different conceptions of just about everything – be it matter, the self and subjectivity~objectivity, others, things in themselves, nature and the world. Epistemological implications also vary widely where, for example, despite the persistent anthropocentric bias in much phenomenology, the Cartesian mind and body are ‘separated’, as is reason and emotion and physicality, theory and practice and I and lifeworld. Consequentially, their pedagogical spatialities separate the materialities of indoor and outdoor ‘learning’. Increasingly, the *Anthrobscene* is unwittingly endorsed and uncritically valorized. Another offshoot of epistemological dualism within axiology is ‘values-hierarchical’ thinking. Put simply, one of the ‘enclosures’ identified by Griffiths as most valued in modernity is ‘learning from the neck up’ and constrained to the ‘indoor’ only of a very limited practice of body~time~space relationality.

Ontological monism may well be a generalized form of holism or indicator of non-anthropocentrism, even ecocentrism. Its ‘flat’ rather than hierarchical conception of things, including humans, is of post-critical educational interest. Most children ‘connect’ with animals; they like to play with things; they like to explore, discover and ‘pretend’. The beingness of many things enlivened in children’s experience is, potentially, a form of ecobecoming over the time~space of various environments. The slow flow of time in children’s irreal and ‘nomadic’-like playful experiences warrants attention in our theory development efforts about what, in the various environmental designs for an ecology of things, constitutes for children ‘meaning’ and its ‘making’ without pedagogical/epistemological intervention. If so, methodological deliberation about how that monistic ‘affect’ can be interpreted, described or represented as the ‘experience’ of an ecobecoming. Anthropocentric dualistic logics have privileged epistemology over against ontology with priority in education typically given to the former of that binary of learning, teaching, assessing and other dimensions of schooling, parenting and pedagogy. Shaviro (2014, p. 3), amongst speculating others about ‘thought’ and experience, concludes, ‘… epistemology must be deprivileged’. In education, Huebner’s (1967/1987) highlighting of the materialism of the environmental design of curriculum expresses similar concern about the pedagogical preoccupation in the philosophy and practices of education with formal ‘learning’ and its ‘outcomes’ (see also Payne 2014, 2015 for empirical ‘case’ studies of environmentally designed transpositions undertaken in outdoor experience).

The implications for conceptions and practices of early years education of ontological monism, characterized here (via the access point of ecophenomenology) as body~time~space relationalities with things in themselves are, bluntly, massive and might well please Honore's plea for a new philosophy of children. A case can be made for an 'authentic' demand for non-anthropocentric epistemologies in education theory/practice and research methodologies and deliberation 'different' to the presupposed conceptual/theoretical binaries, presumed values-hierarchical thinking and overprivileging of pedagogical perspectives about child development, cognitive development and so on. Incorporating, or memorying, the authentic 'otherness' of children's affectively meaningful lives must confront the Cartesian-inspired disembodiment, disembedding, displacement and decontextualization of the subject from the human-non-human and animate-inanimate vital world privileged by the ecocentric reconceptualization and repositionings of its various subject/objects/things.

The above microexamples of children's vital connections with animals and vibrant experimentation in discovering things aim to bring to the 'surface' the subterranic ontology~epistemology 'tension' and, more often than not, dualist anthropocentric-non-anthropocentric and human-non-human figurations of it. Any new contours of early years education thought will need to navigate meso- and macrolevel tensions, for example, the social and environmental design and development of schools, curriculum and pedagogy, the experience of being/coming 'educated', the rewilding of the underlying normatively driven epistemologically privileged categories of cognitive~affective~sensorimotor growth and, even, 'worldview' assumptions of culture-nature as they are remade in an early intervention environmental education in the dromospherical Anthrop/obscene. These micro-, meso-, macro- and global ontological~epistemological tensions are far too numerous to list here, the above sampling being indicative. Even assumed notions of language and literacy (and 'ecoliteracy' as now popularized) can be challenged for what they express and represent, and anthropocentically and 'politically/discursively' legitimize. As noted, language used about the rich depths of (children's) experience of, for example, 'imagination' cannot correspond or correlate well to that complex, dynamic and ever temporally spatially moving subjective 'reality' that initiates imagination and creativity in the very first (ontological) instance. At best, language is an approximation only of experience, and much experience is not accessible even to the experiencer and experience of things. If 'non-representation' and the critique of 'correlationism' are even partially considered, the meanings researchers 'give' to children's 'talk' and 'voice' warrant caution from an ecophenememenological and post-critical perspective given their present conceptual and methodological challenges to inquiry and critique.

We don't necessarily need to start anew in navigating 'new' contours of childscapes. Numerous intellectual resources are available and briefly outlined below. The most definitive accounts of ecophenomenology anticipate the transdisciplinary intersections of phenomenology, environmental philosophy including ethics and the philosophy of nature including its aesthetics (Brown and Toadvine 2003). For the reflexively normative purposes of this partially historicized account of high and grounded contours, the scholarly field of environmental ethics was formalized in

1979 with the publication of a journal bearing that name. And much of that environmentally ethical discourses clearly anticipated the anthropocentrism are now so heavily critiqued in the latest high theorizations of speculative realisms and new materialisms and qualified in post-phenomenologies. This ground-breaking subterrain of theory occurred at about the same time the field of environmental education was formalized following a series of international conferences organized by the United Nations during the 1970s (e.g. Palmer 1998). The formalization of environmental education, following earlier 'nature studies', 'conservation education' and elements of 'outdoor education' in the first half of the twentieth century, prioritized interdisciplinarity and experiential learning and education, well beyond the 'science education' of the time that was only just beginning to address environmental problems and issues. Environmental education and ecophenomenology neatly link in the ways I'm 'ethically' suggesting.

Ted Toadvine (2009) posed three questions central to the idea of ecophenenomenology that, taken together, deftly summarize the challenge this chapter presents to formulating the 'early intervention' experiential environmental education and its research development terrain, contours and childscapes navigated here. Toadvine's 'meta'phenomenology draws inspiration from Merleau-Ponty and asks us (as educators and researchers) to describe and understand: What is the nature of experience? What is the experience of nature? And, therefore, what is the 'pedagogical' relation between experience and nature? Toadvine's ecophenomenology insists on bringing to life the 'ontological, epistemological, aesthetic and theological' dimensions of experience (p. 6). But his pursuit of an environmental ethics is ontological rather than the dominant epistemological of the field of environmental ethics, the latter of which, however, is central to 'education' and the ontological~epistemological, pedagogical and methodological 'tensions' referred to so often throughout this chapter. As such, Toadvine's demands for a comprehensive understanding of the philosophy of nature provide a valuable and, potentially, useful set of interrelated criteria for framing curriculum inquiry and its design on/for environments (Huebner 1967/1987). Toadvine's questions might well guide the planning of research (and professional development) that revisits the centrality of deliberation about ontology and epistemology in methodological framing and development (Robottom and Hart 1993). Toadvine's triad of questions are also useful for developing adequate curriculum and appropriate ecopedagogy as they apply in different educative circumstances in schooling and their educational contexts within certain cultural~ecological formations and socio-political arrangements.

Furthermore, in not starting afresh in accessing and navigating relevant intellectual resources, the (eco/post)phenomenological influence on various other disciplinary approaches to inquiry cannot be underestimated in terms of their interdisciplinary potential to reshape educational practice, theory and research. 'Environmental perception and values' and the 'perspective of experience' occupied the human geographer Yi-Fu Tuan's account of *Topophilia* (Tuan 1974) and *Space and Place* (Tuan 1977). 'Eastern' and indigenous ontologies and epistemologies occupy much of Tuan's theorizing. Tuan's human geography, like the different critical geographies of Soja (1989), Harvey (1996) and Massey (Massey 2005), ecological anthropologies

of Tim Ingold (2000, 2011) and Philip Descola (2013) as well as Marc Auge's (1995) 'non-place', the ecological psychology of James Gibson's environmental 'affordances' (Gibson 1979), Andy Fisher's radicalization of ecopsychology (Fisher 2002), Jeffrey Maitland's (1995) therapeutic somatic ontology of the spacious body, Robert Levine's (1997) geo-psychology of time and Nigel Thrift's (2008) sociological non-representational 'spatialities of feeling' provide different 'disciplinary' vantage points that in different somatic and material ways illustrate the ontological and post-phenomenological centrality of movement, perception, affect/emotion and experience and historicity, temporality, spatiality and cultures of nature's environmental differences.

Like Troutner's phenomenology of children's time in education, Tuan's (1974, 1977) inclusion of children's lives and experiences in his phenomenological theory of place is important for the purposes here. Tuan pursued the question of how a young child experientially perceives and understands his or her environment. Movement of the body in places within the timing of such experiential space is 'core'. The child's 'biological imperatives' of growth impose increasing demands on 'learning' over time and space, as well as place, while responding to the inevitability of cultural influences whose 'specific emphases', according to Tuan, are ultimately 'transcended' by those imperatives. Tuan's 'experiential perspective' offers a synthesis of active sensation, perception, emotion, conception and thought. More recently, Dylan Trigg's phenomenologies of the 'uncanny' (Trigg 2012) and 'horror' (Trigg 2014) are heavily shaped by the temporal-spatial qualities and thingly characteristics of 'memory' where, clearly, memories of childhood places and things in them are crucial to how 'meaning' is generated, created, stored and memoried in and through the processes of experience. Somewhat akin to Toadvine's ontological~epistemological questions about the experience of nature, nature of experience and their pedagogically non-dualist/binary mutual constitutions, Trigg pursues the parallel ontological~epistemological questions of the place and things of memory, memory of place (and its things) and their mutual constitutions. Any 'pedagogy of place' in education will need to navigate these contours and questions but, also, critically climb the postmodern mountain of non-place, un-place and splaces ushered into and downloaded into the mobile/liquid/fluid lifeworld that dromology recommends (Nakagawa and Payne 2014).

In the above vein, phenomenologies of children's experience that foreground the ontological~epistemological tensions of body~time~space and nature considerations are scarce (e.g. Chawla 2002), more so in education discourse (Kennedy 2006b), most of all those that provide some evidential insight into schooling. Eva Simms (2008) is a rare exception (see also Rossholt 2012), noting various phenomenologists of children's lives only ever 'indirectly' address the question of dromospherical time highlighted critically here. They tend to emphasize places and spaces like gardens, kitchens, cellars, attics and their 'secrets', as well as the times of the bodied experience of them and things found there (e.g. van den Berg 1961; Langeveld 1967/1983a, b). Critical phenomenologies of the now dominant screen, for example, of fast culture await so as to put into comparative perspective the case for ecophenomenological inquiry (Payne 2003a).

Louise Chawla's (2002) 'spots of time' is particularly helpful in navigating the conceptual base for how theoretically inspired research development and empirical qualification might proceed. Chawla reviews how certain Romantic ideas that first defined the modern notion of childhood and nature, particularly the Wordsworth's, contributed to the interpretive approach to research now gaining momentum in educational research. Chawla interprets this trend through the work of the contemporary Swiss philosopher Jean Gerbser. He provides a means for describing different ways of knowing nature in childhood, as well as different ways of relating to childhood in adulthood. Chawla's spots of times includes and describes Gebser's 'the ever-present origin', 'the necessity of the archaic', 'magic union', 'mythic and mental experience', 'archaic identity', 'magic relations', 'magic and archaic consciousness at play' and 'mythic places'. Chawla concludes with a call for research into what she refers to as 'integral experience' where, in regard to time, the qualities of time experienced by children demand renewed attention, as do responses to the question of how we inhabit our bodies in the world if we are to develop some (re)connection with the natural world. Children's 'memories' are central to Chawla's proposed research program, noting her contributions to the significant life experience (SLE) literature in environmental education and its research. Early years education researchers might grapple equally with the ecopedagogical conceptualization, construction and enactment by educators of such experiences and memories of them.

Simms' (2008) *The Child in the World* does part of that work. Simms proposes a 'genetic phenomenology of lived time' that assertively extends but contrasts with Piaget's psychological emphasis on the logical formation of 'operational time' in children's cognitive development. Like others mentioned throughout this chapter, Simms highlights the 'lived time' of prereflective experience where she asserts time is experienced in a nonhomogeneous way but as dynamic within various flows of spatial presence all of which are indicators of changing movements and modalities of activity over the flow and duration of time. Lived time is a primitive for Simms, as well, in that, as we have already noted, that primordiality is layered by various social, cultural and now global constructions of accelerating time(s) whose enigmatic 'natures' culminate intensively and individually in what I have referred to earlier in this chapter as embodied forms of paradoxical and, even, contradictory body~time~space dissonances. Drawing on David Abram's (1996) ecological phenomenology, Simms also posits that the rise of language is the initial stage in the civilized social reconstruction of time and deconstruction of primordially lived organic time. Indeed, Abram is more critical than that asserted by Simms in that he persuasively argues that the emergence of the alphabet, particularly the invention and insertion of vowels, provided a key anthropocentric turn in the rational severing of the human species from its variously lived animations in nature and relations with more/other-than-human species and animate and inanimate things. Now children are abstracted even further into the languages of the net, the msn, screen culture of the *Anthrobscene*, reiterating its material role and increasingly fast contribution to the environmental and intellectual wastelands of the ecologically problematic condition. Simms also proposes that the combination of schooling and literacy is at odds with Piaget's genetically predetermined biological change as depicted in his

account of children's development. Simms phenomenological focus on the 'solidarity' of spatiotemporality and children's prereflective perceptual experience of lived time covers numerous concepts like the events and action sequences or frames and scripts of experience, co-temporality of doing with, the deep present, the ambience of children's becoming – all of which provide rich understandings, like Chawla's, for phenomenologically inspired pedagogical development, reformulation of research problems around, for example, the challenge of eco/somaesthetics~ethics~politics as a 'grounded/bodied' inductive and adductive basis of educational, social and cultural critique.

Simms' (2008) phenomenology, interestingly, is responsive to how children experience the future given the nonhomogeneous, non-operational notion of the dynamic flow of time~space solidarities. Again, the concepts deployed by Simms and Chawla are helpful on this matter ranging from the well-known and established constructs of 'play' that demand ecophenomenological reinterpretation such as its 'trauma' to notions of the 'lived and narrated past', things 'tamed and old' (and wild), 'family narratives' and the cultural past. Memory and anticipation of things are key dimensions of children's experiences of time, as indicated in, for example, Trigg's (2012) account of 'place memory'. Simms is critical of how contemporary schooling acts as a collective and cultural memory that very selectively and reductively focuses on the cultural artefacts of literacy acquisition and mathematical notation at the expense of children's natural desire to 'become'. Simms (2008, p. 158) finds it not surprising that children, in general, do not like school and that a paradox exists in education where the future-oriented and teleologically constructed child has to engage the past-oriented knowledge of the culture in which he, or she, and they reside. Griffiths (2013, p. ix) asks why so many children in Euro-American cultures are so unhappy.

Those 'clockwork children' and their cultures of screened enclosures are now a global one in the dromospherical Anthrop/obscene. The future consequences for children's ecological development are likely to be devastating at an intergenerational level and, consequently, for critiquing and revising education discourses within the international quest for an aesthetics, ethics and politics of and for sustainability. And as an aide, at this level of a global response to the ecologically problematic human condition, the United Nations Decade of Education for Sustainability (2006–2015) is drawing to a close. What is next, noting critics of this massive, well-funded, global effort to promote the practices of sustainability find this admirable effort has failed, for many reasons that can't be pursued here apart from one revealing fact? According to research completed by the Australian Education for Sustainability Alliance (2014), 80% of teachers in Australia are either unaware of education for sustainability (EfS) or do not understand what it is. Nine percent of teachers lack a knowledge of how to integrate Efs into their classroom, while 7% are integrating 'compliant' in their classroom and 2% are EfS 'engaged' in their classroom. These findings are damning about the past, present and future. And a compelling indicator of the need for an early intervention for early years environmental education.

From the more critical ecophenomenological perspective formulated here for children, additional concepts and empirically qualified insights and evidence relevant to

the rich possibilities for research, curriculum and pedagogical development and critique can be gleaned not only from Simms and Chawla, for example, but also a number of Payne's studies of children's experience in and of 'nature' and its environments, spaces and places. Payne's 'critical ecological ontology for inquiry' aims at the recursive nature of theory building about environmental education and the normatively reflexive development of research about an education 'for being for the environment and natures'. This empirically qualified research program stresses the critical dimensions of more ecocentric persuasion and praxis 'work'. It has addressed curriculum theory through posing nine interrelated questions (Payne 1995, 2006); movement as experiential ecopedagogy (Payne 2003b, 2005c; Brown and Payne 2009); its pedagogical and democratic inclusion of young children (Payne 2015); children's conceptions and valuings of nature's environments (Payne 1998a, b); children's imaginative experiences of environments (Payne 2010c); the importance of insignificant experiences (Payne 1999b); family studies and narratives (Payne 2005a) of intergenerational influences in the oikos (Payne 2009) of 'pale green' children (Payne 2010a); young adults' embodiments of the socioecological problematic (Payne 1997); technology as subjectification of identities (Payne 2003a); the mobility and fluidity of 'splace' experience (Payne 2009, 2013); slow ecopedagogy as justices (Payne 2014); as well as how research approaches like 'post-phenomenology' (Payne 2003b, 2005b), phenomenological deconstruction (Payne 2009, with Wattchow) and 'new' methodologies in the social sciences, humanities and arts are responding 'post-critically' (Payne 2005c) to a number of 'turns' in theory (Payne 2013).

Payne's conceptual-empirical insights-evidence into children's experience of the temporal-spatial experience of nature confirms much of that identified above or alluded to about the centrality of sensation and movement, perception and reception in meaning-generation and its creative and imaginative making. He highlights the aesthetic role of the 'sensorium',[5] often intuitively and spontaneously according to movings in various environmental affordances and their 'designs' for and of body~time~space in different scapes (home/oikos, school, neighbourhood, urban, gardens, beach/coast, bush and other 'open' spaces). Payne's studies reveal the degree and extent of how what counts as 'natural' and 'wild/wildness' vary in experience and are, often, dynamically pre-rational or pre-discursive but 'elemental' to interpretation, memory, valuing, understanding and conception and learning and 'knowing'. Indicated already, other layers of social and cultural constructions of experience always overlap, some only summarized here for 'practical' purposes of theory building and research inquiry into children's educative experience – be it formal, structured schooling or other pedagogical circumstances, such as parenting, or informal contexts, such as playing, holidays, weekend activities and so on.

[5] Stoller (1987) and others assert the sensory apparatus of human beings can't really be disaggregated into separate senses even if visuality is (claimed to be) dominant. Hence the conceptual use here of the eco/somaesthetic/affective dimension of experience, or 'synaesthesia', follows Abram's (1996, p. 123) reinterpretation of Merleau-Ponty's 'chiasma' of intertwining, overlapping or sensory fusion. Note also Abram's affirmation of our 'forgetting of the senses' or 'synamnesia', as part of the 'memory problem' of adults already mentioned.

Key 'practices' identified repeatedly by Payne in these studies include the role of active and 'passive' movements and moments in 'other' environments, the spontaneity of exploration and opportunity for discovery in/of nature and the importance of mystery, puzzlement, imagination, skepticism, speculation, hypothesizing and other 'creative' experiences of the 'suspension of belief' and 'promotion of disbelief' via pedagogies of the 'irreal' as embodied in various 'natures'. Methodologically, creative expression of experience via a range of representational forms such as illustration, 'drama' and music, including well-storied 'voice' – be it individual and/or collective narratives – is valued. Other practical/ecopedagogical empirically qualified constants emerging from these actions and practices for retheorizing and research include paying strong attention to the proximal 'environmental design' (Huebner 1967/1987; Payne 2014) of the 'curriculum design' that 'scaffolds' children's memoried ecological experiences in, of and for different versions of 'nature', lived proximally/geographically but within the inevitability of the hybridity/fluidity/liquidity of 'sp(l)ace' lived temporally in the accelerating dromsophere of children's 'lived' experience. One critical ecopolitical constant of these studies is the impact on educative experience of an environmental design where the 'openings' and exposures (and becomings) of various 'natures' – inner, social and external – are bodily enabled, revealed and expressed somatically through a low consumption, low commodity and low 'technics' design of experience. Other 'things' that matter in nature are revealed when an array of techno-things/gadgets 'at hand' and their 'tool designs' are minimized materially (Payne 2003a) and pedagogically (Payne 2014).

Based on these studies of environmental education practices as they often occur 'outdoors' in urban, seminatural and open, natural or wild environments, any 'strong' evidential conclusion of a normative type about the vital/vibrant and animated 'ecologies' of somaesthetics, ethics and politics, usually disaggregated like the reductively individualized senses, is not warranted at this stage. Further reflexive studies are required and, indeed, speculation in materialist, critical and, perhaps, magical/imaginary ways. Again, the pedagogical implications for environmental 'learning', be it in children's or others' socioecological development, call for playful risk taking and role experimentations in experiential approaches to environmental education (Payne 2014, 2015), its theory building and research development.

6.11 Back to the Mind Temporarily: Phenomenology and Environmental 'Learning'

The ecophenomenological reconceptualization for theory building, methodological innovation and research development outlined above discloses 'other' gaps and flaws in what research currently focuses on. For example, somaesthetic meanings (or somatic understandings) and their intercorporeal 'making' of spatialities of feeling and 'affect' are, basically, precognitive. This largely hidden 'pre' of

consciousness, conceptualization, rationalization, cognition, language, discursive and 'mind' (and 'knowing') is brought into much sharper relief when inquiry and critique is 'bodied' in the action or conative capacities and capabilities afforded in body~time~space relationalities as they are 'felt' in movement, memorizing and meaning-making within the eco/somaesthetic. Play theory touches upon some of those issues that have been foregrounded in contemporary high theory about affect and its non-representational status (e.g. Jay 2002; Ranciere 2004; Thrift 2008; Butler 2015).

High theory about affectivity, aesthetics, spatiality and environmental designs of meaning generation and the ecological sources of its making creates a real conundrum for conventional theories of learning in education and psychological discourses. For example, in mainstream environmental education research, empirical evidence is limited to formal 'environmental learning' which is only now emerging. That development can only be a minor part of the claims of an environmental education envisioned here for early years education. Learning, as we formally use that term, is, in itself, insufficient for the purposes here because it does not acknowledge the significance of the 'pre's' listed above or the material conditions in which they are lived socioecologically and historico-culturally. The significance of affectivity in ecological meaning generation and its making in different environments and their 'designs' as they are moved through (or played in) needs to be incorporated into theories of learning. To reiterate, 'indoor designs' of spatially and temporally limiting 'learning' dominate and are abstracted (or disembodied) further by the acceleration of cyber/digital screen technologies designed by invisible corporate and entrepreneurial interests. Put differently, the *Anthrobscene* (Parikka 2015) can be understood as an insidious form of what I will refer to as 'digital colonialism' and 'cognitive capitalism', dimensions of the neoliberal 'stealth' (Brown 2015) downloading or bombing of, in this instance, children's fast 'learning' and accelerated 'development'.

In practical pedagogical terms, the long-term absence of evidence in education research about the bodied, somatic, corporeal, affective value of ecologies of meaning generation (as well as intersubjective or social) dramatically hinders the progress of the Deweyan-inspired field of 'experiential education' (and even constructivist epistemologies) already well known in the discourse of education theory and philosophy as they are pedagogically deployed not only in environmental education but also in outdoor, physical, health, service and citizenship, human development and even adult educations. Each aims to bridge the persistent mind-body, cognition-affectivity, theory-practice and rhetoric-reality gaps so prominent in education. And to which early years education and its research are vulnerable.

As will be outlined below about recent developments in cognitive science, phenomenological philosophy, linguistic sciences and even 'official' cognitive/mind theories of learning and associated pedagogical strategies will find it difficult to avoid those often invisible 'pre' dimensions of the affectivity of environmental experience, as emphasized environmentally and ecologically throughout this chapter under the umbrella notion of eco/somaesthetics. For that purpose for early years education, building blocks are needed. The phenomenology of play is one amongst

numerous socio-cultural-historical and ecological possibilities in children's experience, and in childhood, proposed for researching, theory building and methodological innovation. But, to state the obvious, the 'ambiguity of play' (Sutton-Smith 1997) is already complicated before we assertively add in 'slower' considerations like the affective, intercorporeal and environmental dimensions of eco/somaesthetics of movement. This aesthetics of experience demanding research is, of course, complicated further by the 'fast' of its technologization or 'technics of experience' (e.g. Payne 2003a, b) via, for example, the enclosured clockwork diarizing of children candidly observed by Griffiths in the introductory problem identification.

Rickinson et al. (2009) developed some useful evidential insights into the importance of 'student experience' as an official form of 'environmental learning' in education. Their approach to the study of learning, as environmental, can be contrasted with conventional positivist understandings that emphasize causal relations and linear effects of largely measurable cognitive and behavioural perspectives during short-term educational interventions. However, this promising research is persistently anthropocentric in design and methodology. It steers to learn about and 'in' the environment, an inherently conservative view (and practice) of environmental education that has attracted considerable criticism in the past, notwithstanding the absence of critical consideration that research gives to the neoliberal-techno-postmodernization of education. Nonetheless, the authors recommend further research on learners' experiences, greater emphasis on emotions and values, better use and development of theory, broader consideration be given to life-long learning and stronger collaboration between researchers, practitioners and learners. In view of the ecophenomenological approach described here, Rickinson et al.'s findings and recommendations are relevant and partially useful but can be broadened significantly, noting their use of the term student 'experience' requires much greater clarification and qualification as it reoccurs spatially and temporally in different settings and contexts or environmental designs of education.

In moving the environmental contours of 'learning' beyond the cognitive mind and indoor enclosures, there are additional but seemingly disconnected developments about the relations of experience and learning that are of immediate relevance to future inquiry about children's experience and memorizing of it. The historicizing first is the 'significant life experience' and 'memory work' literature found in the discourse of environmental education. The second is found in the very recent hybridity of the fields of phenomenological philosophy, cognitive science, neuroscience and linguistics. On both counts, the importance of meaning generation and making in and through experience as formative of (environmental) learning must be stressed, given the importance already explained about key concepts in the phenomenological discourse, such as primordial, primitive, sensation, perception, reception, intuition, somaesthetics, feeling/affect and the various other often invisible or hidden 'pres' of conventional accounts of reason, rationality and the discursive and other epistemological privilegings such as the requirement for assessment of such rational understandings. Again, it is timely to remind ourselves of the problem of correlationism – the gap between being as experience and mind as knowing.

Studies of the possible formative contributions of significant life experiences to sometimes unofficial environmental learning and activism (broadly defined) have been undertaken for three decades commencing with Thomas Tanner's (1980) 'classic'. This research program now extends to international comparisons and contrasts of various factors influential in formative learning and development (see Tanner 1998; Palmer et al. 1999). The program and its methods have been debated (Scott 1999) and revisited (Chawla 2001) in ways that examine the strengths, weaknesses and recommendations for future research. In substantive terms, the somewhat contentious 'end' (for some) of environmental 'activism' is viewed as complex, while the majority of 'influences' interpreted as 'significant' such as time spent in natural areas, with frequent contact with habitat, and its alteration, roles of parents, teachers and even books are all traced to childhood and adolescent experiences. Memory, clearly, plays an important role in this research not only of 'house' and home as accentuated by Bachelard (or postmodern oikos, Payne 2009) but also, more broadly, 'other' socio-environmental and ecological conditions. To what extent a 'cause and effect' relation exists between particular episodes/events (and/or slowly accumulated) and significant experiences, and environmental activism exists is open to debate and further research. But, the empirical fact that significance has been attributed, and memoried, to those formative years of childhood is suggestive of what an early intervention environmental education might include in its curriculum design and ecopedagogical imagination. These studies examined the key influences on attitudes toward the environment and influences on practical concern 'for' the environment as well as interest 'in' the environment' for working in environmental education and commitment to environmental protection.

The investigative methods employed were fairly 'standard' for the time in which the studies of 'significance' were conducted. That time of research coincided with the transition in environmental education research from quantitative to qualitative approaches and the latter's propulsion of different, emergent genres of inquiry (Hart and Nolan 1999; Russell and Hart 2003). This emergence quested interpretively for 'commensurability' of research purposes, means and ends (e.g. Payne 2005b) within the 'post-critical' (Hart 2005). After much 'heat' had previously been cast critically on quantitative and 'applied' post-positivist research in the field focusing on a combination of behaviourism and cognitive development, searching questions about the development of the qualitative alternative were being posed about the field's substantive foci and need for renewed methodological innovation. At risk was an internal struggle to sustain the critical imperatives of environmental education, as introduced earlier, but here played out precisely within environmental education research and the need for greater commensurability. Lessons for early years education research are clear. Progress is being made in environmental education research (Stevenson et al. 2013) and more specifically (McKenzie et al. 2009; Lotz-Sisitka et al. 2013) that heighten interest in the question of agency and emergence of moral sensibilities and ethical as well as political 'growth'.

Second, exciting insights and needed evidence about environmental and ecological learning are now emerging in the 'harder' (human) sciences as phenomenological philosophy, particularly Merleau-Ponty's, is incorporated into 'interdisciplinary'

research programs in the cognitive, neuroscientific and linguistic sciences. There can be no doubt that this revolutionary development will profoundly influence the appraisal and redevelopment of current learning (and teaching) theory and practices in education. Already, this still anthropocentric but hybrid reconceptualization of interdisciplinary human science incorporates movement-oriented therapeutic treatments of a range of mental and intellectual 'health' problems. Characterizations of this revolution are contributing to major debates about the 'embodied mind' and/or 'mind embodied' or 'embodied meaning' and 'embodied cognition' in various environmentally 'embodied realisms' of society and culture (e.g. Lakoff and Johnson 1999; Dreyfus and Dreyfus 1999; Csordas 1999; Gallagher 2005; Petitot et al. 1999; Varela et al. 1991). However, to what extent this 'new' interdisciplinary science can deal with numerous 'contexts' and 'designs' of, for example, children, parenting and schooling remains an open question reiterating the critical orientation of this chapter to body~time~space relationalities and the eco/somaesthetics of experience. Even in these hard sciences, the negative effect of fast/instant 'screen culture' on the dromospherical 'plasticity' of children's brains and their development or growth cannot be simply wished away (e.g. Greenfield 2011), least of all in the slow environmental education envisaged here.

Similarly, and in cross/transdisciplinary hybridity, the philosophical notion of 'somaesthetics' (Sullivan 2001; Shusterman 2008; Johnson 2008) will help (re) shape 'play' and 'learning' theory and pedagogical research as well as provide additional affective insights into the significant and insignificant life experience and cognitive science literatures. Unavoidable now in educational theory and practice is the experiential, generative, affective and, inevitably, normative role in meaning-making that 'non'-representationally mirrors that 'body consciousness' of the otherwise preconceptual, pre-rational and pre-discursive or even cognitive unconscious. Enlisting Merleau-Ponty, again, James, Dewey, de Beauvoir and Alexander are historical key informants of the somaesthetic understandings of movement as 'body pedagogy' as a form of affectivity.

6.12 Ecophenomenology and Methodology

Many concepts emanating from an ecophenomenological orientation to interpretive inquiry in education are outlined above. A major limitation of this chapter is that a number of recent 'turns' in (high) theory have only been alluded to via the brief use of conceptual examples, metaphorical empiricism and figurational micronarrative. For example, high theory alerts us to questions about how human and non-human things exist ecologically as material actants within body~time~space relationalities. This type of less anthropocentric thought is weird, wild and irreal. It's a strange reframing notion of human-non-human natures, but not 'really' – until we remind ourselves that children love to play, discover, explore, imagine, mimic and memorize animate and inanimate things if given the 'unenclosed' chance of such spontaneously driven metaphysical freedom.

Researchers will no longer be able to hide from the anthropocentric problem of correlationalism in (non)-representing children's lived experience (by both researched and researcher, Payne 1998b/2014). This significant problem of (re)presenting what we think we know about children's 'reality' and 'experiences' of it stresses the rational limits of language, texts and discourses to adequately or accurately represent the complexity and ecology of human and social experience and its meanings, let alone 'speak for', or on behalf, of things of/in/as nature and its/their ecologies. Uncomfortable questions must, therefore, be raised alongside those of a conceptual type at this point about the importance of methodological innovation and experimentation in researching children and their experience. For example, what is children's voice (or thinking) and who/what is voicing it? Concern about this fundamental problem of representation is now well argued in critical perspectives of (high) theory (e.g. Shaviro 2014) but, for the purposes here of representing children's eco/somaesthetic experiences of time~space in varied material and symbolic contexts including the Anthrop/obscene, there is a compelling need for 'new' interpretive methodological demands and explanations (alongside new high theory) responsive to the empirical question of what can reasonably be represented in research. (Eco)phenomenological inquiry within post-critical framings of research rejects positivism and embraces evolving forms of creative interpretivism. Numerous mobilities and movements in/of experience as well as ecopoetic type sources and resources are possible, as identified throughout this chapter. At best, the enlivened 'representation' of corporeally rich and meaningful experience over time~space will only ever be partial and contingent; much of affective 'experience' and eco/somaesthetic 'nature', and our intercorporeal and intersubjective relations between beings and things, defy interpretive, quantitative and qualitative representation.

This practical, theoretical, methodological and empirical problem of what can adequately or appropriately be represented about children (or adults) as a claim on 'truth' and 'knowing it' inevitably flags major questions about credible 'communication' of deep social~cultural~ecological experience and subsequent claims on the 'multiple (un)realities' of human and non-human experiences. It highlights the value of the notion of yet another 'turn' in theory called the 'non-representation' (e.g. Thrift 2008) encapsulated in the correlational problem of 'accessing' the relationship between the affect of being and thinking (e.g. Sparrow 2014), the researcher and researched and the subject and object of inquiry, critique and evidence (or insight).

With these methodological (correlationism, anthropocentrism, representation and non-representation) limits now in fuller view, the problem of representation, voice and text is exacerbated by the ecophenomenological interest in bringing into 'being' and 'becoming' a somaesthetics~ethics~politics of body~time~space relationalities in and with or for nature(s). We do the best we empirically can to share and communicate our understandings of children's lives and experiences, reiterating the interpretive/hermeneutic rise of increasingly varied representational efforts in the humanities and social sciences that gather under the notion of ecopoiesis – a poetic bringing forth of things ecological. Pragmatically (and practically), in environmental education, worthy of consideration are David Jardine's (2000) textual representations of ecopedagogies and children's visual examples of eco/artography

reproduced in Cutter-Mackenzie et al. (2010). Elsewhere, for representational and methodological experimentation, my own narrative representations of body~time~space relationalities carefully and tactfully emphasize the affect of the sensorium and environmental perception and reception of animality 'in place'. The construction of that (con)text deliberately 'backgrounded' (critically) the debilitating consequences of anthropogenic climate destabilization while indicating the non-representational absences, and presences, as speculated about in experience, so as to 'open' up 'other' possibilities (Payne 2013).

These new theoretical turns demand methodological innovation and experimentation. The turns are extremely complex. Given the acceptance of the Anthropocene (e.g. Latour 2013; Morton 2012; Shaviro 2014)), specifically its material consequences, there is now great interest in thought that is non-anthropocentric and non-human and, therefore, creates a genuine puzzle for researchers of an empirical persuasion and need for evidence. All gather around the 'ontological turn' as an object of inquiry. These skeptics of the excesses of anthropocentric thought focus unevenly but critically upon the primacy of ontological sources of epistemology and its debates. Turns in theory abound, as do the enlivened concepts many of those authors play with – philosophical ecocentrism, new materialisms, speculative realism, post-phenomenology, things/matter/stuff theory, post and trans-human, corporeal~intercorporeal and animal, magical realisms, affect and non-representational theory. Many, particularly in the 'post-humanities', gravitate around the revitalized need in inquiry for a politicized 'aesthetics' of the human condition, mostly from a non-anthropocentric posture where the epistemologies of constructivism are to be emphasized far less in these 'new materialisms' and 'speculative realisms'. All invoke the parallel demand for new or different framings, symbols, languages, names, genres of inquiry and methodological innovation adequate to reconceptualizing the research problems and questions brought forth by various new concepts, metaphors, figurations and their transpositions (Braidotti 2006). They cannot be listed, described, contextualized and explained in detail.

As should now be apparent, the common denominator of these turns is the renewed interest in 'ontology', objects and things that exist materially and interact, as a type of agency, within the thing. Surely, this is a 'wild' proposition that will leave methodologists in education scratching their heads. The ontological turn is a departure from the conventional authority of epistemology which so much education discourse embraces in its constructivist stress in pedagogy, teaching and learning. While the politics of epistemology as methodology are well known in educational research, ontology and its politics (e.g. Johnson 2015) have largely escaped the scrutiny that 'being' a human, social and ecological being or thing and the associated becomings now demand. The inclusion in inquiry of the politics of ontology as 'messy' (Law 2004) as that politics might non-anthropocentrically and representationally be, and ecocentrically and non-representationally become, foregrounds a major substantive (e.g. conceptions of children and relations with nature) and methodological challenge (plausible revealing and limited representation) for educational, early childhood, environmental education researchers. The challenge is to accept, understand and make as clear as conceptually possible the

ontology~epistemology presuppositions we make in formulating inquiry and critique and framing of research. Declaring those propositions must also account for the generative and recursive nature of the preferred conceptual propositions. That is, having justified particular propositions in the framing and processes of inquiry; how do they 're-enter' the conduct of research and its consequences for the researched and other stakeholders?

In the post-critical wake of these new turns that, indeed, should build on earlier theory that straddles the ontology~epistemology tensions, it now behoves the researcher to make communicative sense to any audience of the 'relations' assumed or presumed in the triad of ontology~epistemology~methodology, according to the research problem and questions and their conceptions and contextualizations. As persistently as possible in this chapter, the more exacting derivative of that triad for empirical work is the empirically qualified retheorizing needed of body~time~space relations via, for example, the ecophenomenological vantage point so conspicuously promoted post-critically here. Of course, within each turn in theory, there are significant differences and serious debates and hence their politics of entanglements. Applied contexts are affected, like the conceptualization and construction, 'naming' and 'framing' of 'early childhood', 'development' and 'education' or 'inquiry' or 'research,' become major concerns in legitimizing and representing the triads of ontology~epistemology~methodology in the academic/intellectual world in which most readers of this performatively live and body~time~space relations in the post-phenomenological and socioecological everyday world. In the applied context of environmental education research, the notion of 'a critical ecological ontology' for inquiry which, in praxical terms of (eco)curriculum and (eco) pedagogy, highlights the practical triadic focus in education of the social ecology of 'eco'/somaesthetics~environmental ethics~ecopolitics'.

A second common problem highlighted by these new theoretical turns is, therefore, the desired coherence, or commensurability, in research of the 'best fit' of a problem's conceptions, contexts and theories and methodological invention, extension, deliberation development and representation, reiterating, again, the correspondence problem and non-representational concerns, particularly of affect and eco/somaesthetics of issues and experiences 'lived' (Fig. 6.2). These 'openings' for different other than literal/textual (and numerical) epistemologies of representing an underlying ontology have paved the way for different perspectives of, and approaches to, ecophenomenological inquiry and practice in, for example, ecopedagogies of artography, musicology and dramatology as they performatively emphasize the contribution of the sensorium in alternative meaning-making/somatic explorations of culture-nature relations and their embodiments. Not coincidentally, the field of aesthetics education and policy development is now moving 'beyond' art education into environmental and natural aesthetics (Smith 2004), while arts education promisingly includes, amongst many foci, child cultures, social and cultural issues and the body but, beyond a short interlude by David Abram, excludes ecological issues and environmental aesthetics (Bresler 2007).

Beyond the many sensitizing concepts for further 'reconceptualist' inquiry described by Simms, Chawla, Payne and others like Bachelard, there is a wide array

of affectively evocative insights into the lived experience of nature that once were named as 'nature writing'. That ecopoetic sensibility and genre is well known to North Americans, following Thoreau, Emerson, Muir, Leopold, Lopez, Berry and numerous others and, well before them, many European 'romantics' including Rousseau, the Wordsworths and Coleridge. More recently, in what has been dubbed the 'environmental humanities', marked by the rise of environmental criticism (Buell 2005) or ecocriticism (Garrard 2004) and ecopoetics, evocation is well illustrated in, for example, Griffiths (2004, 2006, 2013), more broadly in environmental discourse by David Abram (1996, 2013) and in education by David Jardine (2000). Children's aesthetics, subjectivities and wellbeing in education (Kennedy 2006a, b) and children's culture and ecocriticism (e.g. Dobrin and Kidd 2004) have only recently attracted interest in environmental education research (Cutter-Mackenzie et al. 2010). But it must be said of the environmental humanities and its influence in education that preferred methodologies exist within that movement that line-up mostly with versions of discourse and language/semiotic analyses. The persistence of the correlationism problem within the commensurability problem highlights, yet again, the politics of ontology~epistemological tensions.

At the more difficult methodological-empirical demand of phenomenological research, Max van Manen's (1990) researching lived experience for an action-sensitive pedagogy is, perhaps, the most significant contribution to hermeneutic phenomenology method and, potentially, the requirement for heightened sensitivity to children's realities and their lifeworlds. Hence, his pedagogical emphasis on 'tact', where the researcher's required tactfulness, incorporates reflection, thoughtfulness, seeing, showing, ineffability and competence as components of the creation of action-sensitive 'knowledge'. Central to van Manen's methodology of lived science, one of the very few authors to lay out in detail the relationship between philosophy (phenomenological, in this instance) and interpretive methodology of human science, are four 'existentials'.[6] Elsewhere in environmental education research, Kaufman et al.'s (2001) use of the 'memory work' methodology in revealing four women's 'experience' of nature deeply extends into their collective corporeality the notions of (in)significance and memory and, more emphatically, locates the researcher (as also the researched) in the ontological~epistemological (and methodological) locus and focus of inquiry outlined here. Marilyn Doerr (2004) uses a phenomenological environmental autobiography about teaching and learning ecology to highlight many of the subtleties of ecopedagogy.

Some caveats. The emphasis here on an ecophenomenology of children's experience of nature's body~time~space scapes necessitates four interrelated qualifications needed in research (and its representation) for the ecopedagogical vantage

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[6] These existentials act as guides for reflection in the research (and pedagogical) process. They are lived space (spatiality), lived body (corporeality), lived time (temporality) and lived human relation (relationality or communality). These are well represented in this chapter. Van Manen is adamant that children 'probably' experience these existentials in a different modality than adults. Spatiality is 'felt'; corporeality understands we are 'always' bodily in the world; temporality is subjectively felt rather than objectively; and relationality is the lived relations we maintain with others in the 'interpersonal space that we share with them'.

point anticipated in an alternative early intervention environmental education. The four propositions aim to minimize the potential for van Manen's existentials to be interpreted solely or primarily and singularly or reductively in an andro/anthropocentric and intersubjective manner in pedagogy, curriculum, research and policy deliberation and development. The qualifications stress, first, an 'ecocentric' (non-anthropocentric) disposition in education and its research; second, the intercorporeality of (children's) bodies and their time/scapes in material relations with other bodies, things, matter and stuff, both animate and inanimate; third, the perceptual/sensory importance of the 'affect' of the sensorium and its environmental resources and ecological antecedents in the felt of both the researcher and the researched. Hence, for example, the rise of sensuous ethnography (Pink 2009) highlights movement and other 'mobility' methods like walking (in nature). Such experiences (or activities) are heuristic to methodologies that 'live', for example, children's experiences in ways that pedagogically enhance and extend current methods used with children in environmental education research (Barratt-Hacking et al. 2013; Blenkinsop and Piersol 2013). Fourth, despite the above recommendations, the correlationism problem of what can be represented and what remains 'non-representational' persists, notwithstanding how that problem might be reconfigured by the way in which research is conceptualized, contextualized and then represented and legitimized. Walking theory/philosophy (e.g. Gros 2014)) as environmental practice (Davidson 1980/2012) and methodologies (e.g. Moles 2008) will 'post flaneur' like grapple with these issues, as will experimentation and innovation in new 'play' and 'childhood' methodologies anticipated here.

In different ways that cannot be elaborated here (but see Payne 2013 that combines first person singular description and theoretical exegesis), this reconceptualizing and, subsequently, reframing of an ecophenomenological hermeneutic in theory and research methodology addresses a number of key ideas emerging in the range of 'turns' indicated above. Working with these theoretical issues, concepts and methodological and pedagogical issues in the various ecological contexts of children's lives in different time~space settings remains a formidable and exciting challenge.

Figure 6.2 provides another mapping of the global~local~body~space~time 'relationality' challenge for critical inquiry and methodological deliberation in a critical ecophenomenology.

6.13 Ends-in-View: Post-critical Ecophenomenologies of Childhood, Theoretical and Research Directions

This chapter critically emphasizes the fragilities, frictions, vulnerabilities and collisions between children's sensuously lived bodies in their affective being, moving, memorying and becoming as constituted in and by nature's environments and the constructed realities of social, cultural and global times and their natures, primordiality and postmodernity, slow and fast and ontology and epistemology.

In emphasizing the former of these broad couplings, various tensions and dissonances are highlighted and abound for a possible normative and ethical reconciliation of O➔• in the ecologies of internal, social and external natures. My aim is to ferment a wild contribution of education to a 'sustainable' intergenerational eco/somaesthetic~environmental ethic~ecopolitic. Inquiry~critique~theory and empirical research with methodological experimentation as reflexivity are needed.

6.14 The Nick of Time

The timeliness of this needed ecophenomenological disruption of our current postmodern amnesia and somnambulism is captured neatly in Elizabeth Grosz's (2004) *The Nick of Time*. Grosz declared, '…the precarious, accidental, contingent, expedient, striving, dynamic status of life in a messy, complicated, resistant, brute world of materiality, a world regulated by the exigencies, the forces, of space and time. We have forgotten the nature, the ontology, of the body, the conditions under which bodies are enculturated, psychologized, given identity, historical location, and agency. We have forgotten where we come from…' (p. 2).

6.15 The Aesthetics of Childhood

And following Grosz's (2004) rationale for memory work and Honore's (2004) plea for a new philosophy of childhood, Pauline von Bonsdorff (2009) extends both with her 'non-adultcentric' proposition of 'The aesthetics of childhood is not just about children, but about the human situation. We were all children once, and childhood is on the whole a permanent structure of individual lives, of culture and society' (p. 74).

6.16 Social Control

And following Griffith's (2013, p. ix) probing of the 'riddle' of an 'unnatural' childhood and denial of 'metaphysical freedom' via the 'enclosures' of schooling leads us directly to the always prescient John Dewey (1938) who, in *Experience and Education*, challenges the potential for a 'timely' intersecting of ecophenomenology and pedagogy in children's lives with his reconstructive 'growth', 'I have said that educational plans and projects, seeing education in terms of life-experience, are thereby committed to framing and adopting an intelligent theory or, if you please, philosophy of experience. Otherwise they are at the mercy of every intellectual breeze that happens to blow' (p.31).

A critical ecophenomenology of children's embodied becoming in time~space provides at least one radical (re)source for developing an intelligent theory of children's lived experience in education, and its research, and to the challenges now harshly presenced in experience for children's 'sustainable' development in, and against, the dromospherical Anthrop/obscene, amongst numerous issues children now confront.

Any strategic response to this global presence in early years education requires further conceptual clarification, theoretical development, methodological innovation, experimentation or extension and empirical elaboration in inventing an experiential environmental education whose slow ecopedagogical resistance to various intellectual and epistemologically privileging breezes is meaningful for children within a broader ethical formulation of children's survival. The need for researcher reflexivity in revealing what von Bonsdorff realizes is as compelling as what Honore demands. For these critical purposes, an array of sensitizing concepts appropriate to pedagogical, curriculum and research renewal have been outlined. Education and schooling can be part of the problem; an experiential (environmental) education for socioecological sustainability can be part of a solution. Time as we mostly live it problematically in ➔• is, indeed, a social construction par excellence, as is its enclosing of childhood and as is its education. Those dominant categories, amongst many such as the home, the family, can, therefore, be deconstructed, existentially, (eco)phenomenologically and textually/discursively (or poststructurally). The deconstruction is only a step in the Deweyan-like reconstructive problem and 'end-in-view' sensitive to the precariousness of 'childhood' with/in that increasingly problematic ecological and social condition filtered materially and symbolically through the thing of a cultural artefact called education.

At the same time in early childhood education studies, we might or must ask with what degree of confidence can we state empirically and/or theoretically, as well as methodologically, that we have sufficient grasp on how children (subjectively) experience time~space in the 'places' they 'inhabit' and 'voice'. Moreover, where does an 'early intervention' environmental education exist in the curriculum for (young) children? Rousseau, Froebel, Pestalozzi, Steiner, Malaguzzi and others were probably on to something important in their respective but much slower times, spaces and places. Now, in the cult of speed, there is an intergenerational urgency in the formative 'foundations' of early years education that requires revisiting for 'adulthood' as well, if there is some truth in von Bonsdorff's observation. Different vantage points for inquiry, critique, theory and research beyond the usual suspects are needed for a revitalized and reanimated renewal of education.

The theoretical and methodological developments of an ecophenomenology of and for childhood beckons. On the weight of the critical insights and sporadic evidence described above about phenomenology's effect on educational and methodological development, the proposition is emergent only at this stage of educational theory and practice about the pedagogically precarious state in which children are 'positioned' in and by conventional 'thought'. A critical ecophenomenology of childhood provides a 'disciplined' inter/transdisciplinary response and counter to those hegemonic epistemological and empirical breezes Dewey alerts us to. Shaviro

(2014) speaks the unspeakable for educators when he concluded, with others, that epistemology requires deprivileging and that ontologically the reality of an ecology of things cannot be subordinated consistently to the never-ending quest for refining ways of knowing or 'how we know' because that ecology of human and non-human beings is the animated actuality and vital source of what can or might be known, not the reverse. But Shaviro might equally be challenged by the 'practical' and pragmatic educator and researcher as to what things, their ecologies and 'environmental designs' might then be pedagogically privileged in the curriculum designs of early years non-anthropocentric education.

Like others speculatively advocating for a non-anthropocentric materialist 'worldview', Shaviro concludes that aesthetics must become the 'first philosophy'. This chapter, theoretically and empirically, pushes his 'aesthetics' more ecocentrically and assertively into the need in education and its research for an eco/somaesthetics~environmental ethics~ecopolitics of body~time~space relationalities as an applied or practically oriented reinterpretation of the underlying tension of ontology~epistemology~methodological deliberation.

In broad summary (Figs. 6.1 and 6.2), given the massive variety of particular local and global contexts in which children experience and live in numerous environments, the 'mapping' of the 'sub/terrain' and 'contours' of reflexive post-critical inquiries requiring navigation in that critical ecophenomenology for future theoretical and research, inclusive of body-time-space relationalities conflicted by O➔•, demand deliberation about, in summary of certain keys:

(i) The politics of the triad of ontology-epistemology-methodology. Translated, following Toadvine's and Trigg's respective questioning of experience and place 'natures' as a possible guide for inquiry, theorists as well as researchers and practitioners must reflexively clarify the assumptions and/or presuppositions they make about ontology and epistemology as that non-dualist ontology-epistemology framing of research is conceptualized, contextualized and represented. Limits, particularly those presented by the problems of correlationism and nonrepresentation, must be acknowledged and justified. For the purposes here, concepts, contexts and representations employed by the researcher with and about the researched will try to accommodate many paradoxes, all of which are inescapably 'political' and ethical. First and foremost, a key substantive one is children's (and their parents, teachers and researchers) increasingly disconnected sense of 'self' from 'nature', its environments and things, In an allegedly more connected fast techno/screen world. Methodologically, what do researcher/reflective practitioners assume substantively about the ontology-epistemology of a school, child care centre, classroom and playground as these mediums of meaning-making and modes of pedagogy inform 'development', identity formations, transitions and, problematically, emergent symbolic sense of *becoming* in the dromospherical Anthropocene?

(ii) The triad of a normatively predisposed eco/somaesthetics-environmental ethics-ecopolitics whose 'social ecology' overlays the deeper and richer

ontological-epistemological basis of an adequate theorizing of environmentally experiential education relevant to the undertheorized question of children's everyday 'agency' (Duhn 2014) and ecological actancy of the things they experience that matter (Bennett 2010). Moreover, that crucially important relationship of agency and education might also be reconceptualized in a broader post-critical and non-anthropocentric manner. Many 'childhood' agencies associated with the new political ecology of things and their wild and vital materiality affectively connect human and nonhuman forces and animate and inanimate things (Attfield 2000; Bennett 2010). For example, Karen Barad's (2007) notion of 'agential realism' highlights the 'intra-active' nature of things/matter and their 'entanglements' in performatively creating 'diffracted' social and ecological relations. Shaviro (2014), following Whitehead's process philosophy, accentuates the intrinsic *creativity* of all things within their interactions and relations of always becoming some*thing*. The normativities expressed by these agential relations are, inevitably, political and ethical, as well as being driven aesthetically by the unfortunate 'invisibility' in contemporary discourse of affectivity (Bennett 2010) and, for example, its spatialities in time (Thrift 2008). How these new 'post' understandings of the everyday practices of eco/somaestheticized agency and actancy of things, somethings and nothings are constructed, produced and reconstituted in, for example, theoretical and methodological approaches to the critical development of children's education is an exciting and formidable challenge. Given the precise focus of this chapter, time(-space) is a politically material thing and not another abstraction, for children as well as others. It is a fast object requiring critique as it is invisibly lived for better or worse (e.g. Birth 2012; Boscagli 2014) as part of the body-time-space condition lived relationally. Time is eco/somaesthetically-ethico-politically charged, as Grosz reminds our forgetting, in various environments and their material things/stuff, settings, locales, milieu and places. 'Slow' is, therefore, a practical and pragmatic but partial response to the 'dechildrening' of children.

(iii) 'Politics' (e.g. Johnson 2015), therefore, is the educational 'core' of deliberation about ontology-epistemology-methodology, as that triadic politic shapes, and is shaped by the 'applied' triad of eco/somaesthetics-ethics-politics in theory and research development in an experiential environmental education of and for children. Typically, in education, the epistemologies of pedagogy and 'learning' understandably preoccupy practitioner educators, while education researchers emphasize methodologies most suited to epistemological concerns about 'best practice' pedagogies and children's cognitive development. Ontological concerns about children's *being* and considerations about their *becoming* are all too often not included. Eco/somaesthetics, ethics and politics of children's lives are often relegated to the theoretically and empirically 'too hard' (or hot) basket. If so, the lives and 'learning' of children are vulnerable to ongoing misrepresentation (and questionable legitimization) and call into question the veracity, plausibility, value and efficacy of many well-meaning educational interventions and the research upon which they are based. But this

assumes a critical, intergenerational concern for sustainability of lives, things and planet. Again, the theorist, researcher and practitioner will need to carefully identify and examine the 'entry point' assumptions and presuppositions about ontology-epistemology they make axiologically about children and their positioning and (non)representation in theory, practice and research. Consideration must be given to the meanings of aesthetics, ethics and politics as they in turn are a key ontological-epistemological basis of meaning generation and making in people's lives. A post-critical ecophenomenology provides a distinctive 'access' point for ontologically focused inquiry and critique into the lived and affectively felt environmental *and* social designs of experience. The 'environmental design' of education practices entailed by the turn to a *non-anthropocentric* or *ecocentric* childlike conception of experience calls for a radical reappraisal of the alleged 'learning' conditions and structures over body-time-space in which children are positioned in curriculum and emplaced by pedagogy (e.g. Payne 2015). Ecophenomenology is an 'other' opening into these questions about what often remains invisible in theory building and research development, notwithstanding the critique that its fullest 'access' into those 'others' suffers from limits indicated much earlier in this chapter (e.g. Sparrow 2014).

(iv) The advent of new theory/turns and the exciting but always vexed question of how theory and theory of practice deductively invokes or inductively invites not only the (re)conceptualization and (re)framing of research, curriculum and pedagogical problems and questions but the interpretive, representational and, at times-spaces, (non-)correlational quest for commensurability with methodological experimentation, innovation, deliberation, debate and legitimation in educational research (e.g. Pink 2009 cf Jackson and Mazzei 2012, footnote 5). The turns in theory indicated above are different responses, overt or covert, to the omnipresent 'fragility of things' and heightened importance now of democratic 'role experimentation' (Connolly 2013) in a 'mode of existence' increasingly laid bare for repair in the Anthropocene (Latour 2013). Early years environmental education is one such experiment in rectifying that troubled mode.

6.17 A Deep Riddle: A Difficult Riddle

The not so final words of this needed returning to, and reclaiming of, an ecophenomenology of children's lives in the dromospherical Anthropocene go to some powerful imagery extracted from Jay Griffiths (2013, p. ix) *Kith: The Riddle of the Childscape.*

Nature is at the core of the riddle: I began looking for the nature of childhood…
Childhood has not only lost its country but the word for it too;
A country called childhood.

How has childhood become so unnatural?...
Born to burrow and nest in nature, children are now exiled from it.
They are enclosed indoors…unthinkable a generation ago.
Children's lives have been subject to intolerable enclosure for the profit of others.
Who owns the child, anyway?
It is in the very nature of the child to want to learn, yet society has historically contrived a school system that…too easily ignores the very education which children crave.

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References

Abram, D. (1996). *The spell of the sensuous: Perception and language in a more-than-human world*. New York: Pantheon.
Abram, D. (2010). *Becoming animal: An earthly cosmology*. New York: Pantheon.
Adorno, T. (1964/1973). The jargon of authenticity. London: Routledge & Kegan Paul.
Attfield, J. (2000). *Wild things: The material culture of everyday life*. Oxford: Berg.
Auge, M. (1995). *Non-places: An introduction to supermodernity*. London: Verso.
Australian Education for Sustainability Alliance. (2014). *Education for sustainability and the Australian curriculum project: Final report for research phases 1 to 3*. Melbourne: AESA.
Bachelard, G. (1958/1964). The poetics of space: The classic look at how we experience intimate places. Boston: Beacon Press.
Barad, K. (2007). *Meeting the universe half way: Quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press.
Barratt-Hacking, E., & Barratt, R. (Eds.). (2007). Special issue: Childhood and environment. *Environmental Education Research, 13*(4), 419–544.
Barratt-Hacking, E., Cutter-Mackenzie, A., & Barratt, R. (2013). Children as active researchers: The potential of environmental education research involving children. In R. Stevenson, M. Brody, J. Dillon, & A. Wals (Eds.), *International handbook of research on environmental education* (pp. 438–458). New York: Routledge.
Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Durham: Durham University Press.
Birth, K. (2012). *Objects of time: How things shape temporality*. New York: Palgrave Macmillan.
Blenkinsop, S., & Piersol, L. (2013). Listening to the literal: Orientations towards how nature communicates. *Phenomenology & Practice, 7*(2), 41–60.
Blunt, A., & Dowling, R. (2006). *Home*. London: Routledge.
Bogust, I. (2012). *Alien phenomenology, or what it's like to be a thing*. Minneapolis: University of Minnesota Press.
Boscagli, M. (2014). *Stuff theory: Everyday objects, radical materialism*. New York: Bloomsbury.
Braidotti, R. (2006). *Transpositions: On nomadic ethics*. Cambridge: Polity Press.
Braidotti, R. (2013). *The posthuman*. Cambridge: Polity Press.
Bresler, L. (Ed.). (2007). *International handbook of research in arts education. Part 1*. Dordrecht: Springer.
Brofenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge: Harvard University Press.

Brough, J., & Blattner, W. (2006). Temporality. In H. Dreyfus & M. Wrathall (Eds.), *A companion to phenomenology and existentialism* (pp. 229–239). Oxford: Blackwell Publishing.
Brown, W. (2015). *Undoing the demos: Neoliberalism's stealth revolution*. New York: Zone Books.
Brown, T., & Payne, P. (2009). Conceptualizing the phenomenology of movement in physical education: Implications for pedagogical inquiry and development. *Quest, 61*(4), 418–441.
Brown, C., & Toadvine, T. (Eds.). (2003). *Eco-phenomenology: Back to the earth itself*. Albany: SUNY Press.
Buell, L. (2005). *The future of environmental criticism: Environmental crisis and literary imagination*. Oxford: Blackwell.
Bukatman, S. (2012). *The poetics of slumberland: Animated spirits and the animating spirit*. Berkeley: University of California Press.
Burton, R. (2011). The experience of time in the very young. Phenomenology OnLine: A resource for phenomenological inquiry, http://www.phenomenologyonline.com.
Butler, J. (2015). *Senses of the subject*. New York: Fordham University Press.
Canaparo, C. (2009). *Geo-epistemology*. Oxford: Peter Lang.
Chawla, L. (Ed.). (2001). *Growing up in an urbanizing world*. London: Earthscan.
Chawla, L. (2002). Spots of time: Manifold ways of being in nature in childhood. In P. Kahn Jr. & S. Kellert (Eds.), *Children and nature: Psychological, sociocultural, and evolutionary investigations* (pp. 199–225). Cambridge, MA: The MIT Press.
Christoff, P., & Eckersley, R. (2013). *Globalization & the environment*. Lanham: Rowman & Littlefield.
Connolly, W. (2013). *The fragility of things: Self-organizing processes, neoliberal fantasies, and democratic activism*. Durham: Duke University Press.
Coole, D., & Frost, S. (Eds.). (2010). *New materialisms: Ontology, agency, and politics*. Durham: Duke University Press.
Cooper, S. (2002). Post-intellectuality? Universities and the knowledge industry. In S. Cooper, J. Hinkson, & G. Sharp (Eds.), *Scholars and entrepreneurs: The university in crisis* (pp. 207–220). Carlton: Arena Publications.
Cooper, S., Hinkson J. & Sharp, G. (Eds.). (2002). *Scholars and entrepreneurs: The university in crisis*. Carlton: Arena Publications.
Csordas, T. (1999). Embodiment and cultural phenomenology. In G. Weiss & H. Faber (Eds.), *Perspectives on embodiment: The intersections of nature and culture* (pp. 143–164). New York: Routledge.
Cutter-Mackenzie, A., Payne, P., & Reid, A. (Eds.). (2010). *Experiencing environment and place through children's literature*. London: Routledge.
Dallmayr, F. (1991). *Between Freiburg and Frankfurt: Towards a critical ontology*. Amherst: University of Massachusetts Press.
Davidson, R. (1980/2012). Tracks. London: Bloomsbury.
Denton, D. (Ed.). (1974). *Existentialism and phenomenology in education: Collected essays*. New York: Teachers College Press.
Descola, P. (2013). *The ecology of others*. Chicago: Prickly Paradigm Press.
Dewey, J. (1938/1988). Experience and education. In J. Boydston (Ed.), *The later works, 1925–1953, John Dewey* (Vol. 13, pp. 1–62). Carbondale: Southern Illinois University.
Dobrin, S., & Kidd, K. (Eds.). (2004). *Wild things: Children's culture and ecocriticism*. Detroit: Wayne State University Press.
Doerr, M. (2004). *Currere and the environmental autobiography: A phenomenological approach to the teaching of ecology*. New York: Peter Lang.
Dreyfus, H., & Dreyfus, S. (1999). The challenge of Merleau-Ponty's phenomenology of embodiment for cognitive science. In G. Weiss & H. Faber (Eds.), *Perspectives on embodiment: The intersections of nature and culture* (pp. 103–120). New York: Routledge.
Dreyfus, H., & Wrathall, M. (Eds.). (2006). *A companion to phenomenology and existentialism*. Oxford: Blackwell Publishing.

Duhn, I. (2014). Making agency matter: Rethinking infant and toddler agency in educational discourse. Discourse: Studies in the cultural politics of education, 1–12.

Fay, B. (1987). *Critical social science: Liberation and its limits*. New York: Cornell University Press.

Fien, J. (1993). *Education for the environment: Critical curriculum theorising and environmental education*. Geelong: Deakin University Press.

Fisher, A. (2002). *Radical ecopsychology: Psychology in the service of life*. Albany: SUNY Press.

Gallagher, S. (2005). *How the body shapes the mind*. Oxford: Clarendon Press.

Garrard, G. (2004). *Ecocriticism*. London: Routledge.

Gershoff, E., Mistry, R., & Crosby, D. (Eds.). (2014). *Societal contexts of child development: Pathways of influence and implications for practice and policy*. Oxford: Oxford University Press.

Gibson, J. (1979). *The ecological approach to visual perception*. Boston: Houghton Mifflin.

Ginsborg, P. (2005). *The politics of everyday life: Making choices, changing lives*. New Haven: Yale University Press.

Gratton, P. (2013). *Post-deconstructive realism: It's about time. Speculations IV* (pp. 84–90). Brooklyn: Punctom Books.

Greenfield, S. (2011). *You and me: The neuroscience of identity*. London: Notting Hill Editions.

Griffiths, J. (2004). *A sideways look at time*. New York: Penguin.

Griffiths, J. (2006). *Wild: An elemental journey*. London: Penguin.

Griffiths, J. (2013). *Kith: The riddle of the childscape*. London: Hamish Hamilton.

Gros, F. (2014). *A philosophy of walking*. London: Verso.

Grosz, E. (Ed.). (1999). *Becomings: Explorations in time, memory, and futures*. Ithaca: Cornell University Press.

Grosz, E. (2004). *The nick of time: Politics, evolution, and the untimely*. Durham: Duke University Press.

Grusin, R. (Ed.). (2015). *The nonhuman turn*. Minneapolis: University of Minnesota Press.

Han-Pile, B. (2006). Affectivity. In H. Dreyfus & M. Wrathall (Eds.), *A companion to phenomenology and existentialism* (pp. 240–252). Oxford: Blackwell Publishing.

Hart, R. (1979). *Children's experience of place*. New York: Irvington.

Hart, P. (2005). Special issue: Transitions in thought and practice: Links, divergences and contradictions in post-critical inquiry. *Environmental Education Research, 11*(4), 391–400.

Hart, P. (2013). Preconceptions and positionings: Can we see ourselves within our own terrain? In R. Stevenson, M. Brody, J. Dillon, & A. Wals (Eds.), *International handbook of research on environmental education* (pp. 507–510). New York: Routledge.

Hart, P., & Nolan, K. (1999). A critical analysis of research in environmental education. *Studies in Science Education, 34*, 1–69.

Harvey, D. (1996). *Justice, nature and the geography of difference*. Oxford: Blackwell.

Heidegger, M. (1927/1962). *Being and time*. New York: Harper and Row.

Held, D. (1980). *Introduction to critical theory: Horkheimer to Habermas*. London: Hutchinson.

Hofffman, P. (2006). The body. In H. Dreyfus & M. Wrathall (Eds.), *A companion to phenomenology and existentialism* (pp. 253–262). Oxford: Blackwell Publishing.

Honore, C. (2004). *In praise of slow*. London: Orion.

Huckle, J. (2014). A response to pathways to sustainability. *Australian Journal of Environmental Education, 30*(1), 51.

Huebner, D. (1967/1987). Curriculum as concern for man's temporality. Theory Into Practice, 26, 324–331.

Hursh, D., Henderson, J., & Greenwood, D. (Eds.). (2015). Special issue: Environmental education in a neoliberal climate. *Environmental Education Research, 21*(3), 299–505.

Ihde, D. (1990). *Technology and the lifeworld: From garden to earth*. Bloomington: Indiana University Press.

Ihde, D. (1993). *Postphenomenology: Essays in the postmodern context*. Evanston: Northwestern University Press.

Ingold, T. (2000). *The perception of the environment: Essays on livelihood, dwelling and skill*. London: Routledge.
Ingold, T. (2011). *Being alive: Essays on movement, knowledge and description*. London: Routledge.
Jackson, A., & Mazzei, L. (2012). *Thinking with theory in qualitative research: Viewing data across multiple perspectives*. New York: Routledge.
James, P. (2006). *Globalism, nationalism, tribalism: Bringing theory back in*. London: Sage.
Jardine, D. (2000). *"Under the tough old stars." Ecopedagogical essays*. Brandon: The Foundation for Educational Renewal.
Jay, M. (2002). Somaesthetics and democracy. *Journal of Aesthetics Education, 6*(4), 55–69.
Jay, M. (2006). The lifeworld and lived experience. In H. Dreyfus & M. Wrathall (Eds.), *A companion to phenomenology and existentialism* (pp. 91–104). Oxford: Blackwell Publishing.
Johnson, M. (2008). *The meaning of the body: Aesthetics of human understanding*. Chicago: The University of Chicago Press.
Johnson, J. (Ed.). (2015). *Dark trajectories: Politics of the outside*. Hong Kong: [NAME] Publications.
Kahn, P., & Kellert, S. (Eds.). (2002). *Children and nature: Psychological, sociocultural, and evolutionary investigations*. Cambridge, MA: The MIT Press.
Kaufman, J., Ewing, M., Hyle, A., Montgomery, D., & Self, P. (2001). Women and nature: Using memory work to rethink our relationship to the natural world. *Environmental Education Research, 7*(4), 359–377.
Kennedy, D. (2006a). *Changing conceptions of the child from the renaissance to post-modernity. A philosophy of childhood*. Lewiston: Edwin Mellen Press.
Kennedy, D. (2006b). *The well of being: Childhood, subjectivity, and education*. Albany: SUNY Press.
Kneller, G. (1984). *Movements of thought in modern education*. New York: Macmillan.
Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to western thought*. New York: Basic Books.
Langeveld, M. J. (1967/1983a). The stillness of the secret place. Phenomenology and Pedagogy, 1(1), 11–17.
Langeveld, M. J. (1967/1983b). The secret place in the life of the child. Phenomenology and Pedagogy, 1(2), 181–194.
Latour, B. (2013). *An inquiry into modes of existence: An anthropology of the moderns*. Cambridge, MA: Harvard University Press.
Law, J. (2004). *After method: Mess in social science research*. London: Routledge.
Levine, R. (1997). *A geography of time: The temporal misadventures of a social psychologist*. New York: Basic Books.
Lotz-Sisitka, H., Fien, J., & Ketlhoilwe, M. (2013). Traditions and new niches: An overview of environmental education curriculum and learning research. In R. Stevenson, M. Brody, J. Dillon, & A. Wals (Eds.), *International handbook of research on environmental education* (pp. 194–205). New York: Routledge.
Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill: Alonquin Books.
Maitland, J. (1995). *Spacious body: Explorations in somatic ontology*. Berkeley: North Atlantic Books.
Massey, D. (2005). *For space*. Los Angeles: Sage.
McCormack, T. (2014). The development of cognition. In R. Lerner (Ed.), *Handbook of child psychology and developmental science, volume 2, cognitive processes* (7th ed., pp. 624–670). Hoboken: Wiley.
McKenzie, M., Hart, P., Bai, H., & Jickling, B. (Eds.). (2009). *Fields of green: Restorying culture, environment, and education*. Cresskill: Hampton Press.
McKibben, B. (1990). *The end of nature*. London: Viking.

Melucci, A. (1996). *The playing self: Person and meaning in the planetary society*. Cambridge: Cambridge University Press.
Merchant, C. (1980). *The death of nature: Women, ecology and the scientific revolution*. New York: Harper & Row.
Merleau-Ponty, M. (1945/2002). *The phenomenology of perception*. London: Routledge.
Merleau-Ponty, M. (1968). *The visible and the invisible*. Evanston: Northwestern University Press.
Merleau-Ponty, M. (2003). *Nature*. Evanston: Northwestern University Press.
Moles, K. (2008). A walk in thirdspace: Place, methods and walking. *Sociological Research Online, 13*(4), 31.
Morton, T. (2012). *The ecological thought*. Cambridge, MA: Harvard University Press.
Nakagawa, Y., & Payne, P. (2014). Critical place as a fluid margin in post-critical environmental education. *Environmental Education Research, 21*(2), 149–172.
Noys, B. (2014). *Malign velocities: Accelerationism and capitalism*. Alresford: Zero Books.
Palmer, J. (1998). *Environmental education in the 21st century: Theory, practice, progress and promise*. London: Routledge.
Palmer, J., Suggate, J., Robottom, I., & Hart, P. (1999). Significant life experiences and formative influences on the development of adults' environmental awareness in the UK, Australia and Canada. *Environmental Education Research, 5*(2), 181–200.
Parikka, J. (2015). *The anthrobscene*. Minneapolis: University of Minnesota Press.
Payne, P. (1995). Ontology and the critical discourse of environmental education. *Australian Journal of Environmental Education, 11*, 83–106.
Payne, P. (1997). Embodiment and environmental education. *Environmental Education Research, 3*(2), 133–153.
Payne, P. (1998a). The politics of nature: Children's conceptions, constructions and values. In M. Ahlberg & W. Filho (Eds.), *Umweltbildung, umweltkommunkation und nachhaltigkeit (Environmental education, communication and sustainability)* (pp. 209–229). Frankfurt am Main: Peter Lang.
Payne, P. (1998b). Children's conceptions of nature. *Australian Journal of Environmental Education, 14*, 19–27.
Payne, P. (1999a). Postmodern challenges and modern horizons: Education 'for being for the environment'. *Environmental Education Research, 5*(1), 5–34.
Payne, P. (1999b). The significance of experience in SLE research. *Environmental Education Research, 5*(4), 365–381.
Payne, P. (2003a). The technics of environmental education. *Environmental Education Research, 9*(4), 525–541.
Payne, P. (2003b). Postphenomenological enquiry and living the environmental condition. *Canadian Journal of Environmental Education, 8*, 169–190.
Payne, P. (2005a). Families, homes and environmental education. *Australian Journal of Environmental Education, 21*, 81–95.
Payne, P. (2005b). 'Ways of doing' learning, teaching and researching. *Canadian Journal of Environmental Education, 10*, 108–124.
Payne, P. (2005c). Lifeworld and textualism: Reassembling the researcher/ed and 'others'. *Environmental Education Research, 11*(4), 413–431.
Payne, P. (2006). Environmental education and curriculum theory. *Journal of Environmental Education, 37*(2), 25–35.
Payne, P. (2009). Postmodern oikos. In M. McKenzie, P. Hart, H. Bai, & B. Jickling (Eds.), *Fields of green: Restorying culture, environment, and education* (pp. 309–322). Cresskill: Hampton Press.
Payne, P. (2010a). Moral spaces, intergenerational influences and the social ecology of families in environmental ethics education. *Environmental Education Research, 16*(2), 209–232.
Payne, P. (2010b). The globally great moral challenge: Ecocentric democracy, values, morals and meaning. *Environmental Education Research, 16*(1), 153–171.

Payne, P. (2010c). Remarkable-tracking, experiential education of the ecological imagination. *Environmental Education Research, 16*(3–4), 295–310.

Payne, P. (2013). (Un)timely ecophenomenological framings of environmental education research. In R. Stevenson, M. Brody, J. Dillon, & A. Wals (Eds.), *International handbook of research on environmental education* (pp. 424–437). New York: Routledge.

Payne, P. (2014). Vagabonding slowly: Ecopedagogy, metaphors, figurations, and nomadic ethics. *Canadian Journal of Environmental Education, 19*, 47–65.

Payne, P. (2015). Slow ecopedagogy and critical curriculum action. *Australian Journal of Environmental Education, 31*(2), 1–29.

Payne, P. (2016). Special issue: The politics of policy in education for sustainable development. *The Journal of Environmental Education, 47*(2), 69–178.

Petitot, J., Varela, F., Pachoud, B., & Roy, J.-M. (Eds.). (1999). *Naturalizing phenomenology: Issues in contemporary phenomenology and cognitive science*. Stanford: Stanford University Press.

Pinar, W., & Reynolds, W. (Eds.). (1992). *Understanding curriculum as phenomenological and deconstructed text*. New York: Teachers College Press.

Pink, S. (2009). *Doing sensory ethnography*. Los Angeles: Sage.

Ranciere, J. (2004). *The politics of aesthetics: The distribution of the sensible*. London: Bloomsbury.

Reid, A., Jensen, B., Nikel, J., & Simovska, V. (Eds.). (2008). *Participation and learning: perspectives on education and the environment, health and sustainability*. Dordrecht: Springer.

Rickinson, M., Lundholm, C., & Hopwood, N. (2009). *Environmental learning: Insights from research into the student experience*. Dordrecht: Springer.

Robottom, I. (Ed.). (1987). *Environmental education: Practice and possibility*. Geelong: Deakin University Press.

Robottom, I. (2014). Responding 30 years later. *Australian Journal of Environmental Education, 30*(1), 8.

Robottom, I., & Hart, P. (1993). *Research in environmental education: Engaging the debate*. Geelong: Deakin University Press.

Rossholt, N. (2012). Children's bodies in time and place; an onto-epistemological approach. *Reconceptualizing Educational Research Methodology, 3*(2), 16–25.

Russell, C., & Hart, P. (2003). Exploring new genres of inquiry in environmental education research. *Canadian Journal of Environmental Education, 8*, 5–8.

Saracho, O. (Ed.). (2014). *Handbook of research methods in early childhood education – volume 2: Review of research methodologies*. Charlotte: Information Age Publishing.

Sauve, L. (2005). Currents in environmental education: Mapping a complex and evolving pedagogical field. *Canadian Journal of Environmental Education, 10*, 11–37.

Scott, W. (1999). (Ed.) Special issue: Five critical commentaries on significant life experience research in environmental education. *Environmental Education Research, 5*(4), 349–418.

Shaviro, S. (2014). *The university of things: On speculative realism*. Minneapolis: University of Minnesota Press.

Shusterman, R. (2008). *Body consciousness: A philosophy of mindfulness and somaesthetics*. Cambridge: Cambridge University Press.

Simms, E. (2008). *The child in the world: Embodiment, time, and language in early childhood*. Detroit: Wayne State University Press.

Smith, R. (2004). Aesthetic education: Questions and issues. In E. Eisner & M. Day (Eds.), *The handbook of research and policy in art education*. Mahwah: Lawrence Erlbaum and Associates.

Sobel, D. (1993). *Children's special places*. Tucson: Zephyr Press.

Soja, E. (1989). *Postmodern geographies: The reassertion of space in critical social theory*. London: Verso.

Soper, K. (1995). *What is nature?* Oxford: Blackwell.

Soule, M., & Lease, G. (Eds.). (1995). *Reinventing nature: Responses to postmodern deconstruction*. Washington, DC: Island Press.

Sparrow, T. (2014). *The end of phenomenology: Metaphysics and the new realism*. Edinburgh: Edinburgh University Press.
Stevenson, R., Brody, M., Dillon, J., & Wals, A. (Eds.). (2013). *International handbook of research on environmental education*. New York: Routledge.
Stoller, P. (1987). *The taste of ethnographic things: The senses in anthropology*. Philadelphia: University of Pennsylvania Press.
Sullivan, S. (2001). *Living across and through skins: Transactional bodies, pragmatism, and feminism*. Bloomington: Indiana University Press.
Sutton-Smith, B. (1997). *The ambiguity of play*. Cambridge, MA: Harvard University Press.
Tanner, T. (1980). Significant life experiences: A new research area in environmental education. *Journal of Environmental Education, 11*(4), 20–24.
Tanner, T. (Ed.). (1998). Special issue: Significant life experiences. *Environmental Education Research, 4*(4), 365–464.
Thomson, I. (2006). Environmental philosophy. In H. Dreyfus & M. Wrathall (Eds.), *A companion to phenomenology and existentialism* (pp. 445–463). Oxford: Blackwell Publishing.
Thrift, N. (2008). *Non-representational theory: Space, politics, affect*. London: Routledge.
Toadvine, T. (2009). *Merleau-Ponty's philosophy of nature*. Evanston: Northwestern University Press.
Trigg, D. (2012). *The memory of place: A phenomenology of the uncanny*. Ohio: Ohio University Press.
Trigg, D. (2014). *The thing: A phenomenology of horror*. Washington, DC: Zero Books.
Troutner, L. (1974). Time and education. In D. Denton (Ed.), *Existentialism and phenomenology in education: Collected essays* (pp. 159–181). New York: Teachers College Press.
Tuan, Y.-F. (1974). *Topophilia: A study of environmental perception, attitudes, and values*. Englewood Cliffs: Prentice-Hall.
Tuan, Y.-F. (1977). *Space and place: The perspective of experience*. Minneapolis: University of Minnesota Press.
van den Berg, J. (1961). *The changing nature of man*. New York: W. W. Norton.
van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany: SUNY Press.
Varela, F., Thompson, E., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. Cambridge, MA: The MIT Press.
Virilio, P. (1977/2006). *Speed and politics*. Los Angeles: Semiotext(e).
Virilio, P. (2007/2010). *The university of disaster*. Cambridge: Polity Press.
von Bonsdorff, P. (2009). Aesthetics of childhood – Phenomenology and beyond. *Proceedings of the European Society for Aesthetics, 1*, 60–76.
Weiss, G., & Haber, H.-F. (1999). *Perspectives on embodiment: The intersections of nature and culture*. London: Routledge.

Part II
Research Methodologies

Marilyn Fleer and Bert van Oers

Chapter 7
(Co)-Researching with Children

Alma Fleet and Deborah Harcourt

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Abstract This chapter offers a collaborative dialogue between academics and practitioners who have given consideration to the literature, the challenges and illustrations from practice in order to examine the notion of child voice in research. It illuminates the researcher-child relationship with an accent on hearing children's standpoints through the lens of interested and invested adults. These considerations are intended as further provocations to the growing research base that is attentive to foregrounding children's perspectives. While the chapter is not co-authored by children, it has been constructed so as to respect children's voices and to task the research community to further deliberate the complexity of issues involved when positioning research practice as 'researching with children'. Organised in several sections, the chapter explores ethical issues of assent and/or consent from children, examines issues in relation to children in a range of age cohorts and proposes a number of ways forward for this particular conversation using practice-based strategies such as pedagogical documentation and clarification of language use. These broad concepts are scrutinised through a conversation between examples of cooperation, collaboration and co-research, in an attempt to clarify the ongoing perplexity in this research terrain.

Keywords Co-researching with children • Children's voice • Ethical consent • Children's rights • Pedagogical documentation • Reconceptualising research

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7.1 Introduction (Alma Fleet, Suallyn Mitchelmore, Deborah Harcourt)

With a focus on listening to children's voices in research in order to better investigate their lived experience of early childhood, the past 20 years has seen a reconceptualisation of early childhood research (Einarsdóttir 2014). The consideration of researching with or co-researching alongside children is not only paradigmatic but at heart philosophical. It is a topic that draws heavily on human rights, particularly the United Nations Convention on the Rights of the Child (UNCRC) (1989), as well as from a perspective which expects all stakeholders in a research context to be involved in decision-making. In addition, when policy is shaped by notions of projected productivity, a political and economic discourse runs through this topic, with both parents and children being positioned as consumers of early childhood education (Einarsdóttir 2014). As Holt (2004) and Smith and Taylor (2000) note, there is a social viewpoint that hopes to empower the marginalised, as children 'have been the invisible and voiceless objects of concern, and not understood as competent, autonomous persons who have a point of view' (p. ix). Similarly, Pascal and Bertram noted that in policy and research contexts, 'children's continued lack of voice and power persists' (Pascal and Bertram 2009, p. 253). Nevertheless, Thomson (2007) asks, 'Is doing research with children different from doing research with adults?' (p. 207).

Consideration of this discourse, however, is not furthered by pursuing polarities. The debate on research *with* children rather than research *on* children has progressed in the literature from a justification of including children's perspectives to one that carefully considers how this can be undertaken with ethical and methodological rigour (Clark 2011; Harcourt and Einarsdóttir 2011). This chapter therefore offers a constructive engagement with a team of researchers to share literature, challenges and illustrations of practice to examine the evolving state of the construct in the sector. It will highlight 'connections and reciprocal relationships' (Einarsdóttir 2014, p. 320), emphasising hearing children's standpoints about matters that concern them and how the adults involved engage and respond to these ideas and opinions. These considerations build on growing interest in the importance of foregrounding children's perspectives, as is represented through reviews such as that reported by Powell (2011) for Childwatch International and Coleyshaw et al.'s (2010) contribution.

The inclusion of young children's voices within data collection and analysis is to give a rightful place to the richness that children's perspectives can contribute to our understandings of the world to:

> Surprise us, make us think, ask critical questions, appreciate the peculiarity of what we have taken for granted, illuminate implicit understandings and values, make us stutter, open us to new possibilities. (Moss and Petrie, 2002 in Carr et al. 2005 p. 130)

Research committed to working collaboratively with and alongside young children, honouring the rights of the child to have a voice and informed opinion in

matters that affect their lives, positions childhood education 'first and foremost as a place of ethical practice' (Dahlberg and Moss, in Lenz Taguchi 2010, p. xvii). Dahlberg and Moss (2005) reveal that a lens of 'ethical practice' is embedded with the belief that rather than positioning knowledge as objective or fixed, knowledge is responsive to new possibilities and the potentialities of diverse ways of understanding that welcome multiple perspectives. It is this disposition of the researcher, to value plurality and to be open to the potentiality of uncertainty and the unknown, which is the invisible suspension bridge that supports the possibility of 'thick data', full of the subjectivities of young children's perspectives and understandings.

7.1.1 Background Issues in Researching with Children (and Educators)

Researching with children is underpinned by the premise that adult-child relationships are reciprocal; children are not seen as incomplete adults but rather equal participants in the co-construction of data collection (and analysis and research findings). To omit children's perspectives from the research design would give an incomplete and incongruent picture. As Kjørholt et al. (2005) offer:

> Children are co-constructors of their childhoods and are active participants in the constructions of their identities in everyday lives and in establishing relationships with adults and other children. They are caring subjects who contribute emotionally to their own and others' quality of life (p. 184).

It is essential that decisions related to the role of young children in research are grounded in ethical guidelines that 'call on researchers to avoid undue intrusion, and using methods which are non-confrontational and participatory, and which encourage children to interpret their own data...' (Morrow and Richards 1996, p. 100). Similarly, decisions related to the place of the researcher within the research context should be evaluated based on their capacity to be inclusive of children's subjectivities and agency. For example, the adoption of the role of participant-observer, with an emphasis on participation and therefore the researcher's participation within the context of the children's play space, is underpinned by 'the children's trust and a willingness to engage with me and involve me in their social worlds' (Warming 2005, p. 58). When considering a collaborative research design with young children, particularly one that seeks to uphold a child's ethical right to participate in decisions and policy that affect their lives, nonintrusive, noninvasive and nonconfrontational methods should be evaluated and employed.

While they note (p. 200) that 'The idea that infants express themselves nonverbally through their bodies and behavior is unproblematic', Elwick et al. (2014a) claim that 'the participatory research agenda with infants' is contested:

> Knowing anything for certain about infants, including whether such things as 'infants' perspectives' exist, is profoundly difficult if not impossible. We conclude that awareness of the

> inherent uncertainties in studying infants reconstructs such research as a site for ethical rather than epistemological practice. (p. 198)

There is growing recognition of children's ethical right to participate in research (Alderson 2008; Eide and Winger 2005; Moss et al. 2005; Morrow and Richards 1996; Rhedding-Jones et al. 2008; Woodhead 2008; Smith 2011; Rinaldi 2005; Harcourt and Conroy 2011). Article 12 of the UNCRC (United Nations 1989) states that children's views are to be respected and that they have the right to be consulted; essentially this involves respecting children's competencies and recognising that young children's experiences of the world are unique and valid (Morrow and Richards 1996; Woodhead 2008; Alderson 2008; Smith 2011).

Ethical considerations for the inclusion of children in the research design are underpinned by the same premise as researching with adults – the asymmetry in power relations between the researcher and the participants (Bae 2005, 2010; Rhedding-Jones et al. 2008). It is therefore important that the methodology empowers and respects children taking part by ensuring that they are not simply passive objects on the receiving end of research processes imposed upon them. Bae (2005) cites this responsibility of addressing the inevitable inequality with the more powerful person in the relationship – the adult researcher – who needs to find ways to invite participants into dialogue about 'what is going on, and how to interpret what comes out' (p. 286). This is particularly pertinent when an objective of the research design is collaboration and cooperation.

Therefore, trust has a significant place in the ethical considerations of research with children; this is a process that is developed over time through the researcher being 'understanding, open and confirming when doing research in preschool contexts' (Bae 2005 p. 284). Listening with all the senses is the key to building trusting relationships (Moss et al. 2005; Rinaldi 2005). This means listening as mental attitude rather than as a skill – '*Listening* as sensitivity to the patterns that connect'; '*Listening* as welcoming and being open to difference'; '*Listening* as an active verb that involves interpretation, giving meaning to the message and value to those who offer it' (Rinaldi 2005, p. 20).

In a research design that strives for researcher-child collaboration, reflective analysis of the changing and diverse nature of mutual recognition throughout the phases of the project is essential (Bae 2005). Ensuring that research analysis is presented in a way that empowers children to contest and respond to representations is an important strategy towards ensuring that children do not feel 'not just textualised but also contextualised' or defamiliarised from their experiences and insights (Tobin and Davidson 1990, p. 278).

The chapter has not been designed with or co-written by children. It is an adult academic task which has been crafted to respect children's voices and to challenge the research community to consider complex issues involved in the notion of researching *with* children. To that end, the chapter is organised in several sections, including explorations of ethical issues of assent and/or consent from children who are the subjects of and/or participants in research with adults, consideration of issues in relation to children in broad age brackets (recognising blurred boundaries

between ages, stages and individual characteristics) and proposals for ways forward in the conversation, through the vehicles of pedagogical documentation and clarification of language use. Concepts are also investigated through examples of cooperation, collaboration and co-research, perhaps under the umbrella of respect for children and between adults and child research participants, in an attempt to clarify confusion and casual use of language in this terrain.

7.1.2 Researcher Reflection Valuing Children's Perspectives: (Jane Merewether)

Smith (2011) points out that the world abounds with research on children, but the body of research with children that has found ways to make children's voices visible is limited, although this has been changing over the last two decades. As has been stated above, a significant catalyst is the *United Nations Convention on the Rights of the Child* (United Nations 1989), which recognises children as active citizens with rights to participate in matters affecting them, including research. A second contributor to changing perspectives is the field of Childhood Studies (James and James 2008; Kehily 2009; Qvortrup et al. 2009), which focuses on children's rights, voices and participation. By conceptualising children as social actors and capable holders of opinions and ideas, Childhood Studies presents the possibility for researchers to work together with children as co-constructors of research data. A third major contributor to strengths-based views of young children is the educational project of the city of Reggio Emilia in Italy which, through its use of multiple forms of listening and documentation, has graphically made visible the capabilities of young children (Edwards et al. 2012b; Giudici et al. 2001; Rinaldi 2006). [Excerpt from: Merewether 2015]

7.2 Beginning the Research Conversation with Children: Informed Consent (Deborah Harcourt)

As we have seen in the chapter introduction, the international research community has been investigating ways in which young children can be positioned as active and authentic participants in research processes. Clark (2005a, b, 2010) has identified clearly the significance of engaging with children's ideas and opinions in order to further inform matters that affect children. However, in order to genuinely reflect the significance of children's role in research, we must give careful consideration to their informed consent as a crucial part of research design. The term *consent*, and not *assent*, has been used deliberately here, to indicate the intention to work in genuine partnership with children just as a researcher would with an adult. While

this may be considered semantic, there is currently no legal imperative to refer to the agreement to participate as *assent* when involving children.

Thoughtful deliberations must be given to trust, equity and security whenever a researcher is inviting a participant to share the lived experience of a particular phenomenon. Grover (2004) noted the importance of establishing trusting relationships in research with children, while Harcourt and Conroy (2005, 2011) continue to warn that the time to develop these relationships cannot be circumvented or foreshortened. Any participant in a research project needs time to reflect and clarify roles and responsibilities to ensure that there is shared understanding of what is involved. For children it becomes critical that they understand that what they are thinking and what they have to say make a worthy contribution to the project.

Harcourt and Conroy (2011) suggest that familiar surroundings such as homes and prior to school may provide the most conducive circumstances in which to initially invite children to engage in research. This notion is supported by the earlier work of Valentine (1999) and Edwards and Aldred (2000) who agree that thoughtful consideration needs to be given to contextual and relational milieus. Perhaps these everyday places where children live their childhoods may well prove the most optimal environments.

In addition, the manner in which children are invited to participate will be dependent on their evolving capacity to engage with the research topic and to make meaning of the research partnership that is being proposed. Positioning the research topic and roles within their everyday experiences assists the children to make connections with their own understandings of the world around them. In this way, intersubjectivity or shared meaning (Rogoff 1990) will assist both children and adult researchers to reach common ground thereby achieving an agreed foundation on which to investigate the focus topic.

The experience of the adult researcher in providing information to children could, at this point, prove vital. Those experienced in working with groups of children, such as teaching professionals, may have an advantage over those who only work with individual children. In our experience, children prefer to be informed in small groups, as they are able to help each other in establishing and negotiating shared meanings. For example, in two studies examining how children measure the quality of their early childhood education experiences, the children had to hypothesise what the word 'quality' meant. In one study (Harcourt 2012b), they decided it meant 'good' as the group consensus in that contextual environment offered the children reference points for a shared construction of that term. Yet in the second study (Harcourt and Mazzoni 2012), the children decided quality meant 'important' as that contextual and relational environment offered a different perspective in framing the notion of quality. Therefore, the ability of the adult researcher to support these group conversations, connections to the real world and subsequent constructions (and sometimes reconstructions!) of meaning is critical to attaining intersubjectivity.

By positioning children as active participants in the research process, the manner in which the invitation is proposed can mean the difference between genuine voluntary participation and the provision of an answer that the child suspects the adult is

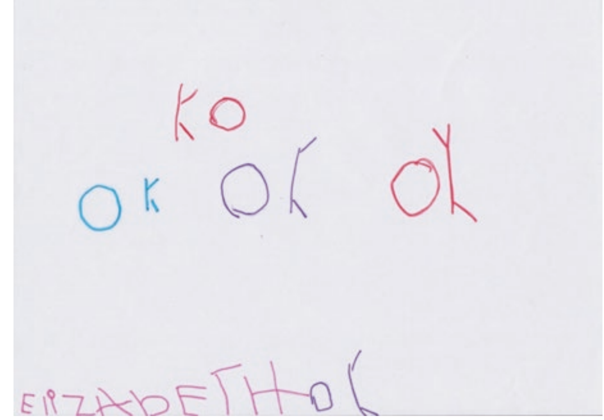

Fig. 7.1 Elizabeth: The OK paper tells you that it is ok for us to work together. If we don't do the ok, then it is not ok for you to talk to us

seeking. Providing the invitation to participate as a foregone conclusion (*e.g. I have come to get your agreement*) disempowers children's capacity to agree/disagree. It is critical that children are offered a full explanation of the project, which should be briefly revisited at each research-focussed meeting to not only support children's memories but also to assure that they can opt in and/or out at any point.

Supporting children in understanding the documentation of consent follows a similar process to that of informing, that is, assisting children to make connections with their known competences as communicators. In the case of very young children, this may well be their willingness to have their photograph taken using expressive cues. With children over three, written consent can be used. For example, in a study undertaken with children investigating rights (Harcourt 2012a), 3- and 4-year-old children used the written word 'OK' to document consent at the beginning of each research conversation. As can be seen in Fig. 7.1, children were given opportunity to revisit an affirmation of their agreement to participate in individual conversations, following the adult researcher's prompting of what had happened before and what was happening next.

This focus on informed consent with young children has been offered to help researchers give purposeful deliberation to the notion of research with children. In this way, there is a greater likelihood that shared understandings of the topic, roles and responsibilities will have clarity and bring legitimacy to an authentic and respectful research relationship between adults and children.

7.3 In What Sense Can Babies Be Research Collaborators? (Sue Gascoyne)

The argument about the nature of infants' participation in research (Dalli and Stephenson 2010; Farrell 2005; Sumsion and Goodfellow 2012; Thomson 2008) rests in part on adults recognising and being advocates of babies' capabilities

(Gascoyne 2012; Edwards et al. 2012a; Salamon 2015). Thomas (2001, cited in Waller and Davis 2014, p. 35) coined the term 'presumption of competence' recognising that if we believe in children's competence, rather than incompetence, they 'often turn out to be more capable and sophisticated than they are given credit for' (Waller and Davis 2014: p. 35). Alderson (2008) and Alderson et al. (2005) argue that despite an infant's 'essential vulnerable dependence' (Alderson and Hawthorne 2005, p. 33), even babies born prematurely are 'not only actors but agents who alter relationships, decisions and the working of social assumptions or constraints' (p. 47).

With inherently unequal power relations and limited language cues, researchers need an 'ethical radar' (Skånfors 2009, p. 1) or awareness of infants' physical expressions, to avoid missing otherwise potentially unnoticed signals. It is in this respect that *mind-mindedness* may have a role to play. Referring to an adult's 'ability accurately to "read" [an] infant's' intentions, thoughts and wishes (Meins et al. 2006, p. 182) can contribute to the ethical radar of researchers working with infants. Often referring to a parent's understanding of their own child's behaviour, mind-mindedness points to the benefits of familiarity when working with babies or even of researchers working with their own children in order to be sensitive to the child's cues.

The concept of 'process assent' is also relevant as this recognises the importance of researchers in ensuring that they are always mindful of children's responses within the research context so they may respond appropriately Dockett 2009). This is particularly helpful when considering infants, as adhering to the principle of process assent, gives children 'multiple opportunities to either confirm or withdraw their participation in the research' (Dalli and Stephenson in Loveridge 2010, p. 15). Dockett (2009) continues to remind the researcher of the importance of developing a relationship with the child prior to the research in order for a certain level of trust to develop.

Although infants' involvement in research was not the focus of Gascoyne's (2012) observations of babies playing with Treasure Baskets (collections of sensory-rich objects), babies' mastery in being able to express a desire for an activity to end appears to lend evidence to this 'presumption of competence'. Infants are primarily sensory beings, so the close observation of their sensory experiences seems to fit with gauging embodied responses in the research processes. Pink et al. (Pink et al. 2013) similarly recognise the value of sensorial information in their work on sensory ethnography, primarily with adults or families with older children. Gascoyne's observations of babies exploring and playing with objects revealed a range of strategies – physical actions, body language or vocalisation – for ceasing the session or expressing non-involvement. From turning their whole body away from the Treasure Basket to crying or crawling away from the resource/researcher, babies were able to express their withdrawal from participation. As these photographs demonstrate – if babies can convey delight, surprise and excitement or conversely dislike of objects through their facial expressions, body language and joint attention, then surely the same is also potentially true of an infant's relationship to the researcher/activity.

Photos: Gascoyne July 2006 – 6-month-old baby with parental consent

Even young babies not yet physically able to move away unaided have been able to clearly indicate their desire for the play or observation session to end, like this 5-month-old, who shifted his body to the side, triggering a response from the researcher and termination of the session.

Photo: Gascoyne June 2006 – same 5-month-old baby with parental consent

Although adult driven and therefore open to the same difficulties of interpretation that befalls all infant research, Leuven's (1994) involvement and well-being scales raise the question of the extent and quality of the youngest children's participation in research. While clearly not definitive, Laevers' (1994) strategies do provide a potential indicator of an infant's process assent; casting a spotlight on body language (as a potential indicator of well-being) and engagement can help develop and fine-tune practitioners' and researchers' 'ethical radar'. With high levels of

Table 7.1 An example of a phased approach

	Phase	Participants	Activity
1.	Phase one	Centre directors	Making contact and establishing professional relationships
	October through April (i.e. the end of the year prior to the study and the beginning of the new school year)	Teachers	
		Parents	Agreement to conduct research (centre directors)
		Children	Familiarisation (parents, teachers and physical environment)
		Researcher	Informed consent processes (parents)
			Familiarisation (children and programme delivery)
			Informed consent processes (children)
2.	Phase two	Whole group discussions with all children and researcher in one (sometimes two) half-day encounter each week in each centre	Establishing shared understandings about research
	April through July		What does quality mean?
			Experimenting with representational tools/symbolic languages
			Child-generated questions and answers
3.	Phase three	Self-selected children and the researcher in small group sessions half-day encounters each week in each centre	Recorded conversations and dialogues
	July through September		Child representations using cameras, drawings and written texts
			Concurrent data collection and analysis (with children)
4.	Phase four	Predominantly the conversational leaders (e.g. Renee, Beatrix, Celine and Alan) and the researcher in individual or paired interactions each week	Generation of texts and drawings
	September through December		Recorded conversations that were responding to emerging themes
			Analysis both with the children's involvement and without
			Reporting/dissemination mechanisms
			Concluding the study

Harcourt (2011)

engagement typically found by Gascoyne (2012) when infants engage in Treasure Basket play, departures from this are all the more obvious to spot on the researcher's ethical radar (Table 7.1).

Seeking parental consent as proxy for young children's participation is 'common practice' in research (Hedges 2001). Although no substitute for engaging the consent of the child, Winnicott (cited in Holmes 1996) suggested that the entity of a baby could not be separated from that of its main carer (or circle of adult support), such that both adult and infant provide perspectives of each other. This also foregrounds the importance of reporting findings back to parents and caregivers to inform their understanding of and relationship with their infant. With this in mind,

perhaps parental consent takes on greater significance in informing parents' and researcher's understanding of and relationship with the infant.

Researcher Reflection (Andi Salamon)
The idea that we can afford infants participatory opportunities in research by being open to engaging with them in 'real' and meaningful ways is a big one. There has been some debate about the nature of participation of infants in research, for example, Can we gain their perspectives? How? Do we really know? and so on. What seems to be the outcome people are coming to is the suggestion that gaining/ascertaining infant perspective is not the only option (Elwick et al. 2014b) for infants' participation in research. Creating conditions for (Palaiologou 2014) and developing relationships with infants, as a part of how the research unfolds (Degotardi 2011), open up possibilities for interactions that afford their participatory opportunities (Elwick et al. 2014a, b). Underlying new perspectives on participatory research with infants, however, is important to position infant participants in ethically symmetrical ways to adult participants (Christensen and Prout 2002; Salamon 2015). Doing so 'does not justify treating children as if they were the same as adults' (Christensen and Prout 2002, p. 479) but recognises the commonalities of infants as human research participants while acknowledging and honouring their differences. Working with an ethically symmetrical perspective can be achieved when researchers adopt a methodological attitude that recognises, respects and incorporates the agency of infants in research processes (Salamon 2015).

7.4 Younger Children's Engagement in Research (Jane Murray)

During two decades as an early years teacher, I witnessed the children I worked with investigating, questioning, developing systems to achieve goals, testing properties of materials and exploring; these seemed to be higher-order processes in which children engaged when directing their own activity. My experiences led me to believe that I observed young children researching naturally as part of their daily quotidian activity. However, I recognised that, while research in the academy is regarded as a universal right (Appadurai 2006), '…children are excluded…from the …rarefied world of the academy' (Redmond 2008, p. 17): a privileged space where foundational methodologies and deductive reasoning enjoy primacy (Hanna 2006; Hatch 2007; Thomas 2007) and where knowledge is produced (Warren and Boxall 2009) – a 'score-keeping world' (Lees 1999, p. 382) which sets itself apart from 'the people' (Bridges 1998).

Tensions also exist between views of children as evolving humans and experts in their own lives from birth (Langsted 1994, p. 29). Yet young children's abilities to develop 'a philosophy of what counts as knowledge and truth' (Strega 2005, p. 201) – epistemology – were established years ago in England (Isaacs 1944).

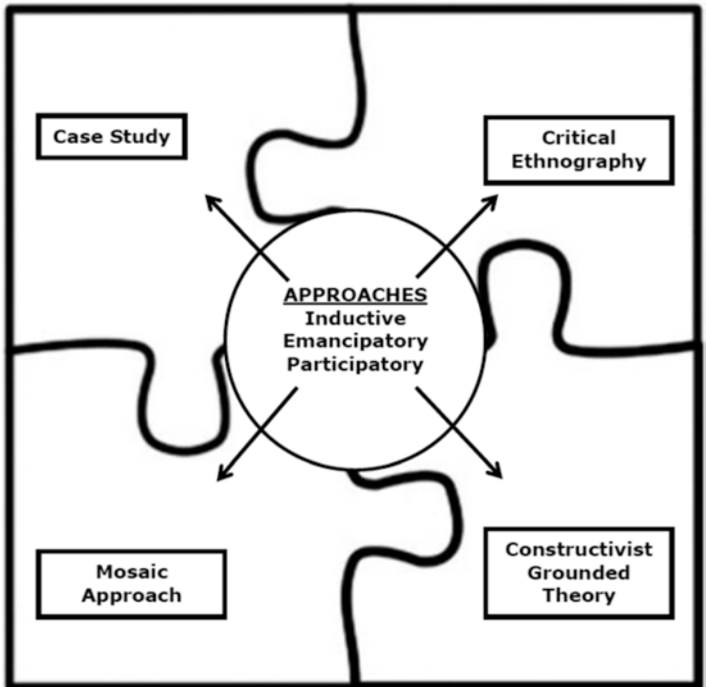

Fig. 7.2 Jigsaw methodology

Moreover, young children can be regarded as '…important human beings capable of understanding, communicating and influencing (their) own lives and those around (them)' (Harcourt et al. 2011, p. 7). It is appropriate, then, to challenge young children's exclusion from any aspect of society, particularly aspects which may affect their lives, as an issue of social justice (Truman et al. 2000). To address these contested spaces in regard to research, the Young Children as Researchers (YCAR) study (Murray 2012) aimed to conceptualise ways in which young children aged 4–8 years are researchers in everyday activities.

Beginning from a value orientation of social justice, three principled guiding approaches were adopted. YCAR was *emancipatory* to enable young children's own research to be evidenced, it was *participatory* to include young children as researchers, and it was *inductive* to maximise use of the children's contributions as the project developed. Following original intentions to work in an interpretive paradigm and adopt constructivist grounded theory (CGT) (Charmaz 2006), and in response to emerging data, those decisions developed as the project progressed, resulting in a pluralist qualitative approach (Frost 2009), comprising plural paradigms and a jigsaw methodology shaped by four single methodologies (Fig. 7.2).

The first phase of data collection and analysis was conducted with an adult group, reflecting young children's exclusion from the academy's world (Redmond 2008). To persuade the academy that young children aged 4–8 years can be researchers, the

Table 7.2 Phase 3 participants

	Annie and family A	Billy and family B	Gemma and family C	Harry and family D	Martin and family E
Setting (Phase 2)	Ash	Ash	Beech	Beech	Cherry
Gender	Girl	Boy	Girl	Boy	Boy
Age during Phase 3	8 years	8 years	5 years	5 years	5 years
Living with	Mother	Mother	Mother	Mother	Mother
	Father	Father	Father	Father	Father
		Sister (9 years)	Brother (8 years)	Brother (4 years)	Sister (4 years)

YCAR study set out to identify a definition on the academy's terms, before applying that definition to the quotidian behaviours of young children. Therefore, the YCAR's first phase comprised a survey, semi-structured interviews and a nominal grouping exercise (Delbecq and VandeVen 1971) with experienced professional researchers (n = 34) from the fields of education and early years, whose research profiles indicated their affiliation with the academy. A single definition of research remained elusive: instead this process elicited 39 research behaviours, forming a Research Behaviour Framework, from which the professional researchers identified their four most important research behaviours: exploration, finding a solution, conceptualisation and basing decisions on evidence.

In the study's second phase, data concerning 138 children's naturalistic behaviours were captured in their three English primary schools by myself, the children and their practitioners and analysed and interpreted by us as well as a focus group of professional researchers. This phase included 106 4- and 5-year-olds and their 13 practitioners and a class of 32 7- and 8-year-olds with their two practitioners. Subsequently, five of the Phase 2 children and their parents participated in Phase 3 (as in Table 7.2), capturing and analysing data at home.

For Phases 2 and 3, data emerged from multiple methods: interview conversations, live and video observations, photographs, field notes, focus groups, artefacts presented by the children, documents and analysis sheets. Guided by the jigsaw methodology's four components, a complex recursive, participatory approach was adopted for the analysis and interpretation of data. The incremental development of the research design was valuable in facilitating recognition of data. As a researcher, I matched appropriate methodologies to emerging data rather than the data being dictated from the outset by a single predetermined methodological rubric. In this way, the research design remained faithful to its value orientation and guiding approaches: its form matched its function. The findings focussed on the four most important research behaviours identified by academy members in Phase 1. Final analysis elicited 80 subfactors spread across nine key epistemological factors that were present in participating young children's quotidian activities at home and at school. These epistemological factors indicated young children's engagement as researchers, demonstrating behaviours such as application of prior experience, innovation, autonomy, material contexts, dispositions and cognitive and social domains.

Table 7.3 Martin's behaviour as causality

Hume's definition of causality (1739, iii, pxv)	Martin's behaviour
'The cause and effect must be contiguous in space and time'	Martin jumped and within seconds his hat fell off
'The cause must be prior to the effect'	Martin jumped (cause) and then his hat fell off (effect)
'There must be a constant union between the cause and effect'	Martin articulated his perception of the correlation: 'I'm seeing if my hat falls off! Watch this, dudes!'
	The 'union' occurs when his hat falls off as he jumps: the hat falling off seems to result from his jumping
	Furthermore, prior to the event when Martin says to his friends: 'I'm seeing if my hat falls off! Watch this, dudes!' he indicates that he had developed a causal theory in advance of testing it (Gopnik 2009)

The following vignette is a demonstration of how the epistemological factors were derived from the children's everyday activities.

One day during school playtime in Cherry Setting, Martin (5 years) stood in the middle of the playground, wearing a sunhat. Two more boys (5 years) joined him. Martin bent over and said to the boys: 'I'm seeing if my hat falls off! Watch this, dudes!' then he jumped up and down until his hat came off.

This is an example of a child's engagement with cause and effect as a subfactor of the cognitive domain, as revealed through the research behaviour of exploration. Similar encounters illuminated other aspects of the identified research behaviours.

While causality has been redefined significantly in the past century in the physical sciences (Born 1949), Hume's definition of causality (1739) continues to prevail in the social sciences. It can be argued that Martin's behaviour in the vignette aligns with Hume's definition, as in Table 7.3.

Moreover, Martin seemed to indicate some 'intellectual understanding of physical systems and living organisms' (Smeyers 2008, p. 64) and a capacity to explore, congruent with professional researchers operating within the academy (Stebbins 2001).

In the YCAR study, adoption of a value orientation to social justice alongside principled guiding approaches informed an emergent, pluralist methodological approach that led to the capture of research behaviours undertaken by participating young children. In turn, these data led to the claim that children's behaviours captured during the study were congruent with adult researchers' behaviours. Despite the adoption of an inductive approach for the majority of the study, this claim is based on deductive logic, the academy's preferred model of reasoning (Pring 2000): a conclusion is true if its premises are true (Johnson-Laird and Byrne 1991). The

Research Behaviour Framework (RBF) is populated with behaviours identified by academy members as research (major premise). Participating children engaged in behaviours included in the RBF (minor premise). Participating children behaved as researchers (conclusion). Research is recognised as a universal right (Appadurai 2006), and the YCAR study demonstrates that this can be as much the case for 4–8-year-old children as it is for older people.

7.5 Preschool Researchers

7.5.1 Researcher Reflection (Anette Boye Koch)

Engaging Children in Research Photo taken by a 5-year-old boy in order to illustrate how he experiences joy when playing with his peers

When 4–5-year-old children are encouraged to be research collaborators with the explanation: *I am writing a book about preschools, but I need some children to help me explain, what it is like to be a preschool child. Because it is only the children who really know* and are requested to help take some photographs to illustrate 'the book', they usually accept the task with excitement. The children receive the digital camera they are offered and immediately start searching their preschool setting to find suitable motifs.

Young children are very eager to participate and co-operate in research. They are excellent collaborators and accept the challenge to speak up right away. They are skilled in providing answers to adult questions but also in telling an adult researcher *what they think she wishes to hear*.

An implicit theme within the idea of children as co-researchers is respect for the researched group and for their own views and abilities (Alderson 2008). Research design should therefore endeavour to get child informers to tell their *own version* of

an issue and thus provide child perspectives that are as authentic as possible. It is a child's right to be heard in all childhood matters, and it is necessary to find out how this might most credibly happen in each situation.

7.5.2 Different Ways of Collaboration

Collaboration is a necessity when doing research with children in order to encourage child informers to tell their 'own truth'. Research implementation should strive to provide children with power to take decisions, e.g. set the agenda of an interview or in another way experience a shared ownership to the research process. They should be invited to participate as active agents out of their own free will and with the awareness that their contribution is of great value.

Alderson (2008) differentiates between various kinds of co-research depending on the stage of research where the children are invited to participate. The author identifies the middle stage of projects as the most common stage – the phase when data is collected and analysed. MacNaughton et al. (2007) offer four different degrees of co-research with reference to an adaptation of Arnstein's (1969) ladder of citizen participation. I distinguish between involving young children in research either as informers and co-producers of empiric data or more radically as informers AND consultants in other project phases (design, analysis, dissemination and reporting.).

Collaboration in Practice

I have often introduced the actual research task by asking young children to pair up and take photos of motifs they choose independently ('what makes you happy in preschool?' or 'take some pictures of places where you have some memories of being with your preschool teachers'). Thus, the children are in charge of the photo session, while I try to follow them on their tour around the preschool in order to audio record as much of their mutual dialogue as possible.

Afterwards, we do the actual interview while running a slideshow on a PC, one photo at a time. In this manner the children themselves decide the agenda of the interview, as I ask questions like 'why did you take that photo?' 'what were you doing there?' and 'how did it make you happy?' The children reply to my questions as best as they can, while I try to follow their lines of thought and ask further questions accordingly.

The term *child informed* explicitly articulates in what way the children have participated in the research process. When children collaborate in research by answering questions and contribute with narratives, artwork, photographs or maps,

they inform the production of empiric data. They collaborate in the production of knowledge on a theme from a *child informed* perspective.

7.5.3 Various Child Perspectives

It is crucial to bear in mind that there is not *one* but *various* child perspectives. Children differ due to their diverse life circumstances, preferences and competences. It is important to include not only children who are verbally strong and adept at relating to adults in a study, though they are often far easier to engage. When children participate in research, we should listen to and include the voices of all different *kinds* of children – not just those who are most evident.

There is much intuitive feeling in being able to relate to children and encourage them to talk and participate in research; not all researchers are able to do this effectively. You need to be simultaneously attentive, curious, interesting, authentic, enthusiastic, humble and grateful. When a researcher manages to open her mind and turn her attention towards what is going on in the world from a child-sensitive perspective, it is like a special pair of glasses that enables you to sense the world from another angle. Details and nuances that were earlier overseen are now suddenly clear.

How is it possible for an adult researcher to understand and grasp what children express? Children express themselves differently mainly because they are not adults – in research their contributions are always interpreted by an adult in some way – so in what way and with what words do it make sense to talk of a child perspective in research? Sommer et al. (2010) differ between *child perspectives*, when adult professionals study children from the outside-in trying to imagine what it is like to be a child in a certain context and *children's perspectives* expressed by the children's own words or productions from the inside-out and the expressions that adult researchers try to interpret. I suggest a vocabulary, where I differ between studies taking either a child-informed perspective on a theme in comparison to studies that try to depict a child-sensitive perspective on ECEC everyday life. Such specific terms explicitly formulate in what way (through choice of research method) the children have participated, such as answering questions and otherwise informing the production of empiric data (a child-informed perspective). Alternatively they might participate less directly if a researcher is doing participant observations with a subtle sensitivity directed towards child expressions, actions and body language (a child-sensitive perspective).

7.6 Participatory Research with Vulnerable and Marginalised Groups (Colette Gray)

As has been suggested earlier, the ratification of the UNCRC (United Nations 1989) by 194 member states signalled a new direction for policy and practice. At the same time, the UNCRC informed paradigm shifts in the new social studies for childhood and developmental research towards a rights-based perspective which views children as active participants rather than passive vessels (Butler 2009). According to Ennew and Swart-Kreger (2003), these approaches reject the presentation of vulnerable and marginalised groups as broken or dysfunctional. Also eschewing the theoretical positioning of children with disabilities against a gold standard of 'normal', which treats them as lesser, recent concerns have been expressed about privileging Minority World rather than Majority World childhoods (see Tisdall and Punch 2012).

7.6.1 The Voice of the Child

This new era heralded a veritable torrent of child-centred initiatives (Gray and Winter 2012) and elevated listening to children to a 'new orthodoxy' (McLeod 2008: 45). A range of substantive issues have however been explored with the aim of affecting change. For example, the voice of the child with a learning disability is informing the development of child protection policies in Northern Ireland (McKee 2014). Research into children's experiences of living with a thyroid condition influenced policy and practice in a London hospital (Davidson 2008). Thomas de Benitez (2011) sought to give voice to marginalised groups of children typically termed 'street children'. Her report for the Consortium for Street Children which has 60 member organisations working in 130 countries challenges the term 'street children' on the grounds that it suggests a homogeneous group when children have multiple identities. There are noticeable similarities between the argument presented by Thomas de Benitez on behalf of street children and those coalesced around the social model of disability, which drove forward anti-discrimination legislation. From a rights-based perspective, both focus on children's agency. Introducing a caveat, Tisdall (2011a, b) notes that the agency model can be inhibiting rather than liberating as it ignores the physical and situational limitations that make agency an aspiration rather than a reality. For example, Connors and Stalker (2007) found children with a disability tended to minimise their differences in order to present as more similar than different from other young people. They argue that this is the child's response to pressure from parents and the school who discourage them from discussing their disabilities and encourage them to 'pass [themselves] as normal'.

7.6.2 Agency: Fact or Fiction?

With regard to agency, de Benitez (2011) reports how street children frequently juggle three jobs seeking seasonal labour and work at cultural festivals and tourist centres. She cautions against romanticising this as autonomy or agency. Although children show considerable resilience in finding work, Thomas de Benitez describes this, at best, as 'thin agency' (p. 30). This and the previous example lend support to claims that the focus on children's agency ignores the negative, challenging and limiting context where agency is circumscribed or not possible (White and Choudhury 2010). Similarly, the promotion of the child's voice risks privileging this form of communication over others and discourages researchers from actively involving children who are unable or unwilling to verbally communicate their thoughts and experiences. Support for this contention comes from a report by the United Kingdom Children's Commissioner (2008) which notes that children and young people with disabilities are much less likely than those without disabilities to participate at any level, particularly those with complex requirements or with only non-verbal communication. In essence, participatory research which seeks to give voice to the child remains adult managed, manipulated and reported. It is also argued that participatory research is tokenistic and has no long-term impact on children's lives (Gray and Winter 2012).

In summary, the voice of vulnerable and marginalised groups remains under-represented in the literature. Thomas de Benitez (2011), for example, found a dearth of studies seeking to actively engage street children in the research process; similar claims are made by Tisdall (2011a, b) with regard to children with a disability. The provocation remains for researchers working within Childhood Studies to debate, challenge and redefine claims regarding agency, participatory research and giving voice to children. In troubling the established discourse that influences policy, practice and taken for granted assumptions about agency, alternate interpretations become accessible and may be redefined within the frame of participatory research discourse.

7.6.3 Researcher Reflection: Voices from Pen Green (Jonathan's Story) – An Extract from Whalley et al. (2012)

The Pen Green Tracer Study (2012) questioned the difference nursery education may have made to children who later, then aged 11–21, revisited their nursery. Walking-talking discussions in the setting with members of staff they had known elicited the children's memories and values. Emerging research strands were the children's sense of self, key worker attachment and parental involvement. This methodological approach afforded a phenomenological reading and multimodal interactions with experiences.

Jonathan, now aged 21, is a talented musician. He is blind. Molly, his mother, selected this Children's Centre rather than a more specialised structured setting. During the Tracer Study, he listened to archives of his interactions with staff. He remembered names and characteristics of a range of workers from 18 years previously, particularly Katey, his nursery key worker. In a layered approach, Jonathan revisited the nursery with Sally, a researcher his own age, and Cath, another member of staff. In their company he identified the value of the pots and pans that he used to make noises with in the Home Corner, hammered a nail into wood and sat on the little chairs. He also relived his interaction with the resources hand in hand with Sally, bouncing on the trampoline and throwing balls while immersed in the ball pool. The discussion prompted him to consider if there was anything that nursery could have done to help him with the transition to school, Jonathan replied:

> I can't think of anything … Because when I went to school I still had someone with me the whole time … The only thing that, obviously, no nursery can really change is that you sometimes get told off at school, but that's … that's nothing … as frightening as it is at the time, you know, it's part of growing up.
>
> Sally explored the question of whether nursery could have prepared him for this by limiting his freedom of choice. Jonathan disagreed, saying that, 'No ... I think school, I think that's the right place to learn that. I didn't get that at nursery, I didn't get told off at nursery which was good.'
>
> S: You think that's good, that you didn't get told not to do things? I suppose it's like a progression as you get older, maybe?
>
> J: I got told **not to do things**, but not **told off** … there's a difference.

When asked to pick a word to describe his nursery, Jonathan replied, 'Idyllic or … magical, 'cause let's face it, nursery is a time of magic, it's brilliant, in terms of ... that whole kind of, anything you want to do you can do, it's all there'.

7.7 Approaches with Potential for Researching Authentically with Young Children

Alma Fleet and Jane Merewether

Einersdóttir (2007) cautions that 'Researchers who conduct research with children have to be creative and use methods that fit the circumstances and the children they are working with each time' (p. 207). While quantitative research is able to provide information about the lives of young children, it is qualitative approaches that have provided the most promise for researching *with* young children. Such approaches allow researchers to work with children in naturalistic, everyday settings. Qualitative methodologies are amenable to hearing participants' voices – crucial if children are to be heard – and they allow for the possibility of children's control of the research, although this is not necessarily the case. Qualitative approaches to gathering data through conversations and non-verbal means of communication such as gesture, drawing, photography and other arts-based means provide the possibility to offer methods that are attractive to children. However, as Fraser et al. (2014, p. 82) note,

'using the term "child-friendly" to describe data production techniques may wittingly or unwittingly undermine the principle that young people must be considered competent experts in their own lives'. This underscores the fact that so-called child-friendly strategies are also common to research with older people and are not the exclusive domain of research with children. In addition, Cheeseman and Robertson (2006) express a cautionary note about the potential of some forms of observation (and recording about) children being seen as surveillance, with little opportunity for young children to avoid (or choose to engage in) participation. In addition, while they note that 'The idea that infants express themselves non-verbally through their bodies and behavior is unproblematic' (p. 200), Elwick et al. (2014a) claim that 'the participatory research agenda with infants' is contested:

> Knowing anything for certain about infants, including whether such things as 'infants' perspectives' exist, is profoundly difficult if not impossible. We conclude that awareness of the inherent uncertainties in studying infants reconstructs such research as a site for ethical rather than epistemological practice. (p. 198)

Acknowledging this caution, it is also clear that two sources of inspiration have been particularly influential in developing respectful ways to work with young children: participatory action research (PAR) and the educational project of Reggio Emilia. These will be discussed before expanding on the particularly influential 'Mosaic approach', which draws on both PAR and the project of Reggio Emilia.

7.8 PAR

Participatory action research is an umbrella term for research that has its roots in the work of Kurt Lewin (1946) and has at its heart a desire to conduct research 'with' people rather than 'on' them (Reason and Bradbury 2008). PAR was developed by social scientists as a means of empowering groups of people to effect change by placing the research into the hands of the groups involved (Lewin 1946; McTaggart 1991). Participation continues throughout the entire research process, thus democratising knowledge production. This democratisation of knowledge allows people to engage in collective problem-solving using a reflective spiral of planning-acting-observing-evaluating steps in order to improve their own practice (McTaggart 1991). It uses a range of qualitative strategies such as participant observations, interviews, document analysis, field notes and journals (McTaggart 1991). Veale's (2005) work with PAR in Rwanda, as amplified by 'creative methodologies', highlights also the potential of arts-informed approaches with children and young people in challenging circumstances.

7.8.1 Reggio Emilia

The world-renowned Reggio Emilia educational project for children aged from birth to six in which children and adults work together with an 'attitude of research' (Rinaldi 2006, p. 101) that is carefully recorded using pedagogical documentation (Dahlberg et al. 2007; Edwards et al. 2012b; Fleet et al. 2006, 2012; Giudici et al. 2001) provides many methodological possibilities for research. Central to the project is the notion that children 'possess a hundred languages, a hundred ways of thinking, of expressing themselves, of understanding, and of encountering others' (Infant-toddler Centres and Preschools Istituzione of the Municipality of Reggio Emilia 2010, p. 10). For researchers, this metaphor opens the door to a myriad of data production possibilities. No longer are researchers constrained to verbal means of expression; the Reggio Emilia project has shown how children can communicate in many different ways.

Another key principle of the educational project of Reggio Emilia is the 'pedagogy of listening' (Rinaldi 2006, pp. 65–68). This pedagogy listens with openness, sensitivity and curiosity, using all of the senses. It involves interpretation, and rather than producing answers, it generates more questions. A pedagogy of listening welcomes different points of view, which requires suspending judgement and being open to change (Merewether and Fleet 2014).

7.8.2 Mosaic

Taking inspiration from both PAR and the Reggio Emilia project, Clark and Moss (2001) developed the 'Mosaic approach', a multi-method, participatory research approach for researching children's perspectives which uses traditional research methods of observation and interviews, as well as a variety of participatory strategies including child-led photography, book making, tours and drawing. The findings from these activities are then brought together to create a 'picture' of children's perspectives. The Mosaic approach has provided a framework for an increasing number of researchers who have sought young children's perspectives by involving them in the research process (Cremin and Slatter 2004; Dockett and Perry 2005; Fleet and Britt 2011; Merewether and Fleet 2014; Smith et al. 2005; Stephenson 2009).

Government instrumentalities in some countries may be on the cusp of acknowledging the importance of researching with children in order to gain their input on matters that affect them, using aspects or adaptations of the Mosaic approach (Clark and Moss 2001, Clark 2005a, b). For example, in 2013, the South Australian Department for Education and Child Development involved 350 children between the ages of 3 and 8 years in consultations across the state to investigate what was important to them in their communities. 'The question was deliberately open-ended so as not to pre-empt children's interests in some aspects of their communities and

not others' (Harris and Manatakis 2013, p. 68). Findings gained through multimedia formats fed into the state's planning procedures, in recognition of Article 12 of the UNCRC (United Nations 1989).

Local areas can also respond to this challenge, as has been evidenced in New South Wales, Australia. The city of Canterbury council worked with the local university to garner the perspectives of children from across the area over a 12-month period in order to influence their decision-making (Canterbury City Council 2014). Dockett and Perry (2007) worked with the State Government to develop a position statement on transitions to school in consultations that included young children. Such initiatives deserve to be more prevalent.

7.8.3 Researcher Reflection: A Phased Approach to Researching with Children (Deborah Harcourt)

The international research community is developing a rich, substantial body of work around investigations with children. However, with very few exceptions (see Clark and Moss 2001; Clark 2010), little has been advanced on how to systematically approach this work from conceptualisation through to dissemination. This reflection seeks to present a reference point for researchers considering such an enterprise.

A phased approach is offered here which has been constructed and reconstructed in various projects to respond to specific research contexts, across three international settings. As the basis for developing this approach, I sought the provision of research space for the active participation of groups of children, aged 3–6 years, and was interested in contributing young children's standpoints through acknowledging children as experts in the lived experience of early childhood education. Such an approach would firstly support the development of relationships, implicitly and/or explicitly, as a phenomenon is being examined. Wiltz and Klien (2001) suggest using participant observation across a continuum, from passive outsider observation to a participant role. Erikson (1979) proposes that a continuum could lead eventually to full engagement. This approach has assisted me in establishing an accepted active researcher presence in prior-to-school settings used as research sites and helped to avoid unnecessary discomfort or disruption to the programmes involved. Serious consideration was given to allocating time to develop relationships with staff and children, which is an imperative to the success of the studies. I acknowledge that extended periods of time are often not available to researchers, but genuine attempts must be made to focus on building authentic research relationships within the constraints of each project.

Planning by phases of research enables the researcher to provide a structure to their work that carefully considers the complexities not only of researching with young children but also the factors that may impact each context. In this way, the researcher is able to have flexibility to respond to matters such as time, group sizes,

capacities of the children, preferred communication and representational tools and other (sometimes unexpected) factors. While the ethical and practical applications of this type of research can at times seem overwhelming, the potential that young children's standpoints offer to critical conversations being undertaken in a range of disciplines will contribute enormous richness to our current knowledge about children and childhood. Not only can we engage young children's active participation in research processes as part of their mandated rights, but we also stand to add unique perspectives, on a broad range of issues, to understandings about matters concerning young children.

7.9 Through the Eyes of a Documentary Film-Maker: The Frontier of Documentary, Education and Research (Penny Lawrence)

To my mind the key principles in researching with children are to consider the extent of the co-construction of meaning with them and how we may move beyond our own perspectives. In Reggio Emilia the practice of documentation is made in dialogue between children and children, children and adults and between adults. It is that essential process of co-construction that moves beyond the transmission of children's ideas into a dynamic growth of knowledge. It is participatory research as education.

In documentary-making, the extent of co-construction can start very young. Two-year-old Ned was the first ever child to light up a Teletubby's stomach (Wood and Davenport 1997). It was Ned who established the way of relating to the viewer when he cycled up to the camera. He addressed us through the theatrical fourth wall. It was Ned who initiated and co-constructed that relationship. Of course he was relating to me, the director, and to the cameraman, not to the subsequent millions of viewers. However, the viewers also experienced something of his purposefulness, his agency as he cycled towards them and throughout the film as he described and demonstrated how he fixed his and his dad's bicycles. This quality of relating is possible, and I would even argue it is an ethical necessity when researching with children. I have in mind what Reddy (2008) calls a second-person approach, through which the researcher acknowledges his/her relation to the child. The second-person approach stands between an immersed first person subjective approach attempting to see the child's perspective and, on the other hand, engaging in an invisible third-person approach seeking an impossible objectivity.

Documentary-making can be instrumental, seeking materials to illustrate a preconceived argument. As such, video would work in the mode of extraction; the knowledge and experiences of children would be mined for the purposes of the project. Social science research can work with video in several ways beyond extraction. Haw and Hadfield (2011) identify four other modalities: reflection, projection and provocation, participation and articulation. Each modality would involve

children more extensively higher up the level of participation (Hart 1992), although of course each modality would have its own levels of intensity. For example, video used for reflection as it is in Reggio Emilia is a tool for the mind (Forman 1999) allowing children to leave the cognitive load or narrative burden of describing what happened and to move into higher-order reflection, explaining and evaluating their learning experiences as they look back at them.

Documentary-making can also work in an inductive way, seeking to find out the unknown, although this has greater resource implications for the necessary time to record and process the material. In this, the process is akin to qualitative research. Vidich and Lyman (2000) show how methods in early ethnography grew out of the researchers' interests in understanding the 'Other'. When the child is framed as *other*, methods may draw deficit comparisons with adults. Not othering the child means engaging with his or her perspective. Nagel emphasises that perspective is vital to the knowing of the other, 'it is the essence of the internal world, and not merely a point of view on it' (1974, p. 5).

The framing I choose determines what and how much (wide or close up) can be seen or known of the child's experience and the potential meaning of power – relations between children, adult and viewer are determined in the high, eye-level or low camera angle (Jewitt and Oyama 2001, p. 135; Goffman 1974; Goldman 2007, p. 5). For Goldman, the camera creates a shareable presence in four ways, including 'perspectivity', which affords both the videographer's and other subjective points of viewing (2007, p. 5). The deliberate use of perspective can change the appearance of events considerably when viewed from the point of view of a child, *if* we can adopt that point of view.

There is a sense in which phenomenological facts are perfectly objective: one person can know or say of another what the quality of the other's experience is. They are subjective, however, in the sense that even this objective ascription of experience is possible only for someone sufficiently similar to the object of ascription to be able to adopt his point of view (Nagel 1974, p. 438).

An example of the potential for shifting perspective is the experience I had of recording a certain siege in Sudan for the UK TV series, *The Investigators*, (Lawrence and Nicholson 2000) presented entirely by children. I worked with the descendent of the Mahdi who attacked and defeated Gordon of Khartoum. The 10-year-old girl turned the event 180° around from my expectations to describe the British as the threat and her forbears looking after the city, land and people. We worked with a model set in the desert as she retold the story, and I filmed from her point of view looking into the city at the outsider Gordon within.

It is important to document also the role of the adult when there is vitality in their interactions with children's thinking. For example, elasticity of mind and responsiveness is embodied in Evelina Reverberi, a teacher at the Diana School of Reggio Emilia. She lit up when a child opened up ideas beyond those she had planned for, beyond the preconceived, crossing the boundaries of her thoughts, (*attraversare il confine* roughly meaning 'to cross the border' in Italian). This light set the climate, the relational context in which a child wanted to share ideas. For her, seeing from another's point of view was enlarging and enriching. She taught alongside Malaguzzi who, to express that going beyond the confines of individual thought, used the

imagery of 'the eye that jumped over the wall'. This was the original name for the '100 languages of children's exhibition of children's thinking in a pedagogy based upon relationships' (Malaguzzi 1993). The eye or the knowing does not stop at the frontier of one's own wall or enclosed self. It is how the ethics of relationship is lived out, 'giving particular attention to how to relate to the Other in a responsive way' (Dahlberg and Moss 2005, p. 76) but not necessarily presuming that the Other is the same. My knowing of the child as *other* is partial, fragmentary and momentary; when observing we also have to jump over our walls to see these things.

7.10 Providing Insight Through Pedagogical Documentation: Seeing Research as an Everyday Practice (Suallyn Mitchelmore)

As a method, pedagogical documentation is a concept for making children's ideas and learning visible through gathering and analysing examples of conversations, photographs, video film and artefacts such as clay pieces, constructions, drawings and paintings. It is a way of working that is provoked by the work of educators in Reggio Emilia, Italy, where it is described as 'educational documentation' and is described by Rinaldi as 'visible listening' (2006, p. 100). Pedagogical documentation can take many forms, for example, an A4 or A3 booklet or a panel on the wall. It shares the journey and the thinking of the children and adults around a particular investigation and includes photographs of children and educators engaging in work in process, transcripts of children's reflections and conversations as well as the thinking of educators.

Pedagogical documentation does not simply tell or retell a story; significantly it is bounded by a conceptual thread or narrative running through the investigation (Edwards et al. 2012b; Guidici et al. 2001). Dahlberg et al. (2007) reason that pedagogical documentation has two interrelated qualities, 'content' and 'process' (p. 147). The content refers to the material that is produced in pedagogical spaces, including notes, photographs and observations, and it is fundamental to the 'process' of pedagogical documentation. The process is central to pedagogical documentation and involves analysing and researching the thinking and meaning making that accompanies pedagogical work.

7.10.1 Concurrent Data Analysis and Data Collection

The processes of pedagogical documentation serve as both 'mirrors and windows', reflecting back on an experience while simultaneously provoking 'new horizons' (Barry 1996, p. 428). Further, Clark (2005c) argues that inclusion of research methods that engage in 'multiple listening recognises the need to make space for the "other"' (p. 38). The processes of pedagogical documentation inherently support the interplay of concurrent data collecting and data generating. The inclusive and reflective nature of pedagogical documentation makes visible the thinking of children,

acknowledging the 'listener as an active participant, co-constructing meanings in a reciprocal relationship' (Moss et al. 2005 p. 11). Indeed, the methodology of pedagogical documentation is in keeping with the nature of knowledge as a space of plurality and a transformation. Documentation is in itself a generating, active agent that sustains the mutuality and interdependence of being and becoming:

> In terms of action, you document what happens, and then you lay out the documentation on the table to re-visit, re-live or re-enact and unfold some of the multiplicities and differentiations of the event, but instead of thinking of such actions in terms of the progression from the present to the future, we think about it as an ongoing duration of the event. (Lenz-Taguchi 2010, p. 95)

Pedagogical documentation invites and honours the multiple voices of children as equal participants in thinking processes. It is a form of data collection and analysis that is accessible; it does not preclude children from contesting interpretations and the educator's/researcher's final analysis (Bae 2005; Tobin and Davidson 1990). Moreover, pedagogical documentation has the capacity to fulfil the role of a 'prompt' of 'stimulus material' by stimulating and engaging discussion (Speer 2002). The documented images, observations and reflections support a respondent-centred avenue for exploring the insights of children and spring-boarding future decision-making. Furthermore the context of the research site is a fundamental consideration when evaluating the potential of pedagogical documentation as a methodology to support collaborative research with young children. Researchers must ask themselves, 'Is this a way of working that children within this context are familiar with?' If young children recognise the processes of pedagogical documentation through previous experiences of co-researching alongside their peers and educators, it is more likely that they will bring to the research project an understanding that you are interested in their thinking, actions and responses.

Prosser and Burke (2008) state that 'Visual research is well placed to access, interpret, and give voice to children's worlds' (p. 407). Pedagogical documentation can also be seen as a communication avenue that supports joint analysis of data collection, inviting children to interpret their own data (Morrow and Richards 1996; O'Kane 2008). The inclusion of young children's experiences gives a rightful place to the richness that children's perspectives can contribute to understanding the nature of early childhood education and other issues that affect and impact upon young children's lives.

7.10.2 Pedagogical Documentation and Privacy

Given that data collection involves the recording and representation of data in the form of text, photography and video, consideration of issues related to risk, privacy and potential vulnerability of minors is essential. The research design must adhere to policies of the early childhood service in relation to publication of images of children, as well as protocols related to local regulations associated with images and privacy. Furthermore, if at any time a child is uncomfortable with being filmed or

photographed, then filming should stop. Protocols should be in place to manage situations where a child has displayed discomfort, such as the researcher reporting to the primary caregiver or service director who will follow up on the welfare of the child, ensuring that they understand their right to withdraw.

In this context, an advantage of pedagogical documentation is the transparency of data collection. As it is a reciprocal process, the purpose of which is to make thinking visible, pedagogical documentation has the capacity to overcome any suggestion of 'secrecy' that may be felt by children. The images and text that are collected are then placed back into the hands of the participants, to create a forum where further data is generated and collected data can be discussed and contested. Significantly, it is essential that the researcher's role as an observer, documenter and participant be explained to the child, so that they are aware that they are being observed. It is imperative that children are asked if they are happy to be photographed and furthermore that opportunities are made available for children to view video and photographic data. As data is collected, the researcher utilises opportunities to check and clarify with children that observations have been understood through sensitive and age-appropriate questioning and open discussions. Being transparent with children is essential to the integrity and validity of research; pedagogical documentation can be considered a conduit to meeting this objective.

7.11 Challenges for the Future

It is clear from the work reported here that, increasingly, researchers are viewing children as knowledgeable and competent members of society who are capable constructors of their own knowledge (Dahlberg et al. 2007; Rinaldi 2006). Merewether and Fleet (2014, p. 898) note that:

> Theoretical perspectives associated with socio-culturalism (Rogoff 2003; Vygotsky 1978) have made a major contribution to changing images of children. Sociocultural theory draws attention to the role of social context and social meaning in learning and suggests that children, from birth, construct their understandings in partnership with others, both adults and children.

These orientations set the groundwork for conceptualising the ways in which researching 'with' children might proceed.

This exploration also raises issues, such as, is there a continuum of 'researching with children' that includes respectful designs, collaboration and involvement in one or more aspects of the study (e.g. design, data tools, timing, analysis, interpretation)? Note, for example, the work of Shaw et al. (2011) which seems a useful model for exploring the continuum of ways in which children can be involved and therefore could potentially be effective in recognising and structuring differences in involvement and ownership as a reflection of children's age. As Gascoyne notes, the idea of 'process assent' was raised in relation to babies' involvement in research but is equally relevant to older children too. She reports (2014, personal communication):

> As the focus of much of my own early research involved my own infant son, I have been able to revisit his involvement in research by seeking his views and consent for the continued use of his photos in publications like this. In one such discussion, my son- now 8 years old- explained that he was happy for photos of himself to be used provided that his name was not included. This raises the issue of the permanency of children's contribution to research, particularly images and therapeutic process work, and the child's right to change their mind or withdraw assumed assent/consent.

Presenting the nuances and subjectivities of children as individuals who are capable of sharing experience and perspectives lessens the possibility of research findings that are 'reductionist, static, limited and objectifying approaches to analysing data and describing and categorising' (Bae 2005 p. 288). Pedagogical documentation invites children into dialogue that is respondent centred and non-hierarchical and reflects multiple voices and perspectives (Speer 2002).

Can respecting and 'honouring' children usefully be seen to have multiple interpretations? And should the sector be more conscious about how the terms are used, i.e. what does (co)-researching with children mean to different people? What aspects of a respectful framework could be said to be 'general' (i.e. not age/context/individual specific), and what aspects are dependent on age/stage/culture and so on? Is this knowable or should it remain negotiable and interpretive?

Methodologies Are Critical

> Respecting the rights of young children to be heard necessitates a preparedness to create a space to listen to their views in ways appropriate to them- through music, movement, dance, sport, storytelling, role play, drawing, painting, photography, hobbies, community and family activities, as well as through more conventional dialogue. This requires the provision of time, adults willing to listen, and environments in which children feel safe and comfortable. (Harrris and Manatakis 2013, p. 75)

It is clear that the environmental vision projects that seek children's perspectives for policy development and the pedagogical practices that engage children as collaborators in processes such as pedagogical documentation highlight the potentials of enabling the rhetoric to more closely align with goals of co-researching with children and foregrounding their perspectives in matters that concern them. Trusting relationships and respect for children's time and space are paramount.

7.12 Addendum: Key Threads

On March 31st, 2015, as the result of a collaboration between the Australian Human Rights Commission and Early Childhood Australia, the Australian National Children's Commissioner, Ms. Megan Mitchell, launched a seminal document

entitled Supporting young children's rights: Statement of intent (2015–2018). In the context of this chapter, the document is important for several reasons: firstly, that the position of National Children's Commissioner exists in Australia – which is a political testimonial to valuing children, and, secondly, that of the five key themes, four are directly relevant to the points made by the authors threaded throughout this chapter. The five key themes include:

- The right to be heard
- Freedom from violence, abuse and neglect
- The opportunity to thrive
- Engaged civic and citizenship
- Action and accountability

Many of the specific elements that have been referenced in this chapter resonate strongly with the principles evidenced here. For example, in terms of action and accountability, the document states that the child will 'be informed about opportunities to contribute to decisions, debates and research activities' and further, that each child will 'be encouraged to express my views and opinions and know that these views and opinions will be listened to and valued'. Consequently, professionals working with young children are asked to 'advocate for engaging children ethically in data collection processes with their ongoing informed consent' (2015, p. 16). These statements move the opening paragraph of this chapter from the arena of philosophy to that of clear obligation.

The principles also sit comfortably alongside a consideration of epistemology, as explored by several Finnish authors: Paavola et al. (2004, p. 572) state '…it is most important for students to engage in knowledge-creating inquiry and to develop a corresponding identity- that is, to consider themselves to be not only consumers but also creators of knowledge'. In addition, as is indicated in recent research by Kumpulainen et al. (2013), who worked with young school children, the concept of co-researching with children using many of the principles highlighted here is finding acceptance across diverse purposes. In this case, using photography by children regarding their positive experiences (in the context of a well-being study), the researchers found the greatest benefit was in the agency demonstrated through the children's discussion of their photographic data. This finding reinforces the value of the approaches summarised in this chapter. It signifies that by including and valuing children's contribution at key points in the research cycle, by giving time for the establishment of relationships and consideration of process and by adapting research methods and hierarchies give rise to a reconceptualisation of the context of research purposes.

So where have we come from and where are we headed in the conversation around researching with children? We have moved from tendency to objectify, to conceptions of collaboration – or at least of recognition of the importance of seeking voice and authentic perspectives from children as rightful owners of their own experiences. There is recognition that enabling children to participate in research about matters that concern them requires multilayered methodologies, including time to develop respectful relationships.

It is nevertheless clear that the bulk of legislation and ethical development, organisational policy frameworks and community development programs proceed with an absence of child voice or even impact statements that take a child's perspectives on decisions being made. At this particular moment in time, there is clear movement towards the valuing of children's engagement and perspectives on matters ranging from educational decision-making to town planning. It is equally clear, however, that this is a nascent field that requires strong advocacy from those who value children as partners in research.

References

Alderson, P. (2008). Children as researchers. Participation rights and research methods. In: P. Christensen, P & A. James (Eds*.) Research with children. Perspectives and practices*. (2nd Ed) (pp. 276–287) Routledge.

Alderson, P., Hawthorne, J. & Killen, M. (2005). The participation rights of premature babies. In H. Van Beers, A. Invernizzi & B. Milne (Eds.) (2008) *Beyond Article 12: Essential readings on children's participation* (pp. 57–65). Bangkok: Black and White Publications.

Appadurai, A. (2006). The right to research. *Globalisation, Societies and Education, 4*(2), 167–177.

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Planning Association, 35*(4), 216–224.

Bae, B. (2005). Troubling the identity of a researcher: methodological and ethical questions in cooperating with teacher-carers in Norway. *Contemporary Issues in Early Childhood, 6*(3), 283–291.

Bae, B. (2010). Realising children's right to participation in early childhood settings: Some critical issues in a Norwegian context. *Early Years, 30*(3), 205–221.

Barry, D. (1996). Artful inquiry: A symbolic constructivist approach to social science research. *Qualitative Inquiry, 2*(40), 411–438.

Born, M. (1949). *Natural philosophy of cause and chance*. Oxford: The Clarendon Press.

Bridges, D. (1998). Research for sale: Moral market or moral maze? *British Educational Research Journal, 24*(5), 593–607.

Butler, U. M. (2009). Freedom, revolt and citizenship: Three pillars of identity for youngsters living on the streets of Rio de Janeiro. *Childhood, 16*(1), 11–28.

Canterbury City Council. (2014). *City of Canterbury: State of the children report*. Canterbury.

Carr, M., Jones, C., & Lee, W. (2005). Beyond listening: Can assessment practice play a part. In A. Clark, A. Kjørholt, T. Moss, & P. Moss (Eds.), *Beyond listening: Children's perspectives on early childhood services* (pp. 129–150). Bristol: Policy Press.

Charmaz, K. (2006). *Constructing grounded theory*. London: Sage.

Cheeseman, S., & Robertson, J. (2006). Unsure- private conversations publicly recorded. In A. Fleet, C. Patterson, & J. Robertson (Eds.), *Insights: Behind early childhood pedagogical documentation* (pp. 191–204). Castle Hill: Pademelon Press.

Christensen, P., & Prout, A. (2002). Working with ethical symmetry in social research with children. *Childhood, 9*(4), 477–497.

Clark, A. (2005a). Listening to and involving young children: A review of research and practice. *Early Child Development and Care, 175*(6), 489–506.

Clark, A. (2005b). Talking and listening to young children. In M. Dudek (Ed.), *Children's spaces* (pp. 1–13). London: Architectural Press.

Clark, A. (2005c). Ways of seeing: Using the mosaic approach to listen to young children. In A. Clark, A. Kjørholt, T. Moss, & P. Moss (Eds.), *Beyond listening: Children's perspectives on early childhood services* (pp. 29–50). Bristol: Policy Press.

Clark, A. (2010). Young children as protagonists and the role of participatory, visual methods in engaging multiple perspectives. *American Journal of Community Psychology, 46*(1), 115–123.

Clark, A. (2011). Multimodal map making with young children: Exploring ethnographic and participatory methods. *Qualitative Research, 11*(3), 311–330.

Clark, A., & Moss, P. (2001). *Listening to young children: The Mosaic approach*. London: National Children's Bureau.

Coleyshaw, L. Whitmarsh, J. Jopling, M., & Hadfield, M. (2010). *Listening to children's perspectives: Improving the quality of provision in early years settings*. CeDARE: University of Wolverhampton.

Connors, C., & Stalker, K. (2007). Children's experiences of disability: Pointers to a social model of childhood disability. *Disability & Society, 22*(1), 19–33.

Cremin, H., & Slatter, B. (2004). Is it possible to access the 'voice' of pre-school children? Results of a research project in a pre-school setting. *Educational Studies, 30*(4), 457–470.

Dahlberg, G., & Moss, P. (2005). *Ethics and politics in early childhood education*. London/New York: Routledge-Falmer.

Dahlberg, G., Moss, P., & Pence, A. (2007). *Beyond quality in early childhood education and care: Languages of evaluation* (2nd ed.). London: Routledge.

Dalli, C., & Stephenson, A. (2010). Involving children in research in early childhood education stings: Opening up the issues. In J. Loveridge (Ed.), *Rationale for involving children in research: Authenticity, listening to children's voices, and participation* (pp. 11–46). Victoria University of Wellington: Jessie Hetherington Centre for Educational Research.

Davidson, S. (2008). *What children think about having a thyroid disorder*, www.open.ac.uk/researchprojects/<http://www.open.ac.uk/researchprojects/>childrens-research-centre.open.ac.uk. Accessed 17 July 2013.

de Benitez, T. (2011). *State of the world's street children report: research. Street children series 2. Consortium for street children*. Available at: http://www.google.co.uk/url?url=http://www.aviva.com/media/upload/State_of_the_Worlds_Street_Children_Research_final_PDF_online.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ei=4NgxVJinIorPaPi7grAL&ved=0CBQQFjAA&usg=AFQjCNGmPScAi5btfrv-hT4qLkbKzIAz9w. Accessed 6.10.14.

Degotardi, S. (2011). Two steps back: Exploring identity and presence while observing infants in the nursery. In E. Johansson & J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 15–38). Netherlands: Springer.

Delbecq, A. L., & VandeVen, A. H. (1971, July/August). A group process model for problem identification and program planning. *The Journal of Applied Behavioral Science*, *VII*, 466–491.

Dockett, S. (2009). Engaging in young children in research. In *ARACY and NSW Commission for Children and Young People, Research involving children and young people: A compendium of papers and reflections* (pp. 52–63). Australian Research Alliance for Children and Young People and the New South Wales Commission for Children and Young People.

Dockett, S., & Perry, B. (2005). 'You need to know how to play safe': Children's experiences of starting school. *Contemporary Issues in Early Childhood, 6*(1), 4–18.

Dockett, S., & Perry, B. (2007). *Transitions to school: Perceptions, expectations, experiences*. Sydney: University of New South Wales press.

Edwards, R., & Aldred, P. (2000). A topology of parent involvement in education centreing on children and young people. *British Journal of Sociology of Education, 21*(1), 435–456.

Edwards, C., Gandini, L., & Forman, G. (2012a). Introduction. In C. Edwards, L. Gandini, & G. Forman (Eds.), *The hundred languages of children: The Reggio Emilia experience in transformation* (3rd ed., pp. 5–26). Santa Barbara: Praeger.

Edwards, C., Gandini, L., & Forman, G. (Eds.). (2012b). *The hundred languages of children: The Reggio Emilia experience in transformation* (3rd ed.). Santa Barbara: Praeger.

Eide, B. J., & Winger, N. (2005). From the children's point of view: Methodological and ethical challenges. In A. Clark, A. Kjørholt, T. Moss, & P. Moss (Eds.), *Beyond listening: Children's perspectives on early childhood services* (pp. 71–90). Bristol: Policy Press.

Einarsdóttir, J. (2007). Research with children: Methodological and ethical challenges. *European Early Education Journal, 15*(2), 197–211.
Einarsdóttir, J. (2014). Children's perspectives on play. In L. Brooker, M. Blaise, & S. Edwards (Eds.), *The SAGE handbook of play and learning in early childhood* (pp. 319–329). London: SAGE.
Elwick, S., Bradley, B., & Sumsion, J. (2014a). Infants as others: Uncertainties, difficulties and (im) possibilities in researching infants' lives. *International Journal of Qualitative Studies in Education, 27*(2), 1–18.
Elwick, S., Bradley, B., & Sumsion, J. (2014b). Creating space for infants to influence ECEC practice: The encounter, ecart, reversibility and ethical reflection. *Educational Philosophy and Theory, 46*(8), 1–13.
Ennew, J., & Swart-Kruger, J. (2003). Introduction: Homes, places and spaces in the construction of street children and street youth. *Children, Youth & Environments*, *13*(1) Spring. Accessed on 5/11/14 from http://colorado.edu/journals/cye
Erikson, F. (1979). Mere ethnography: Some problems in its use in educational practice. Anthropology and Education Quarterly, 10(3), Fall. 182–187.
Farrell, A. (Ed.). (2005). *Ethical research with children*. Maidenhead: Open University Press.
Fleet, A., & Britt, C. (2011). Seeing spaces, inhabiting places: Hearing school beginners. In D. Harcourt, B. Perry, & T. Waller (Eds.), *Researching young children's perspectives: Debating the ethics and dilemmas of educational research with children* (pp. 143–162). London/New York: Routledge.
Fleet, A., Patterson, C., & Robertson, J. (Eds.). (2006). *Insights: Behind pedagogical documentation*. Castle Hill: Pademelon Press.
Fleet, A., Patterson, C., & Robertson, J. (Eds.). (2012). *Conversations: Behind early childhood pedagogical documentation*. Mt Victoria: Pademelon Press.
Forman, G. (1999) Instant video revisiting: The video camera as a "Tool of the Mind" *ECRP* (1)2.
Fraser, S., Flewitt, R., & Hammersley, M. (2014). What is research with children and young people? In A. Clark, R. Flewitt, M. Hammersley, & M. Robb (Eds.), *Understanding research with children and young people* (pp. 34–68). London: Sage.
Frost, N.A. (2009). Pluralism in qualitative research: A report of the work of the PQR project' *Social Psychological Review*, *11*(1), March 2009.
Gascoyne, S. (2012). *Treasure baskets and beyond, realizing the potential of sensory-rich play*. London: Open University Press.
Giudici, C., Rinaldi, C., & Krechevsky, M. (Eds.). (2001). *Making learning visible: Children as individual and group learners*. Reggio Emilia: Reggio Children.
Gopnik, A. (2009). *The philosophical baby*. New York: Farrar, Straus and Giroux.
Goffman, E. (1974) *Frame analysis: An essay on the organization of experience*. Cambridge, MA: Harvard University Press (ix) 586.
Goldman, R. (2007). Video representations and the perspectivity framework. In R. Goldman, R. Pea, B. Barron, & S. Derry (Eds.), *Video research in the learning sciences*. Routledge: New York (3) 38.
Gray, C., & Winter, E. (2012). The ethics of participatory research involving young children with special needs. In D. Harcourt, B. Perry, & T. Waller (Eds.), *Researching young children's perspectives* (pp. 26–37). London: Routledge.
Grover, S. (2004). Why won't they listen to us? On giving power and voice to children participating in social research. *Childhood, 11*(1), 81–93.
Hanna, R. (2006). *Rationality and logic*. Cambridge, MA: The MIT Press.
Harcourt, D. (2011). A phased approach to researching with young children: Lessons from Singapore and beyond. *Early Education and Development, 22*(5), 1–21.
Harcourt, D. (2012a). *Children's rights learning book*. Castle Hill: Pademelon Press.
Harcourt, D. (2012b). Measuring teacher quality: Listening to young children in Singapore. *Global Studies in Childhood, 2*(4), 260–275.
Harcourt, D., & Conroy, H. (2005). Informed assent. *Early Child Development and Care, 175*(6), 567–577.

Harcourt, D., & Conroy, H. (2011). Informed consent: Process and procedures seeking research partnerships with young children. In D. Harcourt, B. Perry, & T. Waller (Eds.), *Researching young children's perspectives: Debating the ethics and dilemmas of educational research with children* (pp. 38–51). London/New York: Routledge.

Harcourt, D., & Einarsdóttir, J. (2011). Introducing children's perspectives and participation in research. *European Early Childhood Education Research Journal., 19*(3), 301–307.

Harcourt, D., & Mazzoni, V. (2012). Standpoints on quality: Listening to children in Verona, Italy. *Australasian Journal of Early Childhood, 37*(2), 9–25.

Harcourt, D., Perry, B., & Waller, T. (Eds.). (2011). *Researching young children's perspectives: Debating the ethics and dilemmas of educational research with children*. London: Routledge.

Harris, P., & Manatakis, H. (2013). Young children's voices about their local communities. *Australasian Journal of Early Childhood, 38*(3), 68–76.

Hart, R. (1992). *Children's participation from Tokenism to citizenship*. Florence: UNICEF Innocenti Research Centre.

Hatch, J. A. (2007). Back to modernity? Early childhood qualitative research in the 21st century. In J. A. Hatch (Ed.), *Early childhood qualitative research* (pp. 7–24). London: Routledge.

Haw, K., & Hadfield, M. (2011). *Video in social science research*. Abingdon: Routledge.

Hedges, H. (2001). Teacher/researchers in early childhood: Ethical responsibilities to children, *Networks – An On-line Journal for Teacher Research*, (4) 2. Accessed on 5/11/14 from http://journals.library.wisc.edu/index.php/networks/article/view/43/47

Holmes, J. (1996). *Attachment, intimacy, autonomy: Using attachment theory in adult psychotherapy* (pp. 2–3). Northvale: Jason Aronson.

Holt, L. (2004). The 'Voices' of children: De-centring empowering research relations. *Children's Geographies, 1*, 13–27.

Hume, D. (1739/1896). *A treatise of human nature. (Represented by L.A. Selby-Bigge)*. Oxford: Clarendon Press.

Infant-toddler Centres and Preschools Istituzione of the Municipality of Reggio Emilia. (2010). *Indications: Preschools and infant-toddler centres of the municipality of Reggio Emilia*. Reggio Emilia: Author.

Isaacs, N. (1944). Children's 'why' questions. In S. Isaacs (Ed.), *Intellectual growth in young children* (pp. 291–354). London: Routledge.

James, A., & James, A. L. (2008). *Key concepts in childhood studies*. London: Sage Publications.

Jewitt, C., & Oyama, R. (2001). Visual meaning: A social semiotic approach. In T. Van Leeuwen & C. Jewitt (Eds.), *Handbook of visual analysis* (pp. 134–156). London: Sage.

Johnson-Laird, P. N., & Byrne, R. M. J. (1991). *Deduction*. Hillsdale: Lawrence Erlbaum Associates.

Kehily, M. J. (Ed.). (2009). *An introduction to childhood studies* (2nd ed.). Maidenhead: Open University Press.

Kjørholt, A., Moss, P., & Clark, A. (2005). Beyond listening: Future prospects. In A. Clark, A. Kjørholt, T. Moss, & P. Moss (Eds.), *Beyond listening: Children's perspectives on childhood services* (pp. 71–90). Bristol: Policy Press.

Kumpulainen, K., Lipponen, L., Hilppo, J., & Mikkola, A. (2013). Building on the positive in children's lives: A co-participatory study on the social construction of children's sense of agency. *Early Child Development and Care, 184*(2), 211–229.

Laevers, F. (1994). *Defining and assessing quality in early childhood education. Studia Paedagogica*. Leuven: Leuven University Press.

Langsted, O. (1994). Looking at quality from the child's perspective. In P. Moss & A. Pence (Eds.), *Valuing quality in early childhood services: New approaches to defining quality* (pp. 28–42). London: Paul Chapman.

Lawrence, P., & Nicholson, S. (2000). *The investigators*. London: Curious Productions/Channel 4 Television.

Lees, L. (1999). Critical geography and the opening up of the academy: Lessons from 'real life' attempts. *Area, 31*(4), 377–383.

Lenz-Taguchi, H. (2010). *Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy*. London: Routledge.

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues, 2*(4), 34–46.

MacNaughton, G., Smith, K., & Davis, K. (2007). Researching with children: The challenges and possibilities for building "Child Friendly" research. In: J. Amos Hatch (Ed.), *Early childhood qualitative research* (pp. 167–184). New York: Routledge.

Malaguzzi, L. (1993). For an education based on relationships. *Young Children, 49*(1), 9–11.

McKee, B. (2014). *Preventative education: Using young children's drawings to illustrate knowledge and understanding of safety and help seeking behaviour*. Women's Aid Federation Northern Ireland Management Board.

McLeod, A. (2008). *Listening to children A practitioner's guide*. London: Jessica Kingsley Publications.

McTaggart, R. (1991). Principles for participatory action research. *Adult Education Quarterly, 41*(3), 168–187.

Meins, E., Fernyhough, C., Johnson, F., & Lidstone, J. (2006). Mind-mindedness in children: Individual differences in internal-state talk in middle childhood. *British Journal of Developmental Psychology, 24*, 181–196.

Merewether, J. (2015). Young children's perspectives of outdoor learning spaces: What matters? *Australasian Journal of Early Childhood, 40*(1), 99–108.

Merewether, J., & Fleet, A. (2014). Seeking children's perspectives: A respectful layered research approach. *Early Child Development and Care, 184*(6), 897–914.

Morrow, V., & Richards, M. (1996). The ethics of social research with children: An overview. *Children and Society, 10*(2), 90–105.

Moss, P., Clark, A., & Kjørholt, A. T. (2005). Introduction. In A. Clark, A. Kjørholt, T. Moss, & P. Moss (Eds.), *Beyond listening: Children's perspectives on childhood services* (pp. 1–16). Bristol: Policy Press.

Murray, J. (2012). *An exploration of young children's engagements in research behaviour*. Thesis. (PhD). University of Northampton, UK.

Nagel, T. (1974) What is it like to be a bat? *The Philosophical Review* LXXXIII, 4 pp. 435–450 [online]. Available from: http://organizations.utep.edu/Portals/1475/nagel_bat.pdf<http://organizations.utep.edu/Po>. Accessed 28 July 2012.

O'Kane, C. (2008). The development of participatory tecniques: Facilitating children's views about decisions which affect them. In A. James & P. Christensen (Eds.), *Researching with children: Perspectives and practices* (2nd ed., pp. 125–155). London: Routledge.

Paavola, S., Lipponen, L., & Hakkarainen, K. (2004). Models of innovative knowledge communities and three metaphors of learning. *Review of Educational Research, 74*(4), 557–576.

Palaiologou, I. (2014). 'Do we hear what children want to say?' Ethical praxis when choosing research tools with children under five. *Early Child Development and Care, 184*(5), 689–705.

Pascal, C., & Bertram, T. (2009). Listening to young citizens: The struggle to make real a participatory paradigm in research with young children. *European Early Childhood Education Research Journal, 17*(2), 249–262.

Pink, S., Mackley, L. K., Mitchell, V., Hanratty, M., Escobar-Tello, C., Bhamra, T., & Morosanu, R. (2013). Applying the lens of sensory ethnography to sustainable HCI. *ACM Transactions on Computer-Human Interaction, 20*(4), 1–22.

Powell, M. (2011). *International literature review: Ethical issues undertaking research with children and young people. Prepared for the Childwatch International Research Network*. Lismore: Southern Cross University Dunedin: University of Otago.

Pring, R. (2000). *Philosophy of educational research*. London: Continuum.

Prosser, J., & Burke, C. (2008). Image-based educational research. In J. G. Knowles & A. Cole (Eds.), *The handbook of arts and qualitative research* (pp. 407–419). Toronto: Sage Publications.

Qvortrup, J., Corsaro, W. A., & Honig, M. S. (Eds.). (2009). *The Palgrave handbook of childhood studies*. Basingstoke: Palgrave MacMillan.

Reason, P., & Bradbury, H. (Eds.). (2008). *The Sage handbook of action research: Participative inquiry and practice*. London: Sage.
Redmond, G. (2008). *Children's perspectives on economic adversity: A review of the literature. SPRC discussion paper No. 149*. Sydney: The Social Policy Research Centre.
Reddy, V. (2008). *How infants know minds*. Cambridge, MA: Harvard University Press Stray Teletubbies (1997) Broadcast Ragdoll/BBC: BBC Television.
Rhedding-Jones, J., Bae, B., & Winger, N. (2008). Young children and voice. In G. MacNaughton, P. Hughes, & K. Smith (Eds.), *Young children as active citizens: Principles, policies and pedagogies* (pp. 44–61). Newcastle: Cambridge Scholars Publishing.
Rinaldi, C. (2005). Documentation and assessment: What is the relationship. In A. Clark, A. Kjørholt, T. Moss, & P. Moss (Eds.), *Beyond listening: Children's perspectives on early childhood services* (pp. 17–28). Bristol: Policy Press.
Rinaldi, C. (2006). *In dialogue with Reggio Emilia: Listening, researching and learning*. London: Routledge.
Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social contexts*. New York: Oxford University Press.
Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.
Salamon, A. (2015). Ethical symmetry in participatory research with infants. *Early Child Development and Care*. Doi: 10.1080/03004430.2014.975224.
Shaw, C., Brady, L. M., & Davey, C. (2011). *Guidelines for research with children and young people*. London: National Children's Bureau Research Centre.
Skånfors, L. (2009). Ethics in child research: Children's agency and researchers' 'Ethical Radar'. *Childhoods Today, 3*(1), 1–22.
Smeyers, P. (2008). On the epistemological basis of large- scale population studies and their educational use. *Journal of Philosophy of Education, 42*(S1), 63–86.
Smith, A. (2011). Respecting children's rights and agency: Theoretical insights into ethical research procedures. In D. Harcourt, B. Perry, & T. Waller (Eds.), *Researching young children's perspectives: Debating the ethics and dilemmas of educational research with children* (pp. 11–25). London/New York: Routledge.
Smith, A., & Taylor, N. (2000). Introduction. In A. Smith, N. Taylor, & M. Gollop (Eds.), *Children's voices: Research, policy and practice* (pp. ix–xiii). Auckland: Pearson Education New Zealand.
Smith, A., Duncan, J., & Marshall, K. (2005). Children's perspectives on their learning: Exploring methods. *Early Child Development and Care, 175*(6), 473–487.
Sommer, D., Pramling Samuelsson, I., & Hundeide, K. (Eds.). (2010). *Child perspectives and children's perspectives in theory and practice*. Milton Keys: Springer.
Speer, S. A. (2002). What can conversation analysis contribute to feminist methodology? Putting reflexivity into practice. *Discourse and Society, 13*(6), 783–803.
Stebbins, R. A. (2001). *Exploratory research in the social sciences*. Thousand Oaks: Sage.
Stephenson, A. (2009). Horses in the sandpit: Photography, prolonged involvement and 'stepping back' as strategies for listening to children's voices. *Early Child Development and Care, 179*(2), 131–141.
Strega, S. (2005). The view from the poststructural margins. In L. Brown & S. Strega (Eds.), *Research as resistance* (pp. 199–236). Toronto: Canadian Scholars' Press.
Sumsion, J., & Goodfellow, J. (2012). 'Looking and listening-in': A methodological approach to generating insights into infants' experiences of early childhood education and care setting. *European Early Childhood Education Research Journal, 20*(3), 313–327.
The Investigators (2000). Broadcast. Curious Productions: Channel 4 Television.
Thomas, G. (2007). *Education and theory: Strangers in paradigms*. Maidenhead: Open University Press/McGraw-Hill.
Thomson, F. (2007). Are methodologies for children keeping them in their place? *Children's Geographies, 5*(3), 207–218.
Thomson, P. (Ed.). (2008). *Doing visual research with children and young people*. Abingdon: Routledge.

Tisdall, E. K. M. (2011a). *The challenge and challenging of childhood studies? Learning from disability studies research with disabled children*. Available at: http://www.strath.ac.uk/media/faculties/hass/appliedsocialsciences/socialwork/esrcseminar/Tisdall_30.8.11[1]ks.pdf. Accessed 9.6.14.

Tisdall, E. K. M. (2011b). Engaging with families and relationships. In L. Jamieson, R. Simpson, & R. Lewis (Eds.), *Researching families and relationships: Reflections on process. Palgrave studies in family & intimate life*. Basingstoke: Palgrave MacMillan.

Tisdall, E. K. M., & Punch, S. V. (2012). Not so new? Looking critically at childhood studies. *Children's Geographies, 10*(1), 249–264.

Tobin, J., & Davidson, D. (1990). The ethics of polyvocal ethnography: Empowering vs. textualising children and teachers. *International Journal of Qualitative Studies in Education, 3*(3), 271–283.

Truman, C., Mertens, D., & Humphries, B. (Eds.). (2000). *Research and inequality*. London: University College London Press.

UK Children's Commissioners' Report to the UN Committee on the Rights of the Child. (2008). Available at: http://www.niccy.org/uploaded_docs/uncrc_report_final.pdf. Accessed 02.10.14.

United Nations. (1989). *The United Nations Convention on the Rights of the Child*. New York: UNICEF.

Valentine, G. (1999). Being seen and heard? The ethical complexities of working with children and young people at home and at school. *Ethics, Place & Environments, 2*(2), 141.

Veale, A. (2005). Creative methodologies in participatory research with children. In S. Greene & D. Hogan (Eds.), *Researching children's experiences: Approaches and methods* (pp. 253–272). London: Sage.

Vidich, A., & Lyman, S. (2000). Qualitative methods: Their history in sociology and anthropology. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 37–38). Thousand Oaks: Sage.

Vygotsky, L. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.

Waller, T., & Davis, G. (Eds.). (2014). *An introduction to early childhood*. London: Sage.

Warming, H. (2005). Participant observation: A way to learn about children's perspectives. In A. Clark, A. Kjørholt, T. Moss, & P. Moss (Eds.), *Beyond listening: Children's perspectives on early childhood services* (pp. 51–70). Bristol: Policy Press.

Warren, L., & Boxall, K. (2009). Service users in and out of the academy: Collusion in exclusion? *Social Work Education, 28*(3), 281–297.

Whalley, M., Arnold, C., Lawrence, P., & Peerless, S. (2012). The voices of their childhood: Families and early years' practitioners developing emancipatory methodologies through a Tracer Study. *European Early Childhood Education Research Journal, 20*(4), 519–535.

White, S., & Choudhury, S. (2010). Children's participation in Bangladesh; Issues of agency and structures of violence. In B. Percy-Smith & N. Thomas (Eds.), *A handbook of children and young people's participation* (pp. 39–50). London: Routledge.

Wiltz, N. W., & Klein, E. L. (2001). What do children do in childcare? Children's perceptions of high and low quality. *Early Child Research Quarterly, 16*, 209–236.

Wood, A., & Davenport, A. (1997). Teletubbies. Ragdoll Productions: BBC Television.

Woodhead, M. (2008). Respecting rights: Implications for early childhood policies and practices. In G. MacNaughton, P. Hughes, & K. Smith (Eds.), *Young children as active citizens: Principles, policies and pedagogies* (pp. 15–30). Newcastles: Cambridge Scholars Publishing.

Chapter 8
Policy Analysis and Document Research

Chris Peers

Abstract This chapter discusses policy analysis and the related field of document analysis for the interest of early childhood education researchers. Early childhood research is relatively young, by comparison to other tiers of the educational community. In addition, policy writing about early childhood (by government) and the study of such policy discourse (by researchers) will express potentially disjointed historical relationships, especially given the intersection of policy discourse with other disciplines such as economics and sociology. The chapter offers a background for those researchers in early childhood seeking to begin examining policy material.

The chapter additionally addresses document analysis because so much policy work is a matter of reading the text and interpreting the content. Of concern here is the risk of treating documents without sufficient heed for the historical or discursive conditions by which they were shaped. The chapter makes brief reference to significant document analysis practices so as to provide researchers with a repertoire of analytical approaches from which to select. Recognizing one's own ideological preconceptions and the perspective that a researcher herself might bring to the work of document analysis are all chief considerations in this chapter.

Keywords Policy • Document • Textuality

Early childhood education is a relatively emergent academic field in which questions of policy analysis and document research are as yet still marginal to the mainstream forms of study and scholarship. This chapter will examine some key examples of each to provide the reader with a sense of the direction that research in these areas has taken in the first few decades of the field's history as an academic discipline. In addition, it will broach relevant issues about the nature of policy analysis and document research in order to consider the complementarity of mainstream approaches to policy analysis and document research, as methods of study that early childhood researchers may undertake in the coming years.

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The field of early childhood education is essentially focused on the quality of, and necessity for access to, services to families with respect to care and upbringing of young children and infants. As such the predominant sources of knowledge for the field have formed authorities and values that often lie elsewhere, in the realm of psychological research, neuroscience, epidemiology, and increasingly, economics. For example, for over 200 years, psychologists have written extensively on human development, and there now exist both orthodox and alternative approaches to developmental psychology that are highly relevant to early childhood study (e.g., Bruer 1999). By contrast the field of policy analysis has emerged from political science and economics, understandably given that the main aims of this kind of study relate to the shaping and impact of government perspectives on a given portfolio of funding and services. Policy is often concerned, in the broad view, with how taxation revenue is to be spent for the public good (e.g., Lowenstein 2011).

Document analysis is strongly related to policy analysis, but, in education generally and early childhood in particular, it can also comprise research in scientific literature about problems facing practitioners and families, issues raised within debate about developmental psychology, learning and care of infants, etc. Documents are often apprehended in their most banal function as paper records; the text that they comprise is often reduced epistemologically as a reproduction of someone's thoughts in writing. Accordingly, document analysis can be misapprehended as the "correct" reading and interpretation of a text or literary artifact. When we acknowledge that such a reduction is possible, a second form of apprehending the "document" arises, in which the epistemological grounds for document research shift dramatically from the conversion and implementation of valid data, on one hand, to a hermeneutic method, on the other hand, in which the use of words, the development of sentences, and the function of a text are each given a completely new significance for scholars. For example, in historical study, the way artifacts of the nineteenth-century early childhood practitioners might be read in the early decades of the twenty-first century is a topic of a study that is distinct from the content of the artifacts themselves (Hinitz 2013; Attridge et al. 1987). The content of such archival texts becomes a topic of debate because the text is no longer a scientific datum that has a single, generalized intention that remains more or less constant.

To provide early childhood education scholars with an overview of the skills and methods relevant to policy analysis and document research, this chapter will approach the theoretical parameters of both policy and text to outline the kinds of scholarship that is already pursued and that might be undertaken to reshape the way we understand the field of early childhood education itself.

8.1 Early Childhood Care and Education Policy

Historically, the adoption of public responsibility for education, i.e., schooling, precedes public responsibility for early childhood care and education in most Western countries by at least a century. In many cases governments are still developing

policies toward childcare as an area of public welfare. The issue here is to recognize the historical and economic causes that have led to the legitimacy of taking responsibility for young children out of the private sphere and placing it in public control, where the costs for undertaking that responsibility are shared among taxpayers. Yet this historical shift from private to public is not straightforward. Prior to the 1960s and 1970s, childcare was largely in the hands of private charities and catered almost exclusively to families of poor and disadvantaged people, especially single mothers and orphans (Rose 1999, 2010). This means that in those cases where childcare remains a charitable venture, it is not necessarily subject to government regulation and is therefore effectively regarded as a private enterprise, even if it is not a commercial enterprise. Public policy does not cater to such private enterprises, and, historically, governments only begin to explore forms of regulation once a decision has been made to include childcare within public expenditure.

The postwar period in the United States and in the United Kingdom saw an intensification of industrial growth that led to increased demands for labor and considerable volatility in wage and salary levels for male heads of household (Kopczuk et al. 2007). This shift in the labor market in two of the world's ten most dominant economies began to provide opportunities for women to enter the workforce in a manner that was new and which coincided with cultural shifts accompanying the so-called sexual revolution. The widespread availability of contraceptives and gradual changes to family law meant that middle-class women in many Western countries did not have to follow their mothers into domestic lives external to the labor market; these women gained access to private income, in isolation from men; and in turn this produced an incentive for some women to reconsider their traditional child-rearing responsibilities (Hakim 1996). The commercial provision of childcare as a substitute for traditional forms of parenting was a radical and controversial change in moral and social values that continues to reverberate in the twenty-first century (Brennan 1998).

The entry of women to the labor market in the Western economies is without question the single most important factor in the reform of government perspectives on childcare and family policy more broadly (Blau and Jusenius 1976; Penn 2007; Joshi et al. 1996). At the same time, both psychologists and economists had launched research initiatives from the late 1950s and early 1960s that addressed the impact of early childhood contexts, how those contexts could be designed in order to maximize a child's academic potential, and to properly shape the responsibilities of professional carers.

The emergence of this interest in the measurement and maximization of children's potential stems from several different historical factors that are relevant in understanding the development of a policy with respect to early childhood development and education as cognate disciplines. To address these factors very briefly, it might be helpful to begin with the consequences of the industrial revolution for young children. The citizen was increasingly conceptualized scientifically in terms of measurable attributes, mainly for the sake of increasing employability as a measure of moral civility. Different psychological systems were brought forward through the nineteenth century, including phrenology (as practiced, for example, by

Maria Montessori) to address the demands for employable citizens in the industrial age; intelligence testing is only the most well-known form of this kind of psychometric classification. As Deborah Tyler points out, in 1939, those responsible for training kindergarten teachers were beginning to consider the purpose of preschooling in terms of the risk of damage to a citizen between birth and 6 years, due to being in the custody and management of an unskilled woman.

Children, born perfect, were "damaged" between birth and school in such a way that their maximum capabilities and potential for happiness would never be realized…[hundreds of child development experts and scientists such as Piaget and Gesell] solidly implicated parents and, particularly mothers, in the production of the imperfect child. Mothers, through their mode of child-rearing, stood between their child and healthy development (Tyler 1993, 49).

There were economic, medical, and social repercussions of inscribing power in women to rear young children without appropriate forms of government regulation, based on scientific research. It is not difficult to see that educational research that is based on psychological science consequently provides a basis for public policy and the regulation of the childcare sector. In combination with increased interest in the determination of incentives for women to enter paid work, this new research agenda slowly began to affect family policies in general in Western nations.

8.2 What Does Early Childhood Care and Education Policy Research Look Like?

Policy should generally be conceptualized in relation with the historico-political structure or institution through which it is generated. For example, it is only possible to represent education policy at all once the Western nation-state began to take administrative control for schooling, for example, within the emergence of a bureaucratic authority in Napoleonic France at the beginning of the nineteenth century (Donzelot 1997).

With particular respect to early childhood education, the earliest regulatory policies (involving initial forms of government spending) took the form of childcare frameworks that purported to describe the broad conditions within which services for childcare could be regulated. Most of this government intervention begins after the Second World War, for example, the Head Start program in the United States (Vinovskis 1993; Hofferth and Phillips 1987; Clarke 2007). The latter offers a well-known example of early childhood intervention, constituting a primary mode of public spending in the childcare sector.

Policy writers are trying generally to take account of the multiple variables contributing to the provision of a childcare service, such as how quality can be measured, how the effects of family background can be accounted for, and what the outcomes of a service can be when correlated with other contributing factors. A good example of this is provided by an American research program called the Cost,

Quality, and Outcomes Study, initiated in 1993, and which sought to aggregate the various factors impacting on service provision and the measurement of outcomes. This kind of policy writing is significant because it directly informs government, provides the basis for reporting to authorities and related sources who are funding a service, and enables a political discourse to emerge based upon empirical data (cf. Peisner-Feinberg and Burchinal 1997). However, it is equally significant to discern between the reporting of research about the provision of services and the nature of policy as a document in itself.

Early childhood care and education policies will take the form of a range of different kinds of documents and texts that aim to serve various purposes: a curriculum framework will be a relatively broad set of policy documents that describe the sorts of objectives and outcomes that should guide the practices of professional carers and educators.

By comparison, a government policy on the establishment of early childhood services may take the form of legislation that is bare of requisite detail for how those services should be conducted. The law is nevertheless a policy of the government which enacts it and will be subject to political discourse and debate. Such laws are usually formulated after considerable research has been conducted into the existing nature and quality of services and the manner in which improvements and reforms may need to be implemented. Governments often refrain from detailing the rationale for such policy frameworks as they appear in legislation, because the law is meant to apply in a wide variety of contexts and is understood as a generalized assertion or statement of conditions under which government responsibilities are to be implemented. It may be the case that these laws are then added to, and detailed, in the form of regulations that are formed under the powers of the legislation.

Alternatively, legislation may appear in the form of a budget statement, which accounts for the level of funding allocated to a given portfolio or department of government, and therefore the policy details may be provided in the form of programs that have grants of money attached to them in the budget itself. Such programs may already be in place, or it may be that a department or bureau of government must establish the program in order to implement the policy. Policy may therefore appear in the form of descriptions of a program, tenders created to fulfill the requirements of a program, or commissions for a researcher to undertake a study of conditions within the community, for which a report on the study is formulated and which can consequently be reported to the government.

Policy should be understood to take a range of forms that each demonstrate the interests of a governing power (Kirp 2007). In this manner researchers ought to recognize a direct link between policy documents and the politics of the day. Policy research cannot ordinarily be conducted without any reference to the historical context in which a given policy was formulated. Consequently, researchers must search for the content of a policy within and between different kinds of documents: no single policy can be properly comprehended within or through the text as it is published on a single occasion for the sake of a given instance of government regulation, such as a budget statement in which funding for the childcare sector might be announced. For example, it would be necessary to compare the level of expenditure/

funding in 1 year with rates of funding over a broader chronological period, in order to disclose the kind of policy perspective being contributed to by one document under consideration. By this means the policy researcher can sketch the outline of a policy as a scale of implementation and reveal the conditions in which implementation was given effect.

The "look" and "feel" of early childhood care and education policy documents will vary from one context to the next; however, the most significant distinctions in the manner of their compilation and content seem to follow the level of economic development within a nation or geopolitical context. This is again due to the correlation that is possible between the manner in which early childhood is perceived historically, as a gauge of civic and economic progress, as described earlier by Tyler (1993) and the level of resources that are available in a given nation-state to be applied to a public policy sector.

For example, in some developing nations, considerable pressure has been applied by international agencies to force governments to develop appropriate policies for maternal and child health and related services for early years of development (Penn 2010; Tomaševski 2005a, b; Kirk 2007). This is so despite the fact that, in many cases, developing nations do not have adequate resources to implement services across the board: this means that the generation of policy in these contexts may be driven by a perception that aid revenue will be impacted if governments cannot demonstrate the effort to develop appropriate policies. Researchers ought to be wary of the historico-political complexities surrounding policy documents as they are generated in developing economies because many of the cultural and economic assumptions that are relevant to policy development in early childhood in a developed economy may be awkwardly or clumsily reproduced as if there were no difference between a developed and a developing economy (Therborn 2003). At the same time, since university research may be lacking in a developing economy, policymakers will sometimes have no alternative but to draw on the wisdom of Western sources and research as if it were automatically relevant. This is also reinforced by the mistaken perception that human development is a universal phenomenon which does not vary on the basis of cultural or economic context. Accordingly, the quality of such documents is sometimes marked by the inadequacy of resources and the qualifications and values of bureaucrats responsible for their production.

However, such problems are not always the case, and their frequency depends largely on the highly variable factors which may be impacting on bureaucratic resources, including the level of funding and the skill set of staff in a given case. For example, Benson reports the factors which support or detract from the introduction of early literacy projects in a series of developing economies, including Nigeria, Guatemala, Bolivia, Guinea-Bissau, and Niger. These factors include the cultural importance of mother tongue where language groups have been marginalized as a result of colonial government, as well as the imposition of literacy testing regimes that aim to measure literacy using Western criteria (Benson 2000). In such cases, early childhood policy is produced in a manner that incorporates many complex issues raised by the citizens whom the policy will affect and the apprehension of such policies by a policy analyst may depend on whether the researcher herself is

able to fully recognize the cultural and economic context in which the document was generated.

8.3 How Is Early Childhood Care and Education Policy Research Conducted?

It is increasingly the case that academic research that informs policy debate and discourse must be composed in a literary genre that borrows from economic and statistical paradigms of knowledge. This is the case in any academic discipline; however, given the intensifying scale of attention paid to the childcare sector by the government, researchers find themselves propelled by several key factors that I outline below:

1. The globalization of markets in early childhood services
2. The medicalization of early childhood services
3. The introduction of epidemiological models
4. Tension between professionalization of early childhood services and costs of provision

8.4 Globalization of Early Years Services

In a global marketplace, the connection between an economic policy and a variety of public policy sectors in Western nations has produced a genuine proliferation of concerns about early childhood health and education that were unknown prior to the end of the Second World War. The Global Millennium Development Goals are only a single example of the manner in which the priority of early childhood health and education has penetrated Western discourse and economic goal setting in the last two decades.

Early childhood policy analysts and document researchers nowadays regard such global issues as central to framing what early childhood policy must achieve in the coming decades on a global scale. For example, Rianne Mahon describes the Organization for Economic Cooperation and Development (OECD) as a “pioneer of soft forms of transnational governance” (Mahon 2009). By this she means that unlike other institutions in government and international banking, the influence of the OECD is in the generation of policy and debate that connects economic factors to social and political problems. The literature produced by the OECD is presently a critical form of data informing government policies in many nations, and the selection of areas for debate in itself is a key driver of its influence (OECD 2011). Researchers in public sector policy such as early childhood care and education are virtually compelled to read and contribute to studies published under the auspices of the OECD in areas such as family policy and labor market reform and “the development of new statistical and

technical indicators" for the purpose of benchmarking quality in-service provision. It is important to distinguish OECD reports as analysis of the ways in which nations and economies can be compared in a global sense and that it informs policy by weight of value placed upon the quality of the reporting.

Globalization should be seen in this context as a matter of recognizing economies as competing against one another for control and dominance of markets: the complex intersection of public policy with corporate policy is one of the most significant outcomes of the influence of international institutions like the OECD. For example, early childhood development is routinely treated as a factor that will contribute to a nation's future competitiveness and productivity, with some writers measuring the "positive externality" of an average individual American child (for rates of return or future average income) at $100,000 (Esping-Anderson 2008).

8.5 The Medicalization of Early Years Services

To understand the way in which economic or statistical paradigms of knowledge impact on policy debate within the early years sector, it is important to recognize that human development in itself is a psychological construct and that scientific research about children's physiological development has increasingly intersected with psychological debate about measurements of human development. Indeed, pediatric medicine, psychiatry, neurology, and epidemiology have all played an increasingly significant role in producing evidence about human development and how it can best be measured (McCain et al. 2007; Shonkoff and Phillips 2000).

While the professional views of early childhood educators and carers are themselves not insignificant, those views are themselves generated within the context of the authority which medicine as a knowledge discipline already holds, prior to the insertion of early childhood education within the academy. As Tyler described earlier, scientific evidence prevails over and shapes educational priorities in the field of early childhood. Given the late emergence of specialist early childhood educators and of corresponding programs of academic research about the practice of teaching, the cultivation of learning, and the design of curriculum and pedagogy for early years practitioners, especially by comparison with the whole field of medicine, the tension between medicine and education could not be described as a fair contest. Medicine, pediatric science, neurology, and epidemiology each offer paradigms of knowledge that far outweigh the views of childcare workers in the determination of a "good" policy. Nevertheless, a range of scholars from both sides of this debate have argued about the quality of medical evidence for the development of measurement criteria with respect to children's cognitive development, but the weight of value placed on medical data as compared with the qualitative paradigms that often dominate educational research is overwhelming (Bradbury 2012; Allmendinger and Liebfried 2003; Clarke 2007).

A primary example of the way in which this tension takes effect is in the implementation of major projects such as the Early Development Index in Canada and its offshoot, the Australian Early Development Index. Largely designed and implemented by psychiatrists and epidemiologists, this model approaches the task of measuring the risk that children in disadvantaged contexts will not be sufficiently ready to transition to school, and the data it generates is entirely demographic, rather than examining individual performance. The early childhood profession in both Canada and Australia has mostly welcomed the adoption of this model by the government, because of the perception that it signals a recognition of the importance that is now being placed on the early years. What the early years sector seems to miss in this case is the increased authority such models give to medicine (and statistics in general) at the cost of the legitimacy of early years professionals themselves, in the evaluation of the evidence that it yields and its impact on policy (cf. Vernon-Feaghans et al. 2012).

What are the consequences of missing the significance of the increasing authority of medical science and empirical science generally for the determination of policy in the field of early childhood? The relevance of empiricism as a theoretical construct as it affects educational policy has been registered by writers such as Carol Bacchi (2000); similarly, Gaby Weiner has asserted that the academic community (from which much policy analysis and scientific research are derived) could now be said to fall into two groups:

> There are those researchers and academics driven principally by government research policies aimed mainly at disciplining and controlling educational research, such as research assessment exercises, research council priority programs, and the like, who are also mostly in high-ranking research departments, which means that income is drawn proportionally more from research than from teaching.
>
> I think it is fair to say that this first group is comprised of academics using predominantly empirical research paradigms and who are mainly driven by scientific ideas rather than the more theoretical task of calling a prevalent paradigm into question.
>
> The second group is less likely to be involved in research rankings, being in departments which draw their funding more from teaching than from research. The first group is compelled largely to focus on priority policy areas and is likely to be empirically unadventurous and draw for its theorizing on established disciplines such as sociology and psychology. Those less dependent on research income are less constrained theoretically and empirically and are more likely to draw on cross-disciplinary frameworks, especially women's studies [but in early childhood, this could also include a range of other approaches such as post-structuralism]. Both groups are themselves positioned (although differently) within the performative and surveillance cultures that they are seeking to understand and evaluate, and both offer a [different] critique of the patriarchal status quo This whole section in brackets is a quote from Weiner (Weiner 2008, 290).

I think that early childhood researchers, being often less experienced than educational researchers in general, are doubly handicapped by that inexperience together with the constraints of the surveillance culture that Weiner is describing, which operates throughout the higher education sector internationally. What is important for the future of early childhood research is therefore to provide opportunities for

scholars to challenge the prevailing ethos in order to give more dramatic effect to the kind of contribution they are making to community debate about children and their education.

8.6 The Introduction of Epidemiological Models

While population studies generally provide important evidence about health, patterns of disease, factors contributing to the spread and management of, for example, smoking and cigarette consumption on workplace productivity, etc., their utilization is comparatively invalid when the unit of analysis is an individual. Problems that vary from one individual to the next pose a special theoretical difficulty that statistical methods will inevitably overlook, likewise for epidemiology in general. It is only valid to apply constant or universally valid markers of development to the study of an individual's learning process, where it is reasonable to deny variations between individuals. In the arena of policy production, it is often unreasonable to determine funding arrangements in the public sector on the basis of objections oriented to the experience of a single individual and which are not common across an entire population. Accordingly, a policy usually stems from population studies, statistical evidence, and epidemiological research.

However even within epidemiology itself, concerns have been raised as to the validity of approaching public sector policy in this manner (Frohlich et al. 2001). This concern is relatively invisible by comparison with the overwhelming tide of new research which assumes population conditions as more critical than conditions that are reported by individuals.

As Keating and Hertzman (two respected Canadian scholars) argue:

> The development of health and well-being is a population phenomenon rather than a purely individual affair.
>
> Particularly striking is the discovery of a strong association between the health of a population and the size of the social distance between members of the population…in societies that have sharp social and economic differences among individuals in the population, the overall level of health and well-being is lower than in societies where these differences are less pronounced. (1999, 3)

This sense of "sharp" differences comes across even more distinctly as a divided social and communal space, when they describe the "central paradox of economically prosperous modern societies:

> on the one hand, material abundance and the ability to generate wealth unimaginable even by our recent ancestors; on the other hand, grave concern about the deterioration of the quality of the human environment required for high levels of developmental health and about the consequences of this deterioration as seen in increasing developmental problems among children and youth. (Keating and Hertzman 1999, 15)

Others such as Fraser Mustard echo this warning, declaring that the quality of early childhood development has become a matter of tremendous importance for the establishment of "stable, prosperous, and equitable societies" and indeed "for the

survival of our species" (Mustard in Mustard et al. 2007, 11). Each of these examples poses instances of the resolution of broad, population-based issues. The attention that such reporting has enjoyed at the level of government over the past three decades cannot be underestimated, especially given the parallel intensification of research about family policy and the ways in which early years provisions are perceived as an index of economic viability (cf. Lowenstein 2011).

8.7 Tension Between Professionalization of Early Years Services and Costs of Provision

Since in some instances of the early childhood sector the predominance of women within the profession is absolute (in Australia to take only one example, 98% of the early childhood sector workforce is female), policymaking in the early years is significantly informed by economic research about the inclusion of women in the workforce (OECD 2007; Lewis and Giullari 2005). Both the demand for childcare places (which is intimately related to whether or not a mother is in paid employment) and the provision of qualified childcare staff to undertake the service of childcare (in jobs dominated almost exclusively by women) are factors that directly lead early childhood education policy studies back to the question of female workforce participation.

On one hand, this means that as more women join the workforce, gravitate upward in socioeconomic terms, i.e., income, they increasingly regard childcare not only as a necessity enabling them to earn a salary but as a mark of consumer choice and status (Conley 2010). On the other hand, this also means that policy must come to terms with the increasing cost of childcare services when the quality of intervention, education, care, and transition arrangements escalates in correlation with the commercialization of those products (Brennan 2007).

One of the most significant issues that policy writers attend to in the "mix" of factors here is the increasing medicalization of intervention services, which means that parents are increasingly effected by community concern about the quality and provision of care, as well as the ever-higher profile of children's illness, developmental progress, delay, and success. The sheer proliferation of measurement instruments and their dissemination and consumption within the community at a variety of levels contributes enormously to the complexity of early years services as a new market in Western economies. Kirp (2007) reports the volume of private fees paid for childcare in some wealthy communities as increasing at rates that compare with much more traditional commodities like mineral resources.

When combined with the pressure to distribute childcare services evenly across the population and to keep costs for individual parents low enough to balance workforce participation with the consumption of those services, the additional pressure to train childcare professionals to a high level and to then pay them in accordance with their qualifications often proves to be a bridge too far for policymakers and treasury officials.

8.8 Summary

Policy research in the area of early childhood care and education remains a smaller component of the overall volume of academic and scientific research conducted in the early years sector, precisely because most of the research that is done in the sector is understood as the development of scientific evidence. Following on from the point raised by Weiner, however, there is a systemic relationship between the priority given to certain forms and methods of research and the way these studies inform policy, meaning that the institutions within which research is sponsored drive the production of statistical evidence that can be used in policy production. By dint of this logic, less priority is given to policy analysis that merely comments on or criticizes the historical context of policy implementation.

Again, this also discloses the basis for the higher value placed on measurement of children's development, practices to augment that development, and criteria for improving the quality of services and to thereby ameliorate risks. While some professionals and practitioners in early childhood may apprehend the priority of these knowledges about human development as a "good" in themselves that aids and benefits young children, the broader picture is one of producing images of child development in order to meet a hidden agenda oriented to economic prosperity and the production of capital.

In the same manner that early childhood practitioners are themselves made instrumental to the production of human capital in this manner, it is likely that policy research in this sector will continue to be dominated by writers external to the early years profession itself, which focuses on the delivery of services rather than on their analysis and evaluation.

However some of the issues that will arise over the coming decades that will necessitate a broadening of the scope of research that early years researchers engage in themselves include the nature of an expanding and changing labor market. Research about policies in this area may additionally consider the increasing intersection of problems in the staffing of childcare services, the delivery of quality and the competing concerns raised by their commercialization, and the geographic distribution of services to different strata of a given community.

OECD research tends to indicate that at a global level the sector is becoming concerned with the broader issue of regulation of the family as a basis for social and economic cohesion. The impact of globalization in economic and educational research requires the reporting of social factors that characterize the gap between developed and developing economies. The field of early childhood education policy is concerned with the ways in which education for young children in different economic settings will determine subsequent social and economic performances. The management and implementation of Global Millennium Development Goals (MDGs) constitute a chief measure of the impact of globalization on early childhood education policy, because it represents a benchmark for delivery of infrastructure and services in developing economies. Each of these matters is likely to feature more prominently in policy debate in the future, enabling the field of policy research

to deepen and to offer more challenges to the way it informs and shapes government perspectives in the sector.

8.9 Document Research and Analysis

8.9.1 What Is a Document?

There are two broad perspectives about the way to best define a document which are addressed in this chapter:

1. In early childhood education, the notion of a "document" is ordinarily taken from an empirical perspective for the purpose of research. In other words, a document is usually apprehended as an idealized "thing." To say that a document is idealized means that a document does not comprise different forms and that its form is stable and unchanging. It also means that from an empirical perspective, a document is something that can always perform the same function. For example, a document can be accessed for the purpose of reading, i.e., it is a text, which may be produced in the form of a book, journal, magazine, a motion picture, or photograph; it could be a virtual file downloadable from the Internet or stored on a computer, a government file or publication, school, university, or other institutional policies; or for historical purposes, it may be an archival artifact such as a diary or an enrollment record. None of these descriptors are exclusive, and there are many other items that might constitute a document. In each case, the key characteristic of a document is its function as a text: the item is something that can be deciphered or read, often as a form of literature.
2. However, from a theoretical perspective, to take the document as an item that can be read in each and every case is always to idealize a document in terms of the assumption that documents exist in the broader cultural context of written language and a literate society. In other words, to apprehend the document as a historical artifact means that its idealization is itself a cultural practice, and, accordingly, it would be necessary to acknowledge that documents are historically mutable or unstable. This observation attends to the possibility of making an artifact function as a text.

Documents are records of a literate culture, and it is a significant theoretical risk to impute legibility to an artifact that may not originally function as a document but does so purely for the sake of research, e.g., a tool or instrument may provide documentary evidence or be necessary for the sake of substantiating a claim of evidence with respect to a research investigation. However, researchers should be wary of presuming that documents always carry certain characteristics of literate culture. The question of treating an artifact of an investigation as a document is a matter of placing the item within a category without first defining or considering the cultural context in which it was generated; if an artifact can safely be regarded as a text, it

may be necessary to consider its original context in relation to the broader issue of what a literary society is or how literary culture impacts on a given research discipline. These precautions are fundamental to the undertaking of document research, especially for those scholars seeking to acknowledge the ontological premises on which the notion of a document has been generated.

The critical basis for considering the ontological premises of a "document" is the risk that documents may be taken naively as a form of "information" (Buckland 1997). In such cases, the document as information loses much of its historical context and structure, and the content of a document is more easily made transcendent of the concrete form of the document itself. This may mean that documents are understood as generic sources of information and that as such, the "truth" value of the "information" is fixed by the way it is used to verify historical events or professional practices.

The problem that underlies these issues about the truth of a "document as information" stems from the question of how reality is understood and the presumption of an experience of reality is assumed. To read a document is taken naively as a form of sensate experience, one in which writing on a page or screen, for example, can be visible to a human eye and decipherable by a literate individual. In most cases, empiricism would lead a reader to assume that the writing means the same thing to any person who reads it, since the letters are codified and always "read" in the same fundamental manner.

However, when seen in the context of literary theory, a document as text (rather than as a document as information) is always subject to interpretation, and despite obtaining a certain function that usually corresponds to the writing being deciphered, texts also possess a different level at which they cannot be directly experienced. From this perspective, the text is largely imperceptible (Derrida 1981). The point here is that if a document is taken as information, its content is relatively transparent, and one possible consequent implication of seeing a document as information is that the author's intentions are conveyed by what is written on the document. However, if a document is understood hermeneutically, i.e., within the context of a literary genre or style, as having a historical setting and of possessing qualities that emanate from the cultural practice of a language, then the meaning of the words written on the document is not exhausted by any initial reading. Multiple interpretations of a text will in this case reveal many different ways of understanding the content and lead researchers in a very different direction that is derived from empirical assumptions. In the latter case, the experience of a document is not purely sensate but is also more or less related to the functions of the text as a sign structure (Spivak 1988).

8.9.2 What Is Document Research?

In accordance with these two perspectives, document research can comprise a range of different practices, depending on the theoretical framework and methods of analysis adopted in any given case. The most general examples of empirical research utilizing documents in early childhood education will take account of the fact that documentation of children's development by researchers and professionals in the childcare sector is a routine aspect of understanding and recording children's learning.

Early childhood education researchers will undertake historical research using documents in which the document as artifact is treated as if it truthfully reflects real events and that interpretation of the document is not complex and does not usually lead to multiple interpretations, at least to the extent that differences between one interpretation and another are insignificant for the sake of historical study (cf. Press and Wong 2013).

Similarly, early childhood researchers may undertake policy studies, in which reading of statistical data about, for example, patterns of government subsidization of childcare for a population of families, may consist of reading numerical tables and converting results of surveys and questionnaires into algebraic symbols, in order to simplify the information as a variable of the problems involved in distributing subsidies across a population. In these cases, numerical data is usually seen as empirically consistent with the experience of the population as a whole, such that any discrepancies between individual families' experience of subsidization are irrelevant to the purpose and function of the statistics themselves (Heckman 2000).

By comparison much of the educational research undertaken in early childhood concentrates on apprehending the experience of individual children and does not collapse automatically into statistical methodologies. A good example of this is video documentation, which is an increasingly strong practice that corresponds heavily with the kind of routine documentation undertaken by practitioners in childcare, as well as with parents documenting their children's learning (Fleer 2008). There is a compelling argument that the complicity between video documentation as it is undertaken by early childhood researchers and between parents and childcare professionals affords a knowledge production that was hitherto unavailable within and across the intersection of families and institutions in the sector.

At a more technical level, this example of document research discloses the complexity of what a document consists of by deepening the capacity for a document to record a "real-life" situation. Video is a combination of audio and visual recording, which is then frequently reduced by researchers to a written transcription of the recorded events and the dialogue they entail. The document is therefore split into three forms: audio, visual, and written transcript. This fragmentation is already significant in an empirical study, because it discloses different forms of data. However, the breakup of the document into different forms is even more significant when placed in the context of a semiotic analysis.

It may be helpful to the reader to acknowledge further that from an empirical perspective, this form of video documentation assumes (generally speaking) that there is no major discrepancy between what the average viewer of a video will see in playback of the recording and what actually happened in the events the video purports to record and document. Accordingly, the theoretical framework for video documentation aims more narrowly at the analysis of the events that a document has recorded and understanding what they might disclose about a recognized issue or theoretical problem.

In the case of a semiotic analysis however, the need to define language and the way it is assumed to function for the purpose of analyzing the document would be a broader site for situating the document as a product of different factors. These may include attending to how children or adults might be understood as producing speech and the difference between speech and writing. Although early childhood researchers may not necessarily treat language as a natural outcome of being "human," they may instead define language in relation to a human community, especially a language community. When research makes such assumptions, the data produced becomes a document of the way children enter a cultural setting and the significance of language or speech acquisition within that process. The document is in these cases a record of a cultural community in a given place and time. For some researchers, the video as document also addresses the difference between language as a cultural instrument and the ways in which different communities and cultures understand and use language (Gachago et al. 2014; Radford 2000).

8.9.3 The Document as an Artifact of "Discourse"

In order to more broadly address the document in early childhood educational research – for the sake of deepening an understanding of practice and methodologies that involve policy analysis and its utilization of document research, as well as the significance of document study in itself in general for early childhood – I propose to finally draw attention to the term "discourse," which is often used as if it were synonymous with any form of conversation or linguistic interaction among humans. The document is an artifact of discourse in these instances by dint of the assumption that there is a direct and obvious correspondence between human language and the records of any given instance of language use.

However the definition of discourse changes dramatically depending on the disciplinary context in which it is being used: in some cases the notion of discourse analysis is used without proper definition and in the absence of strong theoretical parameters that enable a scholar to substantiate the assertions and conclusions they are reaching in their study. There is a risk of naïve and clumsy approaches among early childhood scholars who adopt discourse analysis as a fashionable approach. This risk is especially important in early childhood study because, unlike other domains of educational research, the object of scrutiny is often a young child whose

capacity for speech is still in the process of being developed and, accordingly, the requirement to define how an analysis of discourse might apply is heightened.

In order to summarize the best way to address these risks, I draw the reader's attention briefly to the question of whether it is safe to regard the individual child from a psychological perspective, in which a general assumption is usually made that each child expresses its own individual will and expresses its own autonomous thoughts and in which decision-making is a skill that the child is always trying to acquire. Each of these attributes is a product of the psychological framework in which most common assumptions about human development are already enclosed. However there are two different, broad approaches to discourse analysis that take quite different perspectives on this issue. I summarize these two dominant uses of "discourse" below:

In the first instance, the discipline of linguistics provides a set of structures through which a given piece of text may be analyzed, for example, a speech recorded in parliament or an article from a newspaper or magazine, which purports to "document" and record the details of a historical event. But what are the theoretical premises of this analysis? In the most widespread example of discourse analysis, the production of meaning can always be traced back to the mind of an interpreter of language.

Contexts defined as participant definitions, that is, as mental constructs, are able to function as the interface between situational and societal structures and discourse structures, because they subjectively "represent" relevant aspects of situations and society and directly interfere in the mental processes of discourse production and comprehension. If contexts "control" discourse at all, this is only possible when we conceive them as cognitive structures of some kind. And only in this way are we able to define the crucial criterion of "relevance," that is, in terms of a selective focus on, and subjective interpretation of some social constraint as defined by the participants. This also explains why discourse may be influenced by alternative, fictitious, or misguided definitions of the social situation, as long as the speaker or writer "sees" it that way. Thus, it is not "objective" gender, class, ethnicity, or power that control the production or comprehension of text and talk but whether and how participants interpret, represent, and make use of such "external" constraints and especially how they do so in situated interaction (Van Dijk 2006, 163).

From this perspective, the meaning of discourse is defined with respect to a universal capacity of the human mind to understand, interpret, and engage in linguistic contexts, i.e., discourses. But criticism of this theory would focus on the risk that the human mind as such may not be a universal or generic thing and that to treat human discursive interaction from such a premise demands that the mind be fixed and idealized.

However, in the case of a young child who is not yet in full control of these decision-making faculties as they are projected universally by psychology and linguistics, the validity of tracing an utterance back to an individual mind is complicated by the question of whether that "mind" is operational.

Broad criticism of linguistics has already asserted that Van Dijk's approach transforms language into a passive, insubstantial, and malleable thing that has no

force or power over those who use it. Van Dijk's approach is contradicted as follows: humans do not precede the linguistic context into which they are inserted at birth and cannot choose the language they speak as a "mother tongue"; accordingly, language is not simply a tool more or less appropriated by the individual mind or speaker. Young children would not be learning to speak a language so much as they are participating in a cultural practice that is retrospectively interpreted as if the individual child were an autonomous unit or a force capable of wielding speech as a cultural tool, available to exert their own privileged position over nature. Further, the weight and force of language as an instrument for the dissemination of antecedent cultural and political values are reduced and dissimulated, if the individual mind is privileged in the manner proposed by Van Dijk.

By comparison, Allan Luke points to the historical function of these theoretical premises vis-a-vis the industrial purpose of schooling and literacy. He notes, for example, that the very concept of an individual subjectivity (such as the human mind as proposed by Van Dijk, above) satisfied the needs of a capitalist approach to industry and productivity that is now outdated.

Much early and midcentury educational research attempted to define the human subject in ways that individuated difference and thereby focused the attention of successive generations of researchers, curriculum developers, and teachers on a universal, degendered, cross-cultural, cross-linguistic self. This behaviorally skilled citizen/worker was indeed the ideal subject of industrial, Fordist capitalism. By this account, a great deal of psychological research can be viewed as the historical vehicle of a political will toward defining and classifying a generic individual, toward monoculturalism, and toward education for industrial purposes (Luke 1995, 6).

From this "critical discourse analysis" perspective, the individual subject interacts with discourse in a manner that accounts for a range of variables that "discourse analysis" fails to do: the chief among these is the recognition of the subject as an object shaped by different discourses such as gender, race, and class. Language is not simply manipulated by the subject in the process of producing meanings for the words they speak or read, but neither is the reverse true: discourse accounts for the individual user-of-language (the subject) as a site of contestation in which a range of cultural forces are played out. Accordingly, Luke describes critical analysis of discourse in line with the work of Michel Foucault:

> Foucault described the constructing character of discourse, that is, how both in broader social formations (i.e., epistemes) and in local sites and uses discourse actually defines, constructs, and positions human subjects. According to Foucault (1972, 49), discourses "systematically form the objects about which they speak," shaping grids and hierarchies for the institutional categorization and treatment of people. (Luke 1995, 8)

The implications of incorporating critical discourse methods within document analysis include a broadening of the theoretical premises on which educational research can be conducted and allow for a new range of practical outcomes flowing from this form of study. But this approach to "discourse," and by implication, to the document, is only one of those offered in the development of educational research.

If we were to apply these implications in early childhood research, we would begin to challenge and contest many of the psychological premises on which prevailing scientific knowledge of the human child is based. Early childhood education might not simply be an instrument for the delivery and management of safe and healthy human development but a field of study and practice in which families and their children are given opportunities to independently evaluate the aims and objectives of care and education. We might begin to properly reconceptualize education from a new angle, in which the capacity to speak was not automatically treated as a symptom of human nature.

8.10 Summary

While conceding that early childhood education is a relatively emergent academic field in which questions of policy analysis and document research are as yet still marginal to the mainstream forms of study and scholarship, I nevertheless consider the opportunity to be presenting itself in this emergent field to contest many of the mainstream ideologies which dominate educational policy. Due to the tendency to systematically drive early childhood research in accordance with the overwhelming economic priorities of employability and healthy development at a population level, it has been difficult for many within the profession to obtain sufficient distance from the practices in which they are immersed in their daily work and produce an objective image of their function within the system.

But taking a fresh approach to policy analysis and document research may offer at least one angle on how to redress this problem of objectivity and distance. This chapter has examined some key examples of the direction that research in these areas has taken in the first few decades of the field's history as an academic discipline. But historicity cannot be assumed to correspond to a single universal reality, and each childcare professional ought to be equipped with the analytical tools with which to recognize the globalizing effects of international debate about early childhood and family policy. Accordingly, I have highlighted the importance of respecting diversity between cultural settings by questioning the practice of imagining that the text enclosed within any given policy document or historical artifact can be regarded as universally perceptible. We should not be teaching preservice teachers to assume that a document always means more or less the same thing; we should be attending to the fact that the document is itself a point of contestation about discourse itself (Derrida 1976). Within the scope of this chapter, there is insufficient space to delve more effectively into the range of research frameworks emerging from document analysis in this mode, but given the enthusiasm of writers such as Rhedding-Jones (2012), Ailwood (2004), Heydon and Iannacci (2009), and Wood (2004), early childhood education appears to be embracing the new forms of policy and document research with very positive effects.

References

Ailwood, J. (2004). Genealogies of governmentality: Producing and managing young children and their education. *Australian Educational Researcher, 31*(3), 19–33.

Allmendinger, J., & Leibfried, S. (2003). Education and the welfare state: The four worlds of competence production. *Journal of European Social Policy, 13*(1), 63–81.

Attridge, D., Bennington, G., & Young, R. (Eds.). (1987). *Post-structuralism and the question of history*. New York: Cambridge University Press.

Bacchi, C. (2000). Policy as discourse: What does it mean? Where does it get us? *Discourse: Studies in the Cultural Politics of Education, 21*(1), 45–57.

Benson, C. (2000). The primary bilingual education experiment in Mozambique 1993–1997. *International Journal of Bilingual Education and Bilingualism, 3*(3), 149–166.

Blau, F. D., & Jusenius, C. L. (1976). Economist's approaches to sex segregation in the labor market: an appraisal. *Signs, 1*(3), 181–199.

Bradbury, A. (2012). Education policy and the 'ideal learner': Producing recognisable learner-subjects through early years assessment. *British Journal of Sociology of Education, 34*(1), 1–19. doi:10.1080/01425692.2012.692049.

Brennan, D. (1998). *The politics of Australian child care: From philanthropy to feminism and beyond*. Melbourne: Cambridge University Press.

Brennan, D. (2007). Babies, budgets and birthrates: Work/family policy in Australia 1996–2006. *Social Politics, 14*(1), 31–57.

Bruer, J. (1999). *The myth of the first three years: A new understanding of early brain development and lifelong learning*. New York: Free Press.

Buckland, M. (1997). What is a "document"? *Journal of the American Society for Information Science, 48*(9), 804–809.

Clarke, K. (2007). From 'cycles of disadvantage' to sure start: Discourses of early intervention in families. *Critical Policy Studies, 1*(2), 154–169.

Conley, A. (2010). Childcare: Welfare or investment? *International Journal of Social Welfare, 19*(2), 173–181.

Derrida, J. (1976). *Of grammatology* (Tr. G. C. Spivak). Baltimore: Johns Hopkins University Press.

Derrida, J. (1981). *Dissemination* (Tr. B. Johnson). Chicago: University of Chicago Press.

Donzelot, J. (1997). The policing of families (R. Hurley, Trans.). Baltimore: Johns Hopkins University Press.

Esping-Andersen, G. (2008). Childhood investments and skill formation. *International Tax and Public Finance, 15*(1), 19–44.

Fleer, M. (2008). Using digital video observations and computer technologies in a cultural-historical approach. In M. Hedegaard & M. Fleer (Eds.), *Studying children: A cultural-historical approach* (pp. 104–117). New York: Open University.

Foucault, M. (1972). *The archaeology of knowledge*. New York: Harper and Row.

Frolich, K., Corin, E., & Potvin, L. (2001). A theoretical proposal for the relationship between context and disease. *Sociology of Health & Illness, 23*(6), 776–797.

Gachago, D., Cronje, F., Ivala, E., Condy, J., & Chicoga, A. (2014). Using digital counterstories as multimodal pedagogy among South African pre-service student educators to produce stories of resistance. *Electronic Journal of E-Learning, 12*(1), 29–42.

Hakim, C. (1996). *Key issues in women's work: Female heterogeneity and the polarisation of women's employment*. London: Continuum.

Heckman, J. (2000). Policies to foster human capital. *Research in Economics, 54*(1), 3–56.

Heydon, R., & Iannacci, L. (2009). *Early childhood curricula and the de-pathologizing of childhood*. Toronto: University of Toronto Press.

Hinitz, B. F. (Ed.). (2013). *The hidden history of early childhood education*. New York: Routledge.

Hofferth, S., & Phillips, D. (1987). Child care in the United States 1970 to 1995. *Journal of Marriage and the Family, 49*, 559–571.

Joshi, H., Macran, S., & Dex, S. (1996). Employment after childbearing and women's subsequent labour force participation: Evidence from the British 1958 birth cohort. *Journal of Population Economics, 9*(3), 325–348.

Keating, D., & Hertzman, C. (1999). *Developmental Health and the Wealth of Nations: Social, biological and educational dynamics*. New York: Guildford Press.

Kirk, J. (2007). Education and fragile states. *Globalisation, Societies and Education, 5*(2), 181–200.

Kirp, D. L. (2007). The futures market. In*The sandbox investment: The preschool movement and kids-first politics* (pp. 76–92). Cambridge, MA: Harvard Univ. Press.

Kopczuk, W., Saez, E., & Song, J. (2007). *Uncovering the American Dream: Inequality and mobility in social security earnings data since 1937*, *National Bureau of Economic Research Working Paper 13345*. Cambridge, MA: NBER.

Lewis, J., & Giullari, S. (2005). The adult worker model family, gender equality and care: The search for new policy principles and the possibilities and problems of a capabilities approach. *Economy and Society, 34*(1), 76–104.

Lowenstein, A. (2011). Early care and education as educational panacea: What do we really know about its effectiveness? *Educational Policy, 25*(1), 92–114.

Luke, A. (1995). Text and discourse in education. An introduction to critical discourse analysis. *Review of Research in Education, 21*(3), 3–48.

Mahon, R. (2009). The OECD's discourse on the reconciliation of work and family life. *Global Social Policy, 9*(2), 183–204.

McCain, M. N., Mustard, J. F., & Shanker, S. (2007). *Early years study 2. Putting science into action*. Toronto: Council for Early Childhood Development.

Organisation for Economic Cooperation and Development. (2007). *Babies and bosses. Reconciling work and family life. A synthesis of findings for OECD countries*. Paris: OECD.

Peisner-Feinberg, E., & Burchinal, M. (1997). Relations between pre-school children's child care experiences and concurrent development. The cost, quality and outcomes study. *Merrill-Palmer Quarterly, 43*(3), 451–477.

Organisation for Economic Cooperation and Development. (2011). *Doing better for families*. Paris: OECD. doi:10.1787/9789264098732-en.

Penn, H. (2007). Childcare market management: How the United Kingdom government has reshaped its role in developing early childhood education and care. *Contemporary Issues in Early Childhood, 8*(3), 192–207.

Penn, H. (2010). Shaping the future: How human capital arguments about investment in early childhood are being (mis)used in poor countries. In N. Yelland (Ed.), *Contemporary perspectives on early childhood education* (pp. 49–65). New York: McGraw-Hill and Open Univ. Press.

Radford, L. (2000). Signs and meanings in students' emergent algebraic thinking: A semiotic analysis. *Educational Studies in Mathematics, 42*(3), 237–268.

Rhedding-Jones, J. (2012). The OECD and the notion of expert in early childhood education and care. A play. *International Critical Childhood Policy Studies, 1*(1), 28–41.

Rose, E. (1999). *A mother's job: The history of day-care 1890 to 1960*. Oxford: Oxford University Press.

Rose, E. (2010). *The promise of preschool: From Headstart to Universal Pre-kindergarten*. Oxford: Oxford University Press.

Shonkoff, J., & Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy.

Therborn, G. (2003). Fertility decline and political natalism. In*Between sex and power: Family in the world 1900–2000* (pp. 229–259). New York: Routledge.

Tomaševski, K. (2005a). Has the right to education a future within the United Nations? A behind-the-scenes account by the Special Rapporteur on the right to education 1998–2004. *Human Rights Law Review*, *5*(2), 205–237.

Tomaševski, K. (2005b). Not education for all, only for those who can pay: The World Bank's model for financing primary education. *Law, Social Justice and Global Development Journal, 9*(1), 1–19.
Tyler, D. (1993). Setting the child free: Teachers, mothers and child-centred pedagogy in the 1930s kindergarten, Chapter 3. In J. Blackmore & J. Kenway (Eds.), *Gender matters in educational administration and policy* (pp. 49–67). London: Falmer Press.
Van Dijk, T. (2006). Discourse, context and cognition. *Discourse Studies, 8*(1), 159–177.
Vernon-Feagans, L., Garrett-Peters, P., Willoughby, M., Mills-Koonce, R., & The Family Life Project Key Investigators. (2012). Chaos, poverty, and parenting: Predictors of early language development. *Early Child Research Quarterly, 27*, 339–351.
Vinovskis, M. (1993). Early childhood education: Then and now. *Daedalus, 122*(1), 151–176.
Weiner, G. (2008). Fast policy, fast theories, and fast lives: When everything becomes performance. *Discourse: Studies in the Cultural Politics of Education, 29*(2), 289–295.
Wood, E. (2004). A new paradigm war? The impact of national curriculum policies on early childhood teachers' thinking and classroom practice. *Teaching and Teacher Education, 20*, 361–374.

Chapter 9
A Cultural-Historical Methodology for Researching Early Childhood Education

Marilyn Fleer and Nikolai Veresov

Abstract There are many ways to frame research, and there is a plethora of ways that researchers have theorised and discussed their study designs. In this methodology chapter, we present an overview of researching in early childhood education from a cultural-historical perspective. We specifically discuss aspects of a cultural-historical methodology which are related to play and development in early childhood settings. In this chapter we examine three key points. First we discuss what new perspectives the cultural-historical methodology can bring to the field of early childhood education research. Second, we show what a cultural-historical methodology will allow researchers to do. Finally, we (1) theorise a set of cultural-historical principles drawn directly from Vygotsky's legacy but in the context of contemporary research practices in early childhood education; (2) conceptualise digital tools dialectically, as both a research tool for capturing observations of practices and as a cultural tool for the development of young children, where microgenetic changes are made visible and (3) discuss the doubleness of the researcher, as a participant in the research site and as a researcher collecting data. Through the lens of cultural-historical theory, we examine the contemporary challenges and conceptualisations of researching in early childhood education contexts.

Keywords Early childhood • Cultural-historical research methodology • Digital tools • Doubleness of a researcher

9.1 Introduction

Researching in early childhood education can take many forms, such as sociometrics (Gazelle et al. 2015), mixed methods (Harrison and Wang, Chap. 12, this volume), critical incident techniques (Rous 2015), grounded theory (Thornberg, et al.

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2015), case studies (Hill and Millar 2015), action research (Smith 2015), microethnography (Sutterby 2015) or policy research (Peers, Chap. 8, this volume). But what distinguishes one approach from another is how the methods for a particular approach are related to theory. The methodology is key for conceptualising the research process (Saracho 2015). In this chapter, we specifically examine a cultural-historical methodology for researching the learning and development of young children in early childhood education contexts.

As is well known, cultural-historical theory was originally conceptualised by L.S. Vygotsky. In his time, Vygotsky was interested in going beyond the descriptive models and principles that he believed underpinned the empirical methods of investigation that dominated many fields of psychology and education. Focused on behaviours, these methodologies and their corresponding methods sought to describe the behaviours observed. These traditional descriptive approaches have been influential in early childhood research over the years (Saracho 2015), amassing a great deal of data about what young children do and think. The theoretical perspectives underpinning those approaches have been captured through the term developmental research methodologies, and those researchers who have sought to adopt different approaches to researching with a focus on understanding the developmental conditions have been termed postdevelopmental methodologies (Fleer 2014a). This chapter is concerned with the latter only.

Set out in the six volumes of his collected works are examples of methods and principles for researching young children in families and educational settings, where the focus is on understanding development as a sociocultural genesis of human mind. These principles are nestled within a system of theoretical constructs that speak directly to a new way of conceptualising research. Vygotsky (1997b) implicitly introduced through the collected works (Vygotsky 1987, 1993, 1997a, b, 1998, 1999), explanatory models and principles for researching children's development. Foundational to the models and principles is dialectical logic, which has been taken up elsewhere in the theory section of this volume. This chapter should be read in conjunction with the chapter on cultural-historical theory (Fleer and Veresov, this volume).

Researchers in early childhood education have been drawn to a cultural-historical methodology because it not only focuses on development, but it also examines the process of development (Veresov 2014). Here specifically, early childhood researchers have sought to understand the conditions for young children's development (Hedegaard 2008a). Hedegaard (2008b) has termed this a *dialectical–interactive approach* for examining the conditions in which children participate. Other contemporary researchers have framed this as an *intergenerational family dialogue* for capturing family practices that are passed on and imbued with intergenerational meaning (Monk 2014). Still others have sought to capture the *past–present dialectic* for capturing the inseparability of the past and the present cultural practices (Ridgway 2014). In addition, some have sought to create specific conditions for children's development, such as the *educational experiment* (Hedegaard and Fleer 2008), *developmental education* (van Oers 2008, 2012; van Oers and Duijkers

2013), *film-play* (Ferholt 2010), *playworlds* (Bredikyte 2010, 2011; Ferholt and Lecusay 2009; Lindqvist 1995; Rainio 2008) and *transitory activity system* (Hakkarainen 2010), so that specific pedagogical approaches that support children's learning and development can be studied.

There appears to be an international trend to using *digital documentation* for capturing and analysing the developmental conditions of children in everyday life (Adams and Fleer 2015; Fleer 2008; Hao, 2016; Li 2014; March and Fleer 2017) including infants and toddlers (e.g. Johansson and White 2011; Sikder and Fleer, in press), families over extended periods (Hedegaard and Fleer 2013) and across cultures (Chen and Fleer 2015; Quiñones 2014).

In summary, researchers using cultural-historical theory have drawn upon some or all of the principles that underpin a cultural-historical methodology (Fleer 2016), and many have primarily used digital tools as their main method for generating data so that the process of children's development can be better understood (Fleer and Ridgway 2014). However, explicit methodological writing on what might constitute the collective principles and models as a methodology for researching in early childhood settings does not yet exist (exceptions include Fleer 2016; Fleer and Ridgway 2014; Hedegaard and Fleer 2008; Veresov 2014). To address this general gap, this chapter brings together all the principles outlined in the collected works of Vygotsky with examples of data to illustrate these principles in action. This is done to theorise a cultural-historical methodology with the corresponding methods that speak directly to researching in early childhood settings so that the following claim made by Vygotsky is realised:

> Finding a method [and therefore conceptualising a methodology] is one of the most important tasks of the researcher (Vygotsky 1997b, p. 27).

9.2 On Theory and Method

Vygotsky's theory is not just a collection of concepts and principles. What makes cultural-historical theory unique is that every concept refers to a certain aspect of the complex process of development of the higher mental functions. The role, place and interrelationships of all the concepts within the theory become clear in terms of the origins and development of the higher mental functions. Therefore, cultural-historical theory provides a system of interconnected instruments for the theoretical analysis of the process of development in its wholeness and complexity. However, a theory, even a highly developed one, without the method is nothing but just words. Theory without methods is a knife without a handle.

Cultural-historical theory provides a system of concepts which act as theoretical tools for investigating the complex process of mental development and at the same time allows the tools to be used for the investigation of the process of development. Cultural-historical theory includes a "nonclassical" type of method, which Vygotsky originally called the experimental-genetic method.

> The method we use may be called an experimental-genetic method in the sense that it artificially elicits and creates a genetic process of mental development. Due to this, we are able experimentally, in the laboratory, to elicit a certain development… (1997b, p. 68).

First, the experimental-genetic method of analysis was designed to investigate the process of mental development, capturing its dynamics and complexity. Second, this method was based on understanding development as a complex process of qualitative change. This method provided a causal (genetic), not descriptive (phenomenological), analysis of the phenomenon under study. Finally, the method was designed to investigate the developmental conditions of the child. In psychological research, the developmental conditions are often created artificially in laboratories with special experimental settings; however, in educational research, investigators mainly look at developmental conditions existing in the real life of the children within various educational, family and other social and cultural contexts.

The experimental-genetic method was created in (and for) the experimental investigation of development in early childhood and therefore is strictly connected with this age period. The majority of Vygotsky's experiments were done with children. However, the fundamental task of experiments was neither to describe changes or differences in development related to age nor to detect specific psychological characteristics of different ages. The general approach was to reveal the general laws of mental development which lay behind the external manifestations of changes. Early childhood is the most appropriate period in which to investigate this, since at this time higher mental functions are in the process of development. Thus, studies in child development are able to produce results which are important for general psychology and education, since they bring to bear on the experiment grounds for reconsidering general psychological ideas and principles.

An experimental-genetic method involves several principles which together form a system of experimental tools for the study of development. What is essential is that the principles of the experimental-genetic method strictly and directly follow from concepts of cultural-historical theory for the study of the process of development both theoretically and experimentally.

9.3 Principles for Researching in Early Childhood Settings

Each principle of the experimental-genetic method directly follows from the appropriate theoretical concept, and therefore, theoretical instruments and experimental instruments together create a unity as the main components of this concrete research strategy. Both the theory and method create a unity, as originally captured through the term the genetic research approach. Unfortunately, Vygotsky's scientific legacy does not contain a description of these principles. For many years, they were not even clearly formulated in Vygotsky's school. However, they can be "unpacked" and derived from descriptions of various experimental studies presented in Vygotsky's writings (see Veresov 2010a, b, 2014 for an analysis and the formulated

principles of genetic research methodology). In this chapter we use the term cultural-historical method and methodology, rather than the original term used by Vygotsky of experimental-genetic method, as the latter could be misinterpreted in the contemporary context of early childhood education.

Table 9.1 An overview of the key principles used by contemporary cultural-historical researchers in early childhood education

Vygotsky's original methodological principles	Methodological elaboration by contemporary researchers studying young children from a cultural-historical perspective	Examples
Principle of "buds of development" Genesis	Educational experiment (Hedegaard 2008b), genetic research methodology (Veresov 2014), transcending linearity (Fleer 2014a), developmental education (van Oers 2012).	Studying infant–toddlers' development in everyday life (Sikder and Fleer, 2015a), developmental education (van Oers 2008, 2012; van Oers and Duijkers 2013).
The principle of interaction of ideal and present forms Dynamic relation between the child and their environment as a source of cultural development	Wholeness approach (Hedegaard 2008a), dialectical–interactive methods (Hedegaard 2008b), iterative analysis (Fleer 2014a; Li 2014).	The relations between ideal and real forms of small science during collaboration among parents and infants–toddlers (Sikder and Fleer, 2015b); the dialectic between ideal and real forms of "sharing": a cultural-historical study through story acting through imaginary play at home (Hao 2016), and developmental education as shown through the shoe shop example (van Oers 2008).
Principle of dramatic event Drama	Dramatic collision or category (Veresov 2014), capturing change in motion (Fleer 2014a), transitions (Adams 2015; Adams and Fleer 2015).	Study of children and teachers in playworlds (Bredikyte 2010, 2011; Ferholt and Lecusay 2009; Hakkarainen and Bredikyte, 2008; Hakkarainen, et al. 2013; Lindqvist 1995; Rainio 2008), transitory activity system (Hakkarainen 2010), fairy tales (Fleer et al. 2014), film-play (Ferholt 2010) and digital devices (Fleer 2014c).
Principle of developmental tools	Past–present dialectic (Ridgway 2014), intergenerational family dialogue (Monk 2014), keepers of local knowledge (Ridgway 2014). Belongings as a source of development (Adams and Fleer 2016).	Signs for supporting young children's development of emotion regulation (Chen and Fleer 2015), using special toys to develop play complexity (March and Fleer 2017), moving countries: belongings as central for realising the affective relation between international shifts and localised micromovements (Adams and Fleer 2015).

(continued)

Table 9.1 (continued)

Vygotsky's original methodological principles	Methodological elaboration by contemporary researchers studying young children from a cultural-historical perspective	Examples
Principle of sustainable results	Social position of the child changes (Bozhovich 2009) from being a good school child to a school failure (Fleer 2016), motive orientation changes from play to learning as new leading activity (Fleer 2014b).	Longitudinal study of children's learning, development and play (Hedegaard and Fleer 2013), Golden Key schools (Kravtsov and Kravtsova 2010).

Adapted from Fleer (2016) and Veresov (2014)

We draw upon the work of Veresov (2014) and Fleer (2016) to bring together in Table 9.1 a snapshot of these key principles but in the context of contemporary research practices in early childhood education. We have limited our presentation of examples to those who have directly used Vygotsky's original conceptions of development and who have sought to research from the insights gained from cultural-historical theory. This table is followed by a detailed discussion of each of the principles, where further comments are made in relation to contemporary research practices in early childhood education. These principles taken from Veresov (2014) are reproduced here specifically for discussing cultural-historical research methodology for early childhood education.

9.3.1 Principle of "Buds of Development"

The principle of "buds" follows from two important theoretical positions which reflect the character of mental development. First, the process of mental development

> …is not confined to the scheme "more-less," but is characterized primarily and specifically by the presence of qualitative neoformations that are subject to their own rhythm and require a special measure each time. It is not correct to assume that all development is exhausted by the growth of these basic, elementary functions which are the prerequisites for higher aspects of the personality (Vygotsky 1998, p. 190).

Second, mental development is not a linear, homogeneous process. Simultaneously, there are different levels of development of different psychological processes and functions in the child. In each period of development, there are functions which are already matured (developed) and there are functions that are in a

process of maturation. So there is always a complex nexus of (1) functions that have not yet developed, but which are in the process of development; (2) functions that will develop but are currently in an embryonic state and (3) developed functions. Metaphorically, they could be defined as "buds", "flowers" and "fruits" of development (Vygotsky 1935, p. 41).

This methodological principle orients a researcher to focusing on defining the empirical/experimental study as a general question from that of "What psychological process am I going to investigate in my experimental study?" to the specific question of "Which stage of development is the process/function in?" To put it simply, development in existing or specially created conditions becomes the basis of empirical/experimental study. The study should begin with revealing that the function under study is on its "bud" (embryonic) stage and is not yet developed. It does not make any sense to study existing developmental conditions or to organise specially created developmental conditions when the function is already developed. That is, the function under study is in the "fruit" state. On the other hand, it makes no sense to study the function which does not yet exist in child's mind. The principle of "buds of development" helps the researcher to avoid these extreme poles.

This methodological principle orients concrete research programmes to identify not the objects under study, but rather the process under study, the process of the development of higher mental functions in the child, especially by purposely trying to construct them. Examples of this methodological principle can be found in the work of Bert van Oers. In the famous study of children role-playing being in a shoe shop, van Oers (2008) created the research conditions that allowed him to study the process of development, where he was able to focus on the "buds of development" as they were in the process of developing. Through children role-playing setting up a shoe shop, the children in his study encountered a problem during the process of greeting their customers, fitting them with shoes, and finding relevant sizes and colours. The children did not have a system for storing different-sized shoes or colours in boxes. Rather, they had to open each box to find the correct colour and size of shoe for their customer. In the context of early childhood education, the young children's development of mathematical reasoning, problem solving and classification had not yet developed into the mature form. Van Oers (2008) created a research study that documented the mental character of the children during the process of role-playing and examined how their mental development changed as a result of the problem formulation and the process of finding and enacting solutions. The study made visible the complex nexus of functions that had not yet developed, but which were in the process of development. The study design by van Oers (2008) allowed him to ask questions about the children's existing development and to study closely how both the problem formulation and the use of symbols changed the children's practices and how this in turn supported (or not) the development of mathematical competencies, competencies which his study showed were initially in an embryonic state.

9.3.2 The Principle of Interaction of Ideal and Present Forms

This principle follows from the idea that in contrast to traditional psychology, which describes the development of the human mind as a process influenced by two main groups of factors (biological and social), cultural-historical theory defines social environment not just as a factor but as a source of development.

> The social environment is the source for the appearance of all specific human properties of the personality gradually acquired by the child or the source of social development of the child which is concluded in the process of actual interaction of «ideal» and present forms. (Vygotsky 1998, p. 203)

This quotation features two theoretical concepts related to development: the social environment and the interaction of ideal and present forms. We illustrate their developmental content through an example of the origins of the pointing gesture in the child. This example by Vygotsky shows the essence of the process of cultural development expressed in a purely logical form (Vygotsky 1997b, pp. 104–105). In the beginning, the pointing gesture of a child is merely an unsuccessful grasping movement aimed at an object. When the adult comes to the aid of the child and comprehends his or her movements as a pointing gesture, the situation essentially changes. The child's unsuccessful grasping movement gives rise to a reaction not from the object but from another person. The original meaning of this unsuccessful grasping movement is thus imparted by others. Only afterwards does the child himself or herself begins to treat this movement as a pointing gesture. Here, the function of the movement itself changes: from a movement directed towards an object to a movement directed towards another person; the grasping is transformed into a pointing. Thus, the pointing gesture first begins by movement that is understood by others and only later becomes a pointing gesture for the child himself or herself.

The grasping movement is a kind of primary form which, from the beginning, interacts with the "ideal" form (the adult's comprehension of the movement as a pointing gesture), and this creates the moving force for the grasping action to transform into a pointing gesture. In both examples, social interaction as a source of development exists as a process of interaction of the ideal and present forms. The development of any higher mental function in the child is impossible without the interaction of the ideal and present forms. The grasping movement never becomes the pointing gesture without an adult.

There is no development if there is no interaction between the ideal and present forms. This methodological principle orients the researcher to focus on the study of developmental conditions in two interconnected ways. First, it orients the researcher to the identification of what are the actual ideal and present forms within the research design, and second, it focuses the design on the identification and analysis of how these ideal and present forms interact in existing or specially created developmental conditions. In some cases, the creation of experimental ideal forms and organisation of an interaction of ideal and present forms is in itself the developmental condition.

In returning to the research of van Oers (2008), it is possible to notice that the teacher has introduced the ideal form by suggesting the use of symbols to mark each

of the shoe boxes. In this study, it is therefore possible to see how the present form of the children's development (as discussed in relation to Principle 1) interacts with the ideal form. Looking at shoe boxes in a real shoe shop gives the ideal form of the symbol and gives the idea of classifying and storing boxes for easy retrieval, thus solving the problem. As with the example of the pointing gesture, first the movements of the children in the role-play of interacting with their customers created a primary form of a problem, but it was through the teacher noticing and the teacher's comprehension of the children's inefficient actions that she was able to orient the children to the need for symbols. That is, the use of symbols changed the way the play took place. A further example can be found in the work of Hao (2016), who closely studied a mother and daughter at home role-playing. The child held three candies and wanted to give each of her two toys a real candy as part of her game. The child also wanted to keep more than one of the candies for herself, and the game distressed her, as she didn't know how to share the candies to continue with the game. The child was originally oriented to the objects – the toys and the candies. It was through the mother's comprehension of the situation, where she instructed her daughter on sharing out different tasting candies by cutting them, that the present form of the child's development was oriented to the mathematical concept of division (ideal form). The interactions between the present form and the ideal form (division) changed the child's actions and allowed her to continue her play. In both examples, it is therefore possible to study the present form of the children's development (as discussed in relation to Principle 1) during its interaction with the ideal form (mathematical symbols; mathematical concept of division). This principle included in the study design allows the researcher to study the conditions of a child's development.

9.3.3 Principle of Dramatic Event

The principle that follows comes from two interconnected theoretical positions. The first is expressed in the following requirement for a specifically designed experimental study:

> Processes must be analyzed, and through analysis, the true relation that lies at the base of these processes, behind the external form of their manifestation, must be disclosed. (Vygotsky 1997b, p. 70)

The keywords here are "the true relation". Yet, what does it mean to disclose the "true relation", and what kind of relation is this "true relation"? The general cultural-historical law of cultural development gives the answer. Here is the formulation of the general cultural-historical law:

> …every function in the cultural development of the child appears on the stage twice, in two planes, first, the social, then the psychological, first between the people as an intermental[1]

[1] In Russian original it is interpsychological (интерпсихическая) and intrapsychological

> category, then within the child as a intramental category…Genetically, social relations, real relations of people, stand behind all the higher mental functions and their relations. (Vygotsky 1997b, p. 106)

Three points are important here: First, higher mental functions do not appear IN social relations, but AS social relations; every higher mental function was external because it was social before it became an internal strictly mental function; it was formerly a social relation (Vygotsky 1997b, pp. 105). Second, even in being transformed from interpsychological to intrapsychological, "they remain quasisocial" (Vygotsky 1997b, p. 106). So, "intrapsychological" is social by its origin and construction. Third, there is one more aspect in the relations between "interpsychological" and "intrapsychological" functions which highlights a complex and dialectical character in the process of development:

> The basic principle of the functioning of higher functions (personality) is social, entailing interaction of functions, in place of interaction between people. They can be most fully developed in the form of drama (Vygotsky 1929b/ 1989, p. 59).

The social, interpsychological form is a dramatic interaction between people; interpsychological drama is conceptualised as the dramatic social relation, and it is through the drama that the true relations as mental processes become disclosed (see Fleer and Veresov, this volume, for further theoretical elaboration of this concept).

This principle orients the researcher to discover or to design social collisions, dramatic events in children's social environments, which are turning points for their individual developmental trajectories. This might be in a real-life situation related to periods of transition, such as when a child starts school, where a potential crisis emerges, or during specially created conditions, such as dramas in fairy tales (March and Fleer 2017), dramatic story narratives (Hakkarainen 2010), playworlds (Lindqvist 1995) and many others. Such socially engineered critical moments of "small dramas" where transitions from interpsychological to intrapsychological takes place provide very rich empirical data where these transitions are made visible and analysable. These dramatic moments or crises as discussed by Vygotsky can also be in relation to a change in motive orientation, as we might see when a child's activity and orientation changes from primarily wanting to play to wanting to learning where the child enters into new social relations with others.

We can see this principle of dramatic events through the research of Lindqvist (1995). She used drama pedagogy to introduce young children to imaginary situations created through the story telling and acting of story books, folk tales, etc., but where the story line held dramatic moments or collisions. Through the children together with their teachers, entering into the imaginary world, or playworld of specific books, children encountered problems they had to solve. These events were usually emotionally charged and were always dramatic. The research of Lindqvist (1995) and those that have followed (Bredikyte 2010, 2011; Ferholt and Lecusay 2009; Hakkarainen 2010; Lindqvist 1995; Rainio 2008) focused on how these dramatic events supported the development of play, and through playing out the prob-

(интрапсихическая) (Vygotsky 1983, p. 145).

lem situations, this changed the collectively united social relations between children and teachers in the dramatic events (interpsychological), and which acted as the source of children's development as they took on the characters and solved the problems themselves (intrapsychological). Through social relations, children are collectively oriented to the playworld (interpsychological), but as they enter into the imaginary situations and solve problems as part of these dramatic events, the intrapsychological development of the children becomes established over extended periods of time. The playworlds research takes place over a term or even a full year, and children continue to go on adventures, meeting more dramatic moments and problem scenarios that they must solve in play. By studying the dramatic events (Principle 3), the researcher is tuned into not just the present form of development, but also the maturing functions that are in the process of development (Principle 1).

9.3.4 Principle of Developmental Tools

This principle is strictly connected with the concept of sign mediation, which is rightfully considered as one of the core ideas in cultural-historical theory. Even more, for many experts, this concept is a kind of distinguishing feature of cultural-historical theory. In Vygotsky's writings, we could find various examples of sign mediations such as knots for memory, drawing straws in case of two equal stimuli and many others. He even listed a number of examples of systems of cultural signs: "language; various systems of counting; mnemonic techniques; algebraic symbol systems; works of art; writing; schemes, diagrams, maps and mechanical drawings; all sorts of conventional signs and so on" (Vygotsky 1981, p. 137).

However, signs and mediation were known and had been studied in psychology long before cultural-historical theory. Vygotsky's specific approach to signs and mediation was essentially new; cultural signs and mediation were analysed from the point of view of their role and place in the process of mental development. The cultural sign (or system of signs) is seen as a developmental tool.

The development of the human mind is not a biological but rather a cultural-social process. The transition from the biological to the social path of development is the central link in the process of development, a cardinal turning point in the history of the child's behaviour (Vygotsky 1999, p. 20). The psychological essence of the sociocultural path of development is that:

> … the basic and most general activity of man that differentiates man from animals in the first place, from the aspect of psychology, is signification, that is, creation and use of signs. Signification is the creation and use of signs, that is, artificial signals. (Vygotsky 1997b, p. 55)

Therefore, sign and sign mediation obtain an extraordinarily important role in mental development. Reorganisation and transition are two important aspects of the process of development that the concept of sign and the principle of sign mediation are related to.

Cultural signs and sign mediation are essential for the process of qualitative reorganisation of the psychological functions in a course of development:

> The sign as a tool reorganizes the whole structure of psychological functions. It forms a structural centre, which determines the composition of the functions and the relative importance of each separate process. The inclusion in any process of a sign remodels the whole structure of psychological operations. (Vygotsky 1929a, b, p. 421)

Every new structure of mental functioning is the result of its remodelling, the product of sign inclusion. Using Vygotsky's terminology, a new structure is a "fruit of development". However, Vygotsky's methodology is not focused on "fruits"; it is directed on the analysis of the process of development, that is, the transition "from buds to fruits". This leads to the second aspect of the process of development that the concept of sign is related to, that is, the aspect of transition.

Mental development as a process is a "transition from direct, innate, natural forms and methods of behaviour to mediated, artificial mental functions" (Vygotsky 1998, p. 168). The sign (or system of signs) originally exists as an external tool, and later it becomes a tool of internal mediating activity. What is important is that the sign (external tool of activity) should not be given by the experimenter to the child directly. The processes of active searching and finding a sign, as well as the reorganisation of the whole unit and the transition from direct connections to indirect (mediated) connections, were the focus of Vygotsky's experimental studies of the origins of mediating activity.

This principle orients researchers to study the process of child development in three interrelated ways, depending on the research question. First, it allows for the study of different cultural tools existing in different cultural and historical settings from the point of view of their developmental potential and efficiency. Second, it allows for the investigation of the existing or specially designed situations of transitions of a child from direct to mediated activities at different stages of development. Third, it provides for an opportunity to study key aspects of the reorganisation of the whole system of child's mental functions in everyday or specially designed situations, where the child begins to use or create cultural signs as external tools which become internal psychological tools.

The principle of developmental tools can be shown in the research of Chen, who followed children during emotionally charged moments in everyday life contexts in order to study how families support their children to self-regulate. Her study examined the signs used by families, such as, the time-out chair, for supporting young children's development of emotion regulation (Chen and Fleer 2015). She made video observations over 3 months in the home and community during moments of transition. The sign (or system of signs), such as the time-out chair, originally exists as an external tool to direct the child. The time-out chair is used in the process of transitioning from direct emotional expression to mediated action through sitting on the chair and being asked to relax. This is the system of signs, which together mediate the child's emotions and behaviour. With repeated mediated support by the parents, the child engages in a transition from direct, innate, natural forms of expression of emotions and methods of behaviour surrounding the emotional state, to a medi-

ated, artificial mental function of self-regulation. The video observations capture these moments and give the researcher the opportunity to analyse closely signs and potentially a system of signs, which together support (or not) self-regulation. In Chen's study, she examined the cultural signs being introduced by families. The cultural signs, such as the chair, act as a mediating tool for families to support their children to self-regulate.

9.3.5 Principle of Sustainable Results

This principle of cultural-historical method reflects the results of development. Continuing Vygotsky's metaphor, we could say that the results are "fruits" of development. However, these "fruits" are of very special nature. The result of development is not just new functions that appeared as outcomes at the end. Results of development are not new higher mental functions only, they are "qualitative neoformations" (Vygotsky 1998, p. 189). "Neoformation" is the result of the reorganisation of the whole system of functions, a new type of construction of the child's consciousness and mental functions (Vygotsky 1998, pp. 190). This new type of construction is the result of a qualitative reorganisation of the whole system. Actually,

> Higher mental functions are not built up as a second story over elementary processes, but are new psychological systems that include a complex merging of elementary functions that will be included in the new system, and themselves begin to act according to new laws. (Vygotsky 1999, p. 43)

Thus, not a new function, or even a new higher mental function, but rather a qualitatively new structure of functions characterises the result of development.

The principle of sustainable results in relation to the research of the process of development means that the results of the research must not simply be statistically valid changes but rather a new quality. Therefore, an experimenter has to have enough supplementary means to investigate what type of changes happened during the experimental study to make sure that the changes reflect the new system (new structure) that appeared.

This principle is evident in the research of Hedegaard and Fleer (2013), who investigated the development of children from four families over 12 months as they participated in everyday activities at home and at school. Through video observations of the Australian families engaged in everyday practices, the children were followed rising in the morning, meal times, walking to school, being at school, walking home, bedtime routines, homework and play activities over two school years. The societal values, institutional practices of the home and school, and the intentions of each child were analysed holistically. Small, everyday transitions were captured in the video observations, and these observations of the same activity setting (e.g. breakfast) over different periods allowed for an analysis of the social relations, participating activities and the child's social situation of development over

12 months. Following the children from each of the families over an extended time period gave the possibility of seeing if and how children's social relations changed, how their social position changed, such as from being a child in the family to being a school child on entering school (Bozhovich 2009). Possible changes across time, alongside of studying the microgenetic transitions experienced, gave the possibility to notice qualitatively new structure of functions which characterise development. This development becomes visible through the new social relations. Determining the reorganisation of the whole system of functions is possible in a study design that extends over a long period of time. Over time it is possible to see sustainable change, such as a change in motives from play to learning as might be observed in the context of free play settings, where the teacher organises environments for both play and learning. This change in motives can signal to the researcher the child's development.

Summary In this section we have examined the five principles drawn from Vygotsky's cultural-historical theory and illustrated these principles through examples taken from contemporary research. What is evident is that a study design when theorised may not specifically draw upon all five principles, but rather it may only use one. What is key is which principles open up the possibilities for designing a study that uniquely answers the research questions being posed. A research question about sustainable results, as we saw for studying children's development and play in everyday life over 12 months (Hedegaard and Fleer 2013), is very different to following a family during times of transition over 3 months (Chen and Fleer, 2015). Sustainable results can be determined through the former study design, but not easily through the latter. Researchers like Chen rightly draw upon only two principles: the principle of the ideal and real forms of emotion regulation (Principle 3), and the dramatic collisions or small moments where families support their children to self-regulate in everyday practices (Principle 3). Contemporary research also introduces other research needs and makes available new cultural tools that were not available in Vygotsky's time. In the section that follows, we focus specifically on the contemporary context of researching early childhood education to discuss new developments for a cultural-historical methodology.

9.4 Contemporary Challenges and Conceptualisations of a Cultural-Historical Methodology

In this section we move from an examination of the foundational principles of a cultural-historical methodology as conceptualised by Veresov (2014), and as derived from the originally methodology of Vygotsky, and introduce contemporary challenges and conceptualisations specific to early childhood education research. Research is not only about objects or processes under study, but it is also about conceptualising the research tools and the position of the researcher in the research process. This section addresses the challenges associated with new practices in research and the conceptualisations made possible through cultural-historical theory.

We specifically discuss in the first part of this section the digital research tools, where we introduce the idea of tools not just for collecting data, but also as cultural tools for children's development. What have emerged in recent times are an awareness and a new practice of using digital tools for early childhood education research. There are two key aspects associated with the practices of using digital devices as research tools:

1. From a cultural-historical perspective, digital tools can act as both a research tool and a cultural tool for children's development. This is because young children already use these tools in their everyday lives. This is a dialectics relation, because the digital devices act as both research tools to capture children's development, whilst at the same time they are cultural tools that develop the child. Other theoretical perspectives take the research tools and cultural tools as separate domains of practices in the research process. Cultural-historical theory allows for the dialectical conceptualisation of the digital technologies as both cultural tools and research tools. Not every research tool is a cultural tool, and not every cultural tool is a research tool, but digital tools can afford this double possibility, when conceptualised from a cultural-historical perspective. But this double possibility disappears when digital tools are only used for collecting data.
2. When conceptualising digital tools as cultural tools, it makes it possible to create and analyse developmental conditions, which afford microgenetic changes and which can be captured through the digital tools because they have been deliberately made visible.

These two aspects of using digital tools, when conceptualised holistically, show the dialectical nature of digital tools from a cultural-historical perspective. This idea is taken up next, in the context of the historical and contemporary research needs associated with early childhood education.

9.4.1 New Cultural Tools for Researching in Early Childhood Education

In line with the foundations of a cultural-historical methodology, we know that the contexts for researching in early childhood education have historically changed over time. In the example of play, we know from the theoretical work of Elkonin (2005), who examined anthropological studies and excavated artefacts from archaeological digs, that the phenomenon of children playing was culturally and not biologically constructed. This he argued was due to the changing societal conditions, where new technologies meant that children could no longer, for example, simply use digging sticks or their hands to dig soil and plant seedlings in order to contribute to economic sustainability of families. Rather, children needed to practice using tools (e.g. fire lighting), usually miniature objects (e.g. string and stick spinning tops), and later toys (spinning tops), so that they gained the necessary skills and competencies to manage the tools of particular cultural communities, so as to

continue to contribute to the family's survival. Both resources (e.g. toys) and time to practice/play with these objects were supported in the communities at that time, thus introducing the phenomenon of children's play in some societies.

This example from Elkonin (2005) illustrates how the technologies in society create new societal needs, such as the development of toys and the conception of play as an activity of childhood, which change the cultural practices of families. As such, particular communities and societies value particular play practices by giving resources and time to play. New needs in contemporary times also create new practices, which societies or communities need to research. This is introduced here to illustrate how new practices and societal needs create new research problems – as was shown in the introductory chapter to this volume (Fleer and van Oers, Volume 1), where countries in the south were worried about how to introduce play practices in formal learning institutions, and countries in the north were worried about preschools becoming too formal, leading to the research problem of "What is the relations between play and learning?"

New problems may also create the need for new research tools. However, new tools, such as readily available digital video cameras and digital data storage and processing, also create new possibilities for research that were not readily available in Vygotsky's time, opening up new ways of researching that also require theorisation. We need to examine this contemporary research context in order to illustrate the dialectical nature of digital tools from a cultural-historical perspective.

It can be argued that the introduction of new technologies in research, such as digital video tools, has created new research conditions for early childhood education (e.g. Johansson and White 2011). For example, mounting action-cameras onto the heads of infants, so as to closely follow the gaze of infants in order to determine what they pay attention, at the same time as following what adults do, so that a close study of interactions is now possible. White et al. (2007) argue that this kind of research is not about the breadth of coverage, as this is only glimpses of what infants pay attention to, but rather it is about gaining a depth of understanding about the nature of the collaborative enquiry in which meaning is ascribed by infants to what they engage with and for how long. The new cultural tools available to researchers have allowed for new kinds of research questions to be asked because tools now exist which enable early childhood education researchers, rather than laboratory-based researchers, to examine real-world contexts in which young children, including infants, engage. Intersubjectivity between children/infants and educators in the context of formal and informal settings can now be studied in new ways. This has also created a new theoretical need for researchers, as a cultural-historical methodology as discussed in the previous section does not say anything about these new cultural tools. As such, this has opened up new methodological discussions (Fleer and Ridgway 2014). This is conceptualised methodologically in Table 9.2 as a new cultural-historical principle for researching in early childhood settings. Key here is how digital technologies allow researchers to capture both the dynamic and dialectical relations that occur naturalistically in early childhood settings, but also how they can contribute to research because children also have available to them new cultural developmental tools. The latter has been shown explicitly in the context of research

Table 9.2 New conceptualisations of digital tools for researching in early childhood education

Cultural tools for capturing the dynamic and dialectical relations in early childhood settings	Digital video tools have created new research conditions for early childhood education (e.g. Johansson and White 2011; White et al. 2007).	Theorising these new methods from a cultural-historical perspective has emerged (Fleer and Ridgway 2014; Hedegaard and Fleer 2008; Johansson and White 2011).
Cultural tools for analysing the dynamic and dialectical relations in early childhood settings by following the intentions of the participating persons.	New cultural tools for capturing in situ moments of intersubjectivity in everyday practices of early childhood settings.	For example, Johansson and White (2011); White et al. (2007).
Cultural developmental tools that create new play conditions through dialectical virtual and concrete play contexts.	Digital pivots and virtual placeholders: digital tools support children in their play so that they can capture digitally their own play activity (Fleer 2014c).	Fleer (2014c)

that uses software programs and digital devices that support children in their play so that they can capture digitally their play activity (Fleer 2014a), and uses the digital medium to produce movies of play practices where they change the meaning of actions and objects virtually (virtual placeholders and digital pivots) (Fleer 2014c). This is also reflected in Table 9.2.

There have also been other methodological developments noted in the literature in relation to researching from a cultural-historical perspective in naturalistic contexts, such as family homes. As was discussed in the introduction to this section, research is not only about the object under study or research tools, but also about the position of the researcher. In the next section, the position of the researcher from a cultural-historical perspective is discussed. This was a dimension of research that was not explicitly detailed by Vygotsky. The key question is "What role does the researcher take in the research process?"

9.4.2 The Doubleness of the Researcher

In line with Vygotsky's discussion about the need to include in research how the research process is set up, and also the nature of the researcher–participant interaction, Hedegaard (2008c) has introduced the concept of the *doubleness of the researcher* in order to theorise a more holistic conception of research. This concept captures the idea that the researcher is always a participant in the research, not as a fly on the wall disengaged from the participants, or as someone who actively plays with the child, for example, as might be seen in more anthropological studies where the researcher becomes a member of the community, but rather, the researcher takes on a double

position. That is, the researcher is both a person in the research context, interacting with the child when needed, such as if the participant wishes to show the researcher something, and also explicitly the researcher with a particular role that is made clear to the participants. Hedegaard talks about the specific role and gives the example of the participants naming her as "their researcher" when she accompanied them into a school context when following the daily lives of children growing up in Denmark (Hedegaard and Fleer 2013). This concept has been elaborated by Quinones (2014), who has made visible in research the affective dimensions of the researcher and the research participant, acknowledging that an emotional relation can also emerge in the process of researching. The emotional nature of researching is an underexamined area, as this has, in traditional research, been explicitly blocked as interfering with the quality of the results. This affective dimension has also been foregrounded in the work of Ferholt (2010) when engaged in undertaking research in contexts where theatre and playworlds together create the conditions for not only the participants to be in the imaginary situation, but also the researcher, so that fuller sense of the data being generated could be understood. The affective dimensions of this process are captured digitally, and through this, emotionally charged moments can be examined as part of the research context. The doubleness of the researcher, including the emotional positioning of the researchers, is captured in Table 9.3 as a methodological principle of a cultural-historical conception of researching in early childhood settings.

This new conceptualisation of the double position of the researchers brings questions of the validity and reliably of the data. Traditionally, the researchers should be seen as an external observer of the research process, without interference of what is being researched. However, a cultural-historical conception of the role of the researcher shows that reliability and validity are strengthened when their role is conceptualised as part of the research. This is discussed in the next section.

9.4.3 Reliability and Validity When Undertaking Cultural-Historical Research

In considering reliability and validity for undertaking cultural-historical research, we draw upon Hedegaard's (2008c) conceptualisation (summarised in Table 9.4). It is through the process of including the child's perspective in research that more

Table 9.3 Doubleness of the researcher

Researcher and their actions must be visibly present in the research method	Doubleness of the researcher (Hedegaard 2008c); affective and tactile positioning of the researcher (Quinones 2014); synthetic-analytic method; film-play (Ferholt 2010); researcher as orchestrating the capturing of dynamic motion in action (Fleer 2014a); digital tools and human relations (Quiñones and Fleer 2011).	Methodological books: Fleer and Ridgway (2014); Hedegaard and Fleer (2008).

Table 9.4 Reliability and validity when undertaking cultural-historical research

Double subjectivity of the researched participants	Digital video tools have created new research conditions for early childhood education (e.g. Johansson and White 2011; White et al. 2007) in three distinct ways:
	(1) New cultural tools for capturing in situ moments of intersubjectivity in everyday practices of early childhood settings.
	(2) New cultural tools for analysing the intentions of the participating persons.
	(3) Cultural tools that create new play conditions through dialectical virtual and concrete play contexts – digital pivots and virtual placeholders (Fleer 2014a, b, c).
Double subjectivity of the researcher	Doubleness of the researcher and their actions must be visibly present in the research method (Hedegaard 2008c); affective and tactile positioning of the researcher (Quinones 2014); synthetic-analytic method; film-play (Ferholt 2010); researcher as orchestrating the capturing of dynamic motion in action (Fleer 2014a); digital tools and human relations (Quiñones and Fleer 2011).

valid data can be generated because it enables the researcher to analyse how children contribute to their own developmental conditions. By paying attention to the child's perspective in relation to the societal values and institutional practices, a more holistic view of the research is determined, once again increasing validity of the data. As noted by Hedegaard (2008c), "In this type of research the validity is connected to how well the researcher can explicate the historical tradition of the practice and the preconditions that are anchored in the values that integrate and specify different perspectives. The validation question for studying children's development is: How can we conceptualise children's participation in everyday activities as the basis for understanding and guiding practice? The answer depends upon how well the model being used can catch the different perspectives of the participants in everyday practices, and how they are contributing to the conditions for children's development" (p. 43). For instance, digital research tools have created the possibility to bring together the perspective of the participants, as was discussed in relation to the work of Johansson and White (2011), where the action-camera captures the infants and toddlers' perspectives, whilst the second camera captures the practices in the institution through the perspective of the teacher.

Confidence in the reliability of the data can also be strengthened through explicitly theorising the researcher's role in the research. By making clear what the researcher does, at all phases of the study, and their intentions and motives as a researcher, the data being generated can be considered in relation to what the researcher was doing at that moment. As discussed previously, and summarised in Table 9.4, a cultural-historical conception of the researcher means they must take a double role – both as someone in the research situation as a participant, whilst also someone who is a researcher with their own motives and intentions. Hedegaard (2008c) has recommended that reliable data happens when the researchers "find a balance in their interaction with participants, especially children, so that when they ask questions and react in a way that is relevant to the situation" and when this is

done, "meaningful insights are gained into what is being researched" (p. 44). However, research is a scientific activity, and the researcher's project will not be the same as the participants' project. As such, the double subjectivity of the researcher is always relevant in cultural-historically informed research, and theorising the position of the researcher increases the reliability of the data. As such, reliable data for cultural-historical research will always distinguish between the researchers' motives and practices and the participants' motives and practices.

The researcher can take several positions in the research. For example, during interviews, the researcher can not only ask questions, but also answer questions posed by the participants, so that a genuine dialogue is created and the participants feel informed and comfortable. In the example of fieldwork, where the researcher takes on a participant observation role, the researcher can also engage with the participants, such as talking to children, sharing photographs, giving tasks, etc. In all situations, the researcher who draws upon cultural-historical theory will always continue to document/observe, even when interacting informally, or transitioning into and out of the research site. For example, video recording equipment will be turned on before the researchers knock on the door and will only be turned off after they leave the research site and the participants are no longer present. Hedegaard (2008c) has summarised the core ideas for undertaking valid and reliable cultural-historical research as follows:

- *Theoretical preconcepts based on the research tradition within the subject area studied have to be formulated as relations*. That is, the methodology and the methods support the researcher with selecting a system of concepts that together give a relational understanding of the data being studied. For example, in the research of Hedegaard, she examines the relations between the personal perspectives, the institutional practices and the societal values through studying the demands that are made on institutions, which in turn make demands upon teachers, who place demands upon children. But children also have agency, and they place demands upon the teachers.
- *These conceptual relations should be visualised as models that depict these relations, so that change in one aspect can be seen in other aspects.* Studying the demands placed on children, whilst also studying the demands made upon teachers by children, is captured when the conceptual relations are visualised in a model of interaction. When using a model of conceptual relations, the generation of more reliable data is possible, because the tools selected (e.g. cameras on child and on the teacher) capture the different dimensions of the relations.
- *The institutional practices should be outlined as conditions for the social situation.* The study design produces more reliable data when the institutional conditions are captured, whether this is the family or the childcare centre, because rules and regulations allow certain activities to occur. For example, mealtime routines may be different between institutions, creating new demands upon the child that need to be understood when analysing the data. We see this when a toddler who is used to eating whilst walking is expected to sit still at mealtimes in a childcare centre.

- *The activities that create the changes have to be the object of study.* In a cultural-historical conceptualisation of the study design, reliable and valid data are possible when the tools of the research capture data that allow the researcher to analyse how the object of an activity settings changes. For instance, in studying how a family organises homework routines, the object of each child needs to be studied, because their orientation to the activity may be different, and it may change over time. We may see this when the family sets up a homework routine for the oldest child in a family, who has just commenced school. Younger siblings see this new activity as a valued "school practice" with social status. The introduction of the homework activity and how it changes family practices and what it affords for children's development is the focus of ensuring reliable and valid research. Homework practices across families can then be studied, and more confidence in the knowledge claims being made through the research is then possible.
- *The perspectives in the field of research should be outlined.* Here the participants in the social situation have to be specified so that interactions between them can be documented. The generation of reliable and valid data is supported when the researcher takes the perspective of all the participants in the study – including all the family members because they will each have a different social situation of development and will interpret the same situation differently. Their interactions are key to understanding how the social situation may or may not create possibilities for their development. Does the younger child seek to do the same as the other children and "pretend to do homework"? How the adults interact with the child also matters – as a school child with new responsibilities or as a child with no responsibilities, but also how the child takes up either position has a bearing on their development.
- At minimum, there will be two perspectives – a researched person's perspective and the researcher's perspective (p. 45).

Tables 9.2 and 9.3 add to the cultural-historical methodology previously discussed. They show the new challenges and reflect the changing societal context of researching in early childhood settings, where new research needs have demanded new ways of working. Similarly, the new digital methods or tools have opened up new possibilities for researching in contexts that are dynamic, and where the nature of the participants' development has not allowed researchers in the past to iteratively and in microgenetic form, to follow the intentions of participants in naturalistic settings. Theorising these new methods as part of a cultural-historical methodology is still in its infancy. Yet what has emerged to date is in line with the principles (Veresov 2014), holistic conception of research (Hedegaard, 2008a) and digital contexts (Fleer and Ridgway 2014), previously discussed.

9.5 Conclusion

What this chapter has sought to examine is a cultural-historical methodology for researching in early childhood education. We specifically discussed aspects of a cultural-historical methodology which are related to play and development in early childhood settings. We examined three key points. First, we discussed what new perspectives the cultural-historical methodology can bring to the field of early childhood education research. Second, we showed what a cultural-historical methodology will allow researchers to do. Finally, we showed how cultural-historical theory afforded the possibility to (1) theorise a set of cultural-historical principles for the context of contemporary research practices in early childhood education (Veresov 2014); (2) conceptualise digital tools dialectically, as both a research tool for capturing observations of practices and as a cultural tool for the development of young children, where microgenetic changes are made visible and (3) discuss the doubleness of the researcher (Hedegaard 2008b), as a participant in the research site and as researcher collecting data (Hedegaard and Fleer 2008).

In bringing together both Vygotsky's original theory for undertaking research (Table 9.1) and an analysis of the current research practices of early childhood edu-

PRINCIPLES	**Principles of development**
	Buds of development
	Interaction of Ideal and Present Forms
	Dramatic Event
	Developmental Tools
	Sustainable Results
TOOLS	**Research tools**
	Research tool for capturing observations of practices
	A cultural tool for the development of young children, where micro-genetic changes are made visible
	Doubleness of the researcher
RESEARCHER POSITION	**Researcher and their actions must be visibly present in the research method**
	Researcher as a participant in the research site and as researcher collecting data
	Reliability and validity
	Double subjectivity of the researched participants
	Double subjectivity of the researcher

Fig. 9.1 A cultural-historical methodology for researching in early childhood education

cation researchers (Tables 9.2 and 9.3), it has been possible to make visible a cultural-historical methodology that supports researching in early childhood education contexts. The principles and contemporary challenges of a cultural-historical methodology which foreground development are summarised first as a set of five principles (Veresov 2014), second, as new conceptualisation of digital tools as dialectical cultural developmental tools and research tools, and finally as paying attention to the doubleness of the researcher. These three dimensions of a cultural-historical methodology are shown in Fig. 9.1.

Figure 9.1 captures the foundations of the principles, the tools and the role of the researcher that has emerged as key for researching in the field of early childhood education, where real-world contexts of classrooms and play-based programme with very young children, infants and toddlers need to be better understood. Although early childhood education research has a short history when compared with psychology, a cultural-historical methodology with the elaborations discussed in this chapter appears to have provided a foundation for framing studies and researching contemporary problems that are important for early childhood education. However, as societal needs change, and new demands for research result, we anticipate that the emerging field of early childhood education research will continue to develop, with new methods, and therefore a more developed methodology will also evolve. A cultural-historical methodology speaks directly to the dynamic and dialectical nature of researching young children in informal and formal contexts.

References

Adams, M. (2015). *Play, pedagogy, learning and development: A cultural historical perspective.* Paper presented at the Pacific Early Childhood Education Research Association annual conference (PECERA) Sydney Australia.

Adams, M., & Fleer, M. (2015). Moving countries: Belongings as central for realizing the affective relation between international shifts and localized micro movements. *Learning, Culture and Social Interaction, 6*, 56–66. doi: doi.org/10.1016/j.lcsi.2015.03.003.

Adams, M., & Fleer, M. (2016). The relations between a "push down" and "push up" curriculum: A cultural-historical study of home play pedagogy in the context of structured learning in international schools in Malaysia. *Contemporary Issues of Early Childhood, 17*(3), 328–342. https://doi.org/10.1177/1463949116660955.

Bozhovich, L. I. (2009). The social situation of child development. *Journal of Russian and East European Psychology, 47*(4), 59–86.

Bredikyte, M. (2010). Psychological tools and the development of play. *Journal of Cultural-Historical Psychology, 4*, 11–16.

Bredikyte, M. (2011). *The zones of proximal development in children's play*. PhD thesis, University of Oulu, Faculty of Education, Finland.

Chen, F., & Fleer, M. (2015). Re-signing: A cultural-historical study of signs for supporting young children's development of emotion regulation. *Mind, Culture, and Activity: An International Journal, 22*(3), 233–250. doi:10.1080/10749039.2015.1048370.

Elkonin, D. B. (2005). On the historical origin of role play. *Journal of Russian and East European Psychology, 43*(1), 49–89.

Ferholt, B. (2010). A synthetic-analytic method for the study of perezhivanie: Vygotsky's literary analysis applied to playworlds. In M. C. Connery, V. P. John-Steiner, & A. Marjanovic-Shane (Eds.), *Vygotsky and creativity: A cultural-historical approach to play, meaning making, and the arts* (pp. 163–179). New York: Peter Lang.

Ferholt, B., & Lecusay, R. (2009). Adult and child development in the zone of proximal development: Socratic dialogue in a playworld. *Mind, Culture, and Activity, 17*(1), 59–83. doi:10.1080/10749030903342246.

Fleer, M. (2008). Interpreting research protocols-the institutional perspective. In M. Hedegaard & M. Fleer (Eds.), *Studying children: A cultural-historical approach* (pp. 65–87). Maidenhead/New York: Open University Press.

Fleer, M. (2014a). Beyond developmental geology: A cultural- historical theorization of digital visual technologies for studying young children's development. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children*, *International perspectives on early childhood education and development series* (pp. 15–34). Cham: Springer.

Fleer, M. (2014b). The demands and motives afforded through digital play in early childhood activity settings. *Learning, Culture and Social Interaction*, *3*(3), (Special themed issue), 202–209. doi: 10.1016/j.lcsi.2014.02.012.

Fleer, M. (2014c). *Theorising play in the early years*. New York: Cambridge University Press.

Fleer, M. (2016). The legacy of Vygotsky's cultural-historical methodology and its impact on contemporary early childhood research. In T. David, K. Goouch, & S. Powel (Eds.), *Cultural-historical theories of child development, Routledge handbook of philosophies and theories of early childhood education and care* (pp. 209–218). UK: Routledge.

Fleer, M., & Ridgway, A. (2014). *Digital visual methodologies: Theorising researching with children*, *International perspectives on early childhood education and development series*. Cham: Springer.

Fleer, M., Hammer, M., & March, S. (2014). A cultural-historical reading of the emotional development of young children. *Asia-Pacific Journal of Research in Early Childhood Education, 8*(2), 47–67.

Gazelle, H., Faldowski, R. A., & Peter, D. (2015). Using peer sociometrics and behavioral nominations with young children. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education*, *Review of research methodologies* (Vol. 1, pp. 27–70). Charlotte: Information Age Publishing.

Hakkarainen, P. (2010). Cultural-historical methodology of the study of human development in transitions. *Cultural-historical Psychology, 4*, 75–81.

Hakkarainen, P., & Bredikyte, M. (2008). The zone of proximal development in play and learning. *Journal of Cultural-historical psychology, 4*(4), 2–11.

Hakkarainen, P., Brėdikytė, M., Jakkula, K., & Munter, H. (2013). Adult play guidance and children's play development in a narrative play-world. *European Early Childhood Education Research Journal, 21*(2), 213–225. doi:10.1080/1350293X.2013.789189.

Hao, Y. (2016). The dialectic between ideal and real form of 'sharing': A cultural-historical study through story acting through imaginary play at home. *Early Child Development and Care, 187*(1), 99–114.

Hedegaard, M. (2008a). A dialectical approach to researching children's development. In M. Hedegaard & M. Fleer (Eds.), *Studying children: A cultural–historical approach* (pp. 30–45). Berkshire: Open University Press.

Hedegaard, M. (2008b). The educational experiment. In M. Hedegaard & M. Fleer (Eds.), *Studying children: A cultural–historical approach* (pp. 30–45). Berkshire: Open University Press.

Hedegaard, M. (2008c). The role of the researcher. In M. Hedegaard & M. Fleer (Eds.), *Studying children: A cultural–historical approach* (pp. 30–45). Berkshire: Open University Press.

Hedegaard, M., & Fleer, M. (2008). Researching child development – An introduction. In M. Hedegaard & M. Fleer (Eds.), *Studying children: A cultural–historical approach* (pp. 30–45). Berkshire: Open University Press.

Hedegaard, M., & Fleer, M. (2013). *Play, leaning and children's development: Everyday life in families and transition to school*. New York: Cambridge University Press.

Hill, S., & Millar, N. (2015). Case study research: The child in context. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education*, *Review of research methodologies* (Vol. 1, pp. 523–546). Charlotte: Information Age Publishing.

Johansson, E., & White, E. J. (Eds.). (2011). *Educational research with our youngest: Voices of infants and toddlers*. Dordrecht: Springer.

Kravtsov, G. G., & Kravtsova, E. E. (2010). Play in L.S. Vygotsky's nonclassical psychology. *Journal of Russian and Easter European Psychology, 48*(4), 25–41.

Li, L. (2014). A visual dialectical methodology: Using a cultural-historical analysis to unearth the family strategies in children's bilingual heritage language development. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children*, *International perspectives on early childhood education and development series* (pp. 35–54). Cham: Springer.

Lindqvist, G. (1995). The aesthetics of play. A didactic study of play and culture in preschools. Acta Universitatis Upsaliensis. *Uppsala Studies in Education 62*, 234. Uppsala.

March, S., & Fleer, M. (2017). Pooh Bear's turn! An Australian study of using special toys to develop play complexity from within children's imaginary play. In T. Bruce, M. Bredikyte, & P. Hakkarainen (Eds.), *Routledge handbook of play in early childhood* (pp. 230–245). London: Routledge Press/Taylor and Francis Group.

Monk, H. (2014). Intergenerational family dialogues: A cultural historical tool involving family members as co-researchers working with visual data. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children*, *International perspectives on early childhood education and development series* (pp. 73–88). Cham: Springer.

Quiñones, G. (2014). A visual and tactile path: Affective positioning of researcher using a cultural-historical visual methodology. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children*, *International perspectives on early childhood education and development series* (pp. 111–128). Cham: Springer.

Quiñones, G., & Fleer, M. (2011). 'Visual Vivencias': A cultural-historical theorisation of researching with very young children. In E. Johansson & J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 107–129). Dordrecht: Springer.

Rainio, A. P. (2008). From resistance to involvement: Examining agency and control in a playworld activity. *Mind, Culture, and Activity, 15*(2), 115–140. doi:10.1080/10749030801970494.

Ridgway, A. (2014). The past-present dialectic: A new methodological tool for seeing the historical dynamic in cultural-historical research. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children*, *International perspectives on early childhood education and development* (pp. 55–73). Cham: Springer.

Rous, B. S. (2015). Using critical incidents technique in early childhood research. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education*, *Review of research methodologies* (Vol. 1, pp. 225–246). Charlotte: Information Age Publishing.

Saracho, O. N. (Ed.). (2015). *Handbook of research methods in early childhood education*, *Review of research methodologies* (Vol. 1 and 2). Charlotte: Information Age Publishing.

Sikder, S., & Fleer, M. (2015a). Small science: Infants and toddlers experiencing science in everyday family life. *Research in Science Education, 45*(3), 445–464.

Sikder, S., & Fleer, M. (In press). The relations between ideal and real forms of small science: Conscious collaboration among parents and infants-toddlers. *Cultural Studies of Science Education.*

Smith, K. (2015). Action research with children. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education*, *Review of research methodologies* (Vol. 1 and 2, pp. 547–576). Charlotte: Information Age Publishing.

Sutterby, J. A. (2015). Microethnographic research in early childhood education. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education*, *Review of research methodologies* (Vol. 1, pp. 577–600). Charlotte: Information Age Publishing.

Thornberg, R., Perhamus, L. M., & Charmaz, K. (2015). Grounded theory. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education*, *Review of research methodologies* (Vol. 1, pp. 577–600). Charlotte: Information Age Publishing.

van Oers, B. (2008). Inscripting predicates. Dealing with meaning in play. In B. van Oers, W. Wardekker, E. Elbers, & R. van der Veer (Eds.), *The transformation of learning. Advances in cultural-historical activity theory* (pp. 370–379). New York: Cambridge University Press.

van Oers, B. (2012). Developmental education: Foundations of a play-based curriculum. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice, and implementation* (pp. 13–26). The Hague: Springer.

van Oers, B., & Duijkers, D. (2013). Teaching in a play-based curriculum: Theory, practice and evidence of developmental education for young children. *Journal of Curriculum Studies, 55*(1), 1–24. doi: http://dx.doi.org/10.1080/00220272.2011.637182.

Veresov, N. (2010a). Introducing cultural-historical theory: Main concepts and principles of genetic research methodology. *Cultural-Historical Psychology, 4*, 83–90.

Veresov, N. (2010b). Forgotten methodology: Vygotsky's case. In J. Valsiner & A. Toomela (Eds.), *Methodological thinking in psychology: 60 years gone astray?* (pp. 267–295). Charlotte: IAP.

Veresov, N. (2014). Refocusing the lens on development: Towards genetic research methodology. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children. International perspectives on early childhood education and development series* (pp. 129–149). Cham: Springer.

Vygotsky, L. S. (1929a). The problem of the cultural development of the child. *Journal of Genetic Psychology, 36*, 421.

Vygotsky, L. S. (1929b/1989). Concrete human psychology. *Soviet Psychology, 27*(2), 53–77.

Vygotsky, L. S. (1935). *Umstvennoe razvitie detei v protsesse obuchenia*. Moscow: Leningrad. Gosudarstvennoe Uchebno-pedagogicheskoe izdatelstvo.

Vygotsky, L. S. (1981). The instrumental method in psychology. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 134–143). Armonk: M. E. Sharpe.

Vygotsky, L. S. (1983). *Sobranie sochinenii* [Collected works] (Vol. 3). Moscow: Pedagogica.

Vygotsky, L. S. (1987). *The collected works of L.S. Vygotsky. Problems of general psychology* (Vol. 1, N. Minick, Trans.; R. W. Rieber & A. S. Carton, Ed. English translation). New York: Kluwer Academic and Plenum Publishers.

Vygotsky, L. S. (1993). *The collected works of L.S. Vygotsky, The fundamentals of defectology* (Vol. 2, Jane E Knox & Carol B Stevens, Trans.; R. W. Rieber & A. S Carton, Ed. English translation). New York: Kluwer Academic and Plenum Publishers.

Vygotsky, L.S. (1997a). *The collected works of L.S. Vygotsky, Problems of the theory and history of psychology* (Vol. 3, R. van der Veer, Trans.; R. W. Rieber & J. Wollock, Ed. English translation). New York: Kluwer Academic and Plenum Publishers.

Vygotsky, L. S. (1997b). The history of the development of higher mental functions (M. J. Hall, Trans.). In R. W. Rieber (Ed.), *The collected works of L. S. Vygotsky* (Vol. 4). New York: Plenum Press.

Vygotsky, L. S. (1998). *The collected works of L.S. Vygotsky, Child Psychology* (Vol. 5, M. J. Hall Trans.; R. W. Rieber, Ed. English translation). New York: Kluwer Academic and Plenum Publishers.

Vygotsky, L. S. (1999). *The collected works of L.S. Vygotsky, Scientific legacy* (Vol. 6, M. J. Hall, Trans.; R. W. Rieber, Ed. English translation). New York: Kluwer Academic and Plenum Publishers.

White, J., O'Malley, A., Toso, M., Rockel, J., Stover, S., & Ellis, F. (2007). A contemporary glimpse of play and learning in Aotearoa New Zealand. *International Journal of Early Childhood, 31*(1), 93–105.

Chapter 10
Narrative Learning of Literacy

Pentti Hakkarainen and Marja-Leena Vuorinen

Abstract This chapter summarizes experimental work carried out at two sites in Finland. In both sites, we study children's learning process in narrative environments. A frame story combines imaginative events and students or permanent teachers participate in roles to joint play with children. Our special focus is children's problem solving and narrative tasks. We proceed from general characteristics of learning tasks embedded in story line and connected with helping motive to concrete literacy learning goals and tasks. Joint tasks of all children create a specific motivational space, which might be juxtaposed with Vygotsky's "general genetic law of development."

Keywords Literacy • Narrative learning • Oral language • Reading writing

10.1 Cultural-Historical Background

Transition to written language was a dilemma to Vygotsky. Even 9-year-old schoolchildren are weak writers. He asked why a collapse is observed in children's mastery of language at the transition from oral to written form. Relatively young children master complicated oral language skills and abilities. They are also productive. But their first written texts are short and elementary. What is the explanation? Why the collapse happens in the production of language? He compared the situation with looking at an object through a window: "If you observe an object through a glass you do not see the glass. When a child talks he is totally occupied by the object or thought that he does not see the words (glass). The child does not comprehend how he talks" (Vygotsky 1996, 385).

El'konin (1999a) sought for an answer to the problem. His idea was to make the structure of oral language visible to children and thus make it easier to move to reading and writing. He concretized the relation between oral and graphic forms in reading:

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> With a view of primary education, we define reading as a process of reconstructing the phonetic form of words on the basis of their graphic (letter) model. What it is important to point out in this definition is that the beginner operates with the phonetic aspect of language in reading and that, without a proper reconstruction of the phonetic form of words, it is impossible to understand what is being read (El'konin 1999b, 96).

According to El'konin, in literacy learning, there is only one correct path – from phonemes and their systems to letters. Phonemic analysis should help to familiarize the child with the sound system of language. If the child does not master the phonemic analysis, he is not able to learn how to read. The next step according to him was letters and whole words. He wrote:

> After the children have learned to do phonemic analysis and after they have gained an orientation in the phonemic structure of language, the next step is to acquaint them with the letters designating phonemes. The main tasks are: (1) to acquaint the children with letters in their capacity as signs of phonemes, taking care not to confuse the letters with phonemes; (2) to teach them to direct their attention anticipatorily to the vowel letters and vowel phonemes necessary for reconstructing the phonemic form of a word. (El'konin 1999b, 110)

Reading process is recreation of phonetic structure on the basis of graphic letters. An important factor in reading according to El'konin is location principle. In other words, the meaning of a phoneme depends on the place among other phonemes. From this follows that it is necessary to separate vowels and consonants, all vowels and their symbols, all vowels in words, and all possible consonant combinations with vowels.

Vygotsky compared giving to speech a written form as great change as learning oral language in early childhood. But writing and reading is not a mechanical or narrow cognitive skill. This was the starting point of Lobok (1997) who emphasized the use of children's own texts adding to them poetic expressions. In the beginning, the teacher wrote children's important ideas to the blackboard, but then he told that his hand is aching and asked that children continue on their own. This approach not correcting technical mistakes from the very beginning has led to angry protests among other teachers (Lobok 2012). Children produce text from personally significant events and have a personal motive to express something in writing (in the beginning with errors and with great efforts).

Play and narrative mode was introduced already in the 1920s in Soviet literacy teaching. Zuckerman and Shkoljarenko (1997) proposed to use narrative learning play with preschool children. The first basic model was aimed to be used by mothers at home with preschool age children. El'konin's ideas on modeling in graphic visual form the basic structure of oral language were kept in narrative approach. El'konin's model was transformed to narrative form with the following changes: (1) the model of oral sound world (forest of sounds) was introduced as a story and imaginary play, (2) all activity was imaginary and characters of play personified concepts to be adopted (literary heroes were invented), (3) analytic actions on words were actions of characters, and (4) relations between characters were relations between linguistic phenomena. In other words, a role relation was a linguistic relation.

Meta-level of narrative learning was composed of a story line and solving difficult problems together with the story characters. Children were invited to play with Winnie-the-Pooh and his friends in Zuckerman's story line. The same characters

participated in two adventures: Adventure I in the forest of sounds and Adventure II in the forest of words and sentences. Children were invited to follow the characters and help them to solve problems met during the adventure. Transition from the forest of sounds took place when all aspects of phonetic analysis were carried out.

10.2 Developmental Potential of Narrative Tasks and Assignments

In earlier publications (Hakkarainen 2002), we have argued that in narrative play world environments, children's relation to tasks is different compared to adult problems or school tasks. The basic difference in our analysis is that a narrative task "captures" the child inside the imaginary situation of the task. We think this difference explains variation in developmental potential of tasks. Imaginative, emotional, and appealing (inviting) elements are on purpose eliminated from "learning" tasks, but they are intertwined with factual content of narrative tasks.

Traditional school didactics heavily saturate the concept of task. Often tasks aim at learning "facts" from a textbook. School tasks are "objective," cognitive, and fact-laden. Imaginative and emotional elements are minimized or totally eliminated as "distracting." Tasks are still written in learning materials or teacher guidelines of each lesson and subject. Alternative approaches emphasizing active role of children are slowly taken into use. Task is understood, e.g., in El'konin-Davydov system as an element of learning activity defined "a goal set by the child in defined circumstances." In other words, a task is child's goal of learning. The child sets a learning goal for himself. Traditional didactics supposes that children automatically transform teacher's briefing and demands into personal goals and tasks.

A personal goal never consists of cognitive, "objective" facts, only, claims A. N. Leont'ev (1978). We think that personal goal setting and taking on tasks is a special challenge of narrative learning in kindergarten and elementary grade age. In line with cultural-historical approach, social life is the source of goals and tasks. We decided that helping others is such a social ideal, which is understandable for children. In play world projects (about 20 alltogether), we never heard somebody to refuse.

In his analysis on ideal forms, Vygotsky uses a well-known Aesop's fable about grasshopper and ant as an example of how a tale preserves cultural ideal in the form of cultural sense making to next generations. In Vygotsky's example, sense making is not only derivative from cultural meaning as Leont'ev argued with the concept of personal sense, but cultural sense exists, for example, in folk tales. Vygotsky sketched further how ideal and real forms are important in child development:

> The most remarkable attribute of child development is that it happens in circumstances of interaction with the environment where ideal, final form that should be reached at the end of development not only exists in the environment and affects the child, but really interacts, really influence on primary form, on first steps of child development. I. e. something, which should be realized at the end of development somehow influence on the first steps of development (Vygotsky 1996, 88).

In different societies, ideal end points are different and they have changed during history of each culture.

Children meet these formations, e.g., in folk tales and stories as ideal forms of behavior of the heroes (the hero altruistically wants to help people in need). The example presented in affective ideal form may be adopted in individual development and be transformed into real (natural) form of individual psyche and consciousness. Developing subject is engaged in permanent struggle between ideal and real forms of acting. He accepts some forms and rejects others. From real forms new ideal forms may be produced. Zinchenko (1996) uses a metaphor of Mandelshtam who writes that culture and its ideal forms are figuratively described as inviting force and a subject is free to accept invitation or reject it. Invitation is intertwined with the difference of potentials between ideal and real forms. If a subject accepts invitation, "act of development" may happen (El'konin 1994).

How is an ideal form transformed to a real one? Vygotsky claimed that an ideal form has concrete bearers, which may function as mediators in the development of real forms. He named three types of mediators: an adult (in joint activity with the child), sign, and word. Zinchenko (1996) added to this list symbol and myth from the analysis of Losev and sense from Shpet.

We have reported in our earlier publications how children behaved in solving realistic problems met in a narrative environment (Hakkarainen 2008). Children accepted a realistic task associated with imaginative environment and demanding solution in order to continue events of the story line. This demonstrates how they differentiate solutions in miraculous tales and in the real world. In tales solutions are achieved by magic without explaining what tools, methods, and processes are used. El'koninova (2001) has emphasized in her analysis how tales underline motivational strivings of heroes to help other people and act for the common good. She called these tales as "the school of willing."

Assignment of narrative problem is an important stage in play world projects. In our "Rumpelstiltskin," project assignment happened one morning in the classroom after several visits of the characters from the folk tale (teachers in role). King "Alfred" visited in person the classroom in February and now in April his messenger waited in the classroom children coming. A condensed log was written from the videotape:

> The messenger stood in front of the classroom; he wore a helmet and had a parchment roll in his hand. When all children took their seat and sat quiet he solemnly opened the ribbons and started to read: 'King "Derfla" wants to curse you for your tricks you did not send to him. We did not find our son in the faraway field.' Children understood quite soon that something strange has happened and the messenger turns the message backwards. They started to make a 'translation' and loudly shouting corrected the reading of the messenger: "King Alfred wants to thank us for advice we sent to him. They found their daughter playing in the near by forest." Alfred's assignment was at the end. Children 'translated' it and accepted eagerly: Rumpelstiltskin has put a spell on the kingdom of 'Surmundia'. People walk backwards, their jackets are turned (buttons in the back) and they talk opposites like the messenger. Can you children come to 'Surmundia' imperceptibly and help to restore my court. The spell has turned all the rooms of my court upside down and my servants are imprisoned in the basement of the court. Are you ready to free my servants and turn the rooms back to normal position by solving spell elimination task of each room?

In our play world projects, children emphasized the difference between tasks in play world environment and in classroom by crossing the boundary between them. In order to secretly enter and move in "Surmundia," children turned their jackets, walked backwards, and talked changing meanings and words opposite. After getting the tasks in imaginary play world, children returned back to their classroom repeating the boundary crossing rituals contrariwise (talking normally, turning their jackets, and walking normally). After solving the problems, children returned back to the imaginary world with their solutions and the story line and play events could continue. Adults participating in play events in roles plan how story line and problems are related to each other. This part of the story line with the spell and its results adults added to the play world plot. Their motive was to create a new narrative dimension to selected preschool and elementary grade learning tasks. A set of solved problems turned each room of the court back to normal position according to the invented story line.

Children were afraid to go to the dark basement where Rumpelstiltskin might still be lurking and cast a new spell on them. (School basement was the basement of the court.) So they decided to make protective shields against possible spells. The shield making is reported in an earlier article:

> The children worked in groups to prepare their shields, cutting a piece of cardboard and attaching a handle to it. The children then decided to add colors and a personal spell written inside the shield to give them extra protection against Rumpelstiltskin's spells. Several girls agreed that the heart is the strongest symbol against evil powers, so they made red and white heart-shaped shields. Some girls made two human figures representing good and wrote a spell admonishing 'Monster, monster go away.' The boys' favorite symbols were a red triangle and the Finnish flag. They believed that the color on the shield would send a very effective symbolic message against evil powers (Hakkarainen 2008, 298).

Shields in the above-reported situation are psychological tools in Vygotskian sense of the term. They are not eliminating any outside threat, but personal fear inside of children. The psychological tool was made stronger adding more symbolic elements to it like personal spell, color, form, and symbols of goodness.

Narrative content of problem situation brings a moral dimension of good and bad to tasks, which traditionally are pretty neutral and without any tension. Now children are not solving tasks including numbers and literal material, but they are saving the court of the king they met some time ago (teacher in role). The motive of solving preschool or elementary school tasks is to help and fight against the evil. Tasks are now in the position of means of attaining more attractive motives and goals. Here we can see enlargement of the problem unit including a personal challenge and cognitive task in the position of mean. Personal motivating challenge brings to the situation the contradiction of ideal and real form (Zinchenko 1996).

Cultural ideal of helping others in need collides with the fear of meeting "Rumpelstiltskin" in the dark basement, eliminating his possible spell, and freeing the servants. Shields and other psychological tools were needed in this situation because he was a powerful magician turning whole kingdoms upside down. Adults participating in the events reported that normally boasting boys were not in front of the rescue team ascending to the basement.

Learning tasks intertwined with a story are usually tasks of the whole class or group. In a group, there always are learners on different levels of learning abilities and the challenge to somehow differentiate children in problem solving. In imaginative story environment, we have found that differentiation of children is flexible. For example, a group of nine 6-year-old special need children in math adventure based on a board game joint participation in the adventure eliminated differences in abilities and skills. Solving different parts of tasks did not lead to comparisons of individual differences in solving process. The joint total solution was the main aspect (Hakkarainen et al. in print).

A joint assignment of tasks of a whole class creates an interesting collective zone of proximal development. If children are divided into subgroups, they are automatically interested what happens in other subgroups because a joint problem unites all children. Bredikyte (2011) observed how roles and role relations create mutual zones of proximal development.

We can now summarize basic characteristics of narrative assignment and tasks. Earlier we have made a difference between narrative tasks and adult rational cognitive task by stating that children are rather inside a narrative task and do not have a distanced relation to "objective" problems in the outside world (Hakkarainen 2002). In the description above, we see some specific characteristics of narrative tasks:

Adult role characters (animals in two first parts and researchers in the third part) are equal partners of children and support children's initiatives, interpretations, and dialogues. Children are their helpers.

Assignment combining story line and tasks into enlarged developmental challenge (personal challenge of helping).

There is a "super task" creating a personal need for change and learning motive (helping the king).

Psychological tools directed to changing self are found (shields and other symbolic characteristics).

Children are invited to imaginary worlds and events (the spell put on the kingdom of "Surmundia," king's invitation for help).

Contradiction between ideal and real forms of behavior is confronted in the story line (own fears vs. helping the king).

Cognitive tasks are transformed to means of helping others (turning the rooms of the court back to normal position by solving school tasks).

Personal learning tasks can be flexibly differentiated and several zones of proximal development are created (math learning of special need children).

10.3 Three-Stage Literacy Learning Experiment

El'konin's approach to literacy learning has expanded to several languages and countries. There is also a Finnish version starting from phonetic awareness (Poskiparta 1995). This program includes all essential elements of phonetic

analysis, but following traditional linear proceeding of didactics learning tasks minimally allow children's own initiatives. The process is constructed as teacher-managed information transmission.

Our experiment was compiled from the following stages: (1) phonetic analysis and modeling of Finnish language, (2) letters and words as tools of meaning making, and (3) language as a system and tool of communication. Stage 1 and 2 were based on Zuckerman's approach. The original story used in Zuckerman's program was translated and adapted for Finnish language ("Kaapro the Bear's Adventures in the Sound Forest" and "Kaapro the Bear's Adventures in the Forest of Words"). Stage 3 introduced system character of language and its communicative function. As an example, we used Aidarova's (1983) work in teaching language as a communication system. Zuckerman's task structure and stepwise proceeding were adopted directly, but the adventures of Winnie-the-Pooh and friends were replaced with Finnish animal story characters. Students acted as live role characters, and children were their helpers and assisted in problem solving. In the third stage, children's role was changed to researchers doing time trips to ancient worlds and investigating languages and communication (e.g., hieroglyphs in ancient Egypt). University students acted as role persons in destinations of time trips or they were coresearchers doing research with children.

Learning experiment was organized once or twice a week during semesters. Eight teacher students participated in it as a team during 2 years time in 2007–2009. They with a researcher and assistant were planning the adventure of animal role characters and narrative tasks during each meeting. During the first year (autumn semester 2007 and spring semester 2008), Kaapro – the bear – and his friends first had several adventures in the forest of sounds (autumn semester), and they continued to the forest of letters and words (spring semester). The third part of the learning experiment (autumn semester 2008 and spring semester 2009) was more freely created by students because Aidarova's book did not have narrative elements. The students created researcher characters (students in role) investigating ancient cultures and characters communicating with each other in ancient grounds to where children "arrived" with their time machine. In experimental classroom were 19 children (5 preschoolers and 14 first graders; 6–7 years). The same children continued the next study year.

Each adventure day started with a set of transitional rituals. The goal was to move from the school environment to play world. Students, a researcher, a classroom teacher, and children all participated in rituals. Usually rituals took place in school corridor outside the classroom. Each participant was dressed in an adventure shirt, and an imaginary time machine was abstracted to the name of the place where the adventure happens (e.g., "forest of sounds," "ancient Egypt 4,000 years ago," etc. were written using letter cubes). The destination of each time trip and the "time machine" song was sung. Destinations were staged in different environments – in the children's own classroom, nearby forest, gardener's house, in the handicraft classroom, etc. To make a difference during first year, an adventure in children's own classroom presupposed that children crawl inside through a tunnel, not by walking through the door. An adventure tunnel separated two worlds (real and imag-

inary) from each other. For example, in the imaginary forest of sounds, words from which the "sound guzzler" had eaten some sounds could be restored by repeating clearly and loudly three times the whole word with all sounds.

The learning experiment was organized in a combined classroom of 0 and first graders. In the next study year, the children in the experimental combined class were first and second graders. The classroom teacher participated in all adventures during 2 years, but university students were responsible for the activities in the classroom during adventure days. The teacher took part in adventures in some minor roles. In adventures all children used nicknames they invented. So we do not know what is the real name of each child. Children's researcher role was supported with a special assignment to make observations and write field notes and reports in any adventure situation during the second study year like real researchers are doing. A notebook and pen was a regular companion of children in any adventure. As a result each child of experimental classroom produced written texts several times more than students in the first and second grade not participating in the experiment. (A girl asked if she already has produced sufficiently text for a doctoral thesis at the end of second study year.)

Basic tension of the frame story during autumn 2007 was between the evil goblin eating sounds and "soundlings" (fairylike beings living in the forest of sounds) maintaining and fixing sounds. The adventure took place in the "sound forest" and children helped in fixing the sound structure of broken words by pronouncing them correctly. Restoring lost phonemes happened by repeating the word clearly and loudly together at least three times. Quite soon children started to "write" sound structures using different symbols for consonants and vowels. During spring children moved from the "Sound Forest" to the "Forest of Words" and started to use letters instead of sounds and phonetic symbols. Basic tension in the "Forest of Words" was between the evil "Guzzler of Alphabet" eating letters, books, and everything written and "Aunt Soundling" and her brother "Knight of Alphabet" who maintained correct writing and texts.

It was necessary to adapt the program to the special characteristics of Finnish language. In the Finnish language, nearly all sounds have their own letters. Usually children learn the names of the letters before the names of the sounds. This often leads to confusion. Phonemic analysis of Finnish has some special challenges. They are connected with the system of double vowels and consonants. For children it is difficult to decide where you should have one vowel or consonant and in which words you should have double vowels or consonants. The amount of vowels and consonants change the meaning of the word. For example, the word "TULI" (fire) has one U-vowel and one L-consonant. When you have two U-vowels, the word changes to "TUULI" (wind), and if you put two L-consonants, the word changes to "TULLI" (customs). If you put both two U-vowels and two L-consonants, the word changes to "TUULLI" which means nothing. If you put two I-vowels (TULII, TUULII, TULLII, TUULLII) or T-consonants (TTULI, TTUULI, TTULLI, TTUULLI), the words mean also nothing. If a child cannot do this kind of phonemic analysis, he will most probably have big troubles when starting to write.

10.4 Unifying Literacy Learning Objectives, Assignments, and Tasks

10.4.1 Adventure in the Forest of Sounds

Adventure in the forest of sounds started with a short trip to a nearby forest in the campus. Animal characters were introduced to children before the trip. In the forest, adventurers met a scared squirrel (teacher education student in role) in a tree. The other animal characters tried to persuade her to climb down, but she was too scared to dare down. Children understood from the conversation that the reason was disappearance of the first sound of her name ("Kurre"). The Guzzler eating sounds was the culprit. Children were asked to help by pronouncing clearly several times the correct word. So they restored the name of the squirrel and sound –k in all other words.

Sound structure of Finnish words was studied in weekly adventures. At the first stage, children helped to restore sounds Guzzler had eaten from words. The second stage introduced voiced difference between vowels and consonants and method of indicating it in "sound writing," i.e., writing words using different symbols for vowels and consonants (triangles for vowels and squares for consonants). Surrounding long double sounds with a line in "sound writing" marked peculiarity of the Finnish language of making different meanings with minimal structural changes.

The following excerpt describes a task, in which children focus on the first and last sound of each word. In the story line, the animal characters arrived to a heavy stream and they should cross the river. The adventure took place in the forest of sounds and accordingly a bridge can be constructed from sounds. Children were asked to help in the construction. Durable construction presupposed that the last sound of the previous word and the first sound of the next word are the same. If they are not the same, the bridge may collapse and travelers fall to the heavy stream.

Bridge building was trained with empty milk canisters made from cardboard each having a word written on side. Animal character (teacher education students in role) constructed "bridges" and children helped them to find an appropriate joint according to the rule (last sound and first sound of joined words are the same).

10.4.2 Adventure in the Forest of Words

We have picked up from the adventures in the forest of words the stage of transition from sounds and phonemes to letter symbols. Their close relation is indicated in the beginning of this stage in writing words using both symbols in the same word (letters and oral sound symbols). This stage demonstrated to children the problem of writing oral sounds because one vowel symbol can be any of seven vowels in the Finnish language and the same problem is with consonants. Now when the children

select correct letters replacing two sound symbols (consonant or vowel), a more exact word meaning is indicated with letters.

The introduction to meaning making took place in February 12 and 13, 2008. The first challenge was to make clear what kind of task is waiting for children by reading the message "Aunt Soundling" had left at each "flowerbed." The task of six subgroups was to work on "flowerbeds" of "Aunt Soundling" and find out how many words they could find in place of each word written with two sound symbols (separating only vowel and consonant from each other). Next day "Aunt Soundling" (student in role) was present and helped children to root out "weeds" from flowerbeds. The "weeds" were words having no meaning in the Finnish language or they were written wrong.

Children were divided into subgroups so that at least one child was able to read. But the ability to read or write did not mean the mastery of phonetic structure of the language! Two animal characters worked with two child groups. Each group got their own "flowerbeds," and for "seedlings of words," there were colorful pieces of paper. Children should write words on paper and glue it to the suitable "flowerbed." There was one "extra" "flowerbed" without phonetic symbol model, too. The idea of this "flowerbed" was that children could figure out new models, if necessary. Because children's collective role in adventure was helping animal characters, only children corrected each other's mistakes. Only "Aunt Soundling" was the fluent adult character in interpreting written texts.

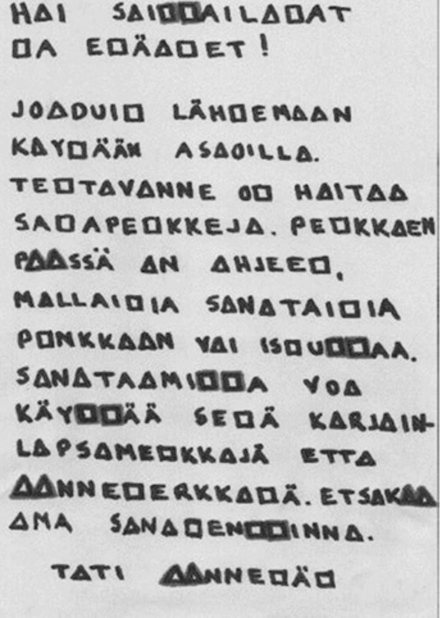
10.4.3 Entering the Forest of Words

A week ago "Aunt Soundling" had introduced herself and her "letter children," i.e., the sounds and their letter symbols. This time the adventure started when children and adult characters crawled to the "Forest of Words" through the tunnel separating two worlds (a canvas tunnel fixed to the door frame). Inside they found a letter of "Aunt Soundling" on the screen written by mixing phonetic symbols and letters. "Aunt Soundling" asked animals and children to prepare "flowerbeds of words" following her instruction (Table 10.1):

> Hello Adventurers and Animals!
>
> I had to go on errands. Your task is to take care for my flowerbeds of words. In the margin of flowerbeds there are instructions for what kind of seedlings of words you can prepare and plant in each flowerbed. In the seedlings of words you can use both letters and phonetic symbols.
>
> Search for your own flowerbed of words.
>
> Aunt Soundling

"Aunt Soundling" had written with the phonetic symbols on each "flowerbed" the names of the children working on it. Only one "flowerbed" was without names, and the animal characters decided to put it aside. Children read instruction easily aloud, but they were unsure what they had to do next. Animal characters proposed that children once again read the instructions and repeated important words during children's reading.

Table 10.1 "Aunt Soundling's" message to children (written mixing letters and "sound writing")



H△I SAI□□AIL△□AT
□A E□Ä△□ET!

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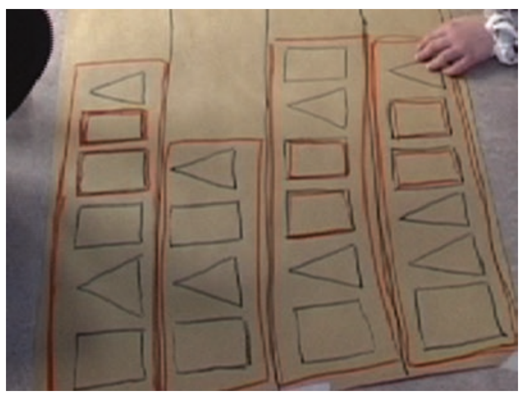

Picture 10.1 The "flowerbeds" with phonetic "word seedlings"

Children wondered where the "flowerbeds" would exist. After they had read the letter, they noticed brown paper scrolls on the floor and concluded that those must be the "flowerbeds" because there were phonetic symbols written on every scroll. After each child has found his or her group, animal characters asked the children once again what they should do next.

Children divided into small groups after finding their names on the side of "flowerbeds." Confusion created the form of instruction: at the end of each row, phonetic model was written showing the order of vowels and consonants in words children should invent and write using letters ("word seedlings"). Each word should have as many letters as there was in the model sound symbols. An open option was to invent completely new phonetic models and write with letters words of the same length.

10.5 Initiatives and Solutions

Children wanted to fill all flowerbeds and glue colored pieces of paper with words the rows full. In the flowerbed task, children have an opportunity to independently increase the difficulty of the solutions and get feedback from other children. RS was striving to more challenging problems.

RS planted a seedling in flowerbed □Δ□Δ. But she is eager to find a word to □Δ□□□Δ, which seems to be difficult for her. SP comes up with the word "LAMPPU" that fits to the phonetic model. MB asks RS if she can find some other word like "LAMPPU." A little later RS suggests to MB the word "IKKUNA." Phonetic analysis reveals that the model begins with "voiceless" sound (a consonant). SP adds that double consonant is in a different place than in the model. After a while RS asks: Does "VERKKO" fit there?

The teacher education student in the role of Matti the Badger (MB) wrote in his field notes: "RS was very interested in the most difficult flowerbed rows and she asked me which word could suit to them. I suggested her as if 'by chance' suitable words and soon RS proposed suitable words by herself. SP corrected mistakes that other children had made. Sometimes children peeked words of other groups and added them into their own 'flowerbeds'."

RS writes the word "VERKKO" and is going to plant it. SP looks at her writing and says: You wrote "VERKO." RS: "VERKO"? She sits back on the floor and corrects the word. RS writes the word "KURKKU" without mistakes and adds it to the row of "seedlings." RS checks the words of the flowerbed row □Δ□Δ. She finds one mistake and reminds SP: "You placed 'ÄITI' in this row, but letter 'Ä' has a voice." SP strikes through the word quickly.

Children worked intensively in good dialogical cooperation. They checked phonetic models carefully and paid attention to places of two same consonants or vowels. (Double consonants and vowels were marked with o double line in the phonetic symbol.) At the same time, they have to detect words that do not suit to any flowerbed.

TT proposed the word "TÄHTI," but no phonetic model was appropriate. TT was asked to make a new phonetic model and add it to flowerbed models.

10.6 TT Mastered This Task Perfectly

10.6.1 Adventure of Language Researchers: Plural Form

The narrative learning environment of the second year was called "The Mystery of the Object: Language Researchers' Adventure." Learning activity was organized like an arcade game, in which children and teacher education students searched keys for a mysterious chest hiding "The object." "The object" was communication model of human language, but for children it was a treasure hidden in the chest. During

separate adventures, children found keys to locks with which the chest was closed. Plural form was one adventure lasting 3 weeks.

Introduction to plural form took place dramatically. Children found a piece of ice in front of the classroom door (the adventure happened in winter). After melting the ice, two written messages were found. One text said: "I have in my possession your precious key. The solution of the riddle on the other text must be left half an hour before noon in the middle of the classroom. Don't dare to lurk any place nearby! If I see spies you will never see your key again!" Children decided that the message is from the wizard who interfered often in their adventures with time machine. The riddle to be solved was constructed from words in plural form in which the ending –t was replaced with the letter –s and syllable –ma was added in the beginning and syllable –pu at the end.

The riddle was quite complicated and the first solution was incorrect. The wizard returned the solution back and asked to solve it correctly by the next adventure day. After hard work, the solution was found. This time children wanted to stay near the classroom in order to see the wizard. But teacher education students proposed a trip to historical Stonehenge with the time machine. Time trip preparations were made and travel through time started. But the travelers arrived to a completely different place (next house from the school) where there seemed to be workstations and two workers. Soon children understood that they are in a car factory of plural country where cars are made from plural and singular forms. Explanation for wrong destination was that professor Ehnqvist, the head of their time expedition, was involved deeply in thinking children's plural riddle. Because time machine fuel is composed of thoughts, plural country attracted the vessel to this destination.

The factory was making cars from two types of parts, words in singular and plural form. During the last 2 months, a growing amount of complaints came from customers that their car was wrong assembled. This means extra money and time repairing such mistakes. We need exact instructions at each workstation on how singular is transformed to plural in Finnish. Especially the plural person at quality control point should brush up his language skills. Children were asked if they could help him and update his language skills because he is responsible of correctness of all plural parts.

10.6.2 Working on Assembly Line

"The assembly line" consisted of four workstations. Each subgroup could join assembly work on their choice. "The plural person" was responsible for quality control and demanded change of defective parts (the plural form of a word was not correct) thrown to the wastebasket. "The plural person" was student-invented character. Two female students made a jumbo size jacket big enough for both to fit in. So the character had two heads like a Siamese twin, but two arms only. The plurality was thus visually embodied in the character controlling the quality of plural parts.

Children's experiments and dialogues revealed them rules of changes in plural construction, but also exceptions from rules.

Excerpt 1
Three girls are working with the plural person at quality control point.

T: Suomi [Finland]. We add letter –t to the end and it will be Suomit.
M: "Names" are put in this basket.
T: Hey, but this is with –t Suomit.
Plural: Is this 'Suomit' correct? It sounds somehow funny.
T: There is only one Suomi.
Plural: Is it special waste in that case?
T: To the problem waste.

Excerpt 2
Plural: 'Kevät' (spring).
T: 'Kevät'
Plural: Let's think 'kevät'?
T: There are not many of them either [singular form ends with letter –t].
T: Plural: Isn't there?
T: 'Kevät' is not many.
Plural: Well, the previous and the previous before and the next. These may be all the springs of my life. Isn't it 'keväät'?

In these excerpts children first meet a word, which does not have plural form. In the second case, the word ended with the letter t in singular form, and plural form is constructed by transforming previous short vowel to a long one. In all workstations, children invented and tested words if they fit to building blocks of a car or they are problem waste not suitable for car assembly.

10.7 Visit of CEO in the Classroom and Preparing Instruction Boards

The CEO (a female student in role) arrived to the classroom without any warning before. She introduced herself as manager of the car factory emphasizing personal responsibility for the results of the factory. She complained permanent errors of cars and told that four cars only came from assembly line in perfect quality last week when children were helping. She asked if children are plural experts and could help her in preparing instruction board for all workstations explaining how plural form can be formed from singular in the Finnish language.

The CEO told that her secretary "Aila" has worked in another auto factory and they used an instruction board reminding that the letter –t indicates plural form in the Finnish. She hung up the old instruction board in front of the class and asked if children could form plural from a set of words she has with her. Children were

divided into subgroups and each child got a word in singular form to be transformed to plural. The CEO read the instruction aloud:

> Change the word on the piece of paper to plural form with your pair.
> Discuss in the group what similarities are in plural forms of your group
> Make instruction board of your group for which each child writes one word.
> Write plural form of your word and mark with a pen the point which is different compared to singular form
> Find an appropriate heading for the instruction board.

The challenge of the task was hidden behind the simple rule that letter –t at the end of word indicates plural form in the Finnish. Different transformations happen in the word except the change of ending. There are four main cases and several exceptions in plural construction. In subgroups most children were able to infer the correct transformed plural form on the basis of their oral mastery of language. In subgroups problem solving was quite easy because the method of transformation was the same, but different between the groups. Each subgroup solved the task; instruction boards were explained to the whole class, but solutions were not compared between the groups.

Children made in subgroup's instruction boards covering all possible four cases of transforming singular to plural form in Finnish language. They realized that the word ending –t is not the only transformation, but a more complicated change happens in the word root. In some cases double vowel becomes shorter or another vowel replaces the root vowel. Children found all the main grammatical rules in subgroups, but individual mastery hardly covered them all.

In this task, children concretely worked with the main message of "the object's" model: when structural changes happen in the word, its meaning will change. Traditionally language teaching doesn't reveal the connection between grammatical rules and meaning making. Grammatical rules are learned by heart without opening the fact that grammar is the collection of principles of meaning making in any language.

Aidarova (1983) even gave an assignment for older children to invent a new language using this communication rule.

10.8 Discussion

El'konin-Davydov system of learning activity inspired our literacy teaching experiment. Some elements are more or less directly adopted from the original approach or its elaborated parts. The first year follows Zuckerman's and her colleagues' model, which is a narrative version of El'konin's ABC – book. The idea of enhancing beginning reading and writing by making the system of oral language visible originally came from Vygotsky. The second year was used in the experimental work to introduce elementary communication model of human language, which Aidarova used in her language teaching experiment at school (Aidarova 1983). The basic idea

is to teach children elementary generalization as a tool for analyzing language: change of word structure changes the meaning of word.

In our experimental work, the whole two-year period was narrative. The experiment started in a mixed age classroom of 19 children. Younger children were 6 years old and the older group consisted of first graders. The experimental activity was introduced to children as “language adventure.” Eight teacher education students voluntarily participated in the two-year experiment. Students planned in-role activities, created imaginative situation, carried out roles, and created characters (animal character during the first year and language researchers during the second year). Tasks and assignments were mainly copied from Zuckerman’s material during first autumn term, but after that they were planned as part of each adventure.

During the second year, “Language researcher” adventure had a general plot: the frame story was a treasure hunt of mysterious “Object.” Children and adult characters first hunted for keys, which would open the locks in the chains around the chest hiding “The object.” Children should have all nine keys and find the chest with “The object.” “Bad guys and spirits” were also hunting the treasure and sometimes stole keys of treasure chest were stolen from children.

One of the problems in El’konin-Davydov system of teaching learning activity is continuity and developmental impact of play. Davydov analyzed the importance of advanced play in learning activity, but focused on scientific concepts and theoretical generalizations as “tool-producing” factor in his experimental work. He wrote that developed imagination and symbolic function are central products of advanced social role-play. Advanced play makes its task and “pushes” the child to “realistic” learning (Davydov 1996). The present situation all over the world indicates that advanced play is disappearing and children’s imagination and symbolic function is not developing in play. Perhaps we should bring advanced play and other narrative activities to school education in order to systematically support child development.

References

Aidarova, L. I. (1983). *Child development and education*. London: Central Books Ltd.

Bredikyte, M. (2011). The zones of proximal development in children’s play. In *Acta Universitatis Ouluensis E 119*. Oulu: University of Oulu.

Davydov, V. V. (1996). *Teoriya razvivayushtshego obuceniya*. [Theory of developing teaching and learning]. Moscow: INTOR.

El’konin, B. D. (1994). *Vvedeniya k psikhologiyu razvitiya* [Introduction to the psychology of development]. Moscow: Trivola.

El’konin, D. B. (1999a, November –December). On the structure of learning activity. *Journal of Russian and East European Psychology*. *37*(6), 84–92.

El’konin, D. B. (1999b, November–December). How to teach children to read. *Journal of Russian and East European Psychology, 37*(6), 93–117.

El’koninova, L. I. (2001). The object orientation of children’s play in the context of understanding space-time in play and in stories. *Journal of Russian and East European Psychology, 39*(2), 30–51.

Hakkarainen, P.,Laitinen, M., Väisänen, M. (2017). *Narrative math learning in Kindergarten*.

Leont'ev, A. N. (1978). *Activity, consciousness and personality*. Englewood Cliffs: Prentice-Hall.
Lobok, A. M. (1997). *Antropologiya mifa* [Anthropology of myth]. Yekaterinburg: Bank kulturnoi informatsii.
Lobok, A. M. (2012). The writing person. *Journal of Russian and East European Psychology, 50*(6), 34–70.
Poskiparta, E. (1995). *Miten ehkäisen oppilaitteni luku- ja kirjoitusvaikeuden syntymisen? Kielellisen tietoisuuden kehittäminen* [How I prevent my students' reading and writing problems? Development of verbal consciousness]. Turku: Turun yliopisto.
Vygotsky, L. S. (1996). *Pedagogiceskaya psikhologiya* [Pedagogical psychology]. Moscow: Pedagogika-Press.
Zinchenko, V. P. (1996). Ot klassiceskoi k organiceskoi psikhologii [From classical to organic psychology]. *Voprosy Psikhologii, 50*(5), 7–20.
Zuckerman, G., & Shkoljarenko, J. (1997). *Kak Winnie-Pooh and vse-vse-vse naucilis citat. Skazka-bukvar* [How Winnie the Pooh and all-all-all learned to read. Story ABC book]. Moscow: Intor.

Chapter 11
Mixed Methods in Early Childhood Education

Judith Schoonenboom

Abstract This chapter presents a view on mixed methods research for early childhood education. Much research in early childhood education investigates or prepares interventions in educational practice. Such research is complex and involves various stakeholders, most notably children. Ultimately, such inquiry informs a decision for educational practice, either an immediate decision for the research site at hand or a possible, more generally applicable, future decision. A decision of high quality is informed by various perspectives and particularly by the voices of those with least power, the children. This chapter describes techniques for interactively articulating stakeholder perspectives and subsequently integrating them. A special challenge is posed by the integration of conflicting evidence, which preferably exceeds simple juxtaposition by finding a solution to the conflict through abduction or further inquiry. Next, this view is elucidated using a complex real-life example, Clark and Moss's Mosaic study. It is shown how various kinds of evidence play a role in this real-life example, how conclusions drawn from these diverse pieces of evidence build upon each other, and how they inform the ultimate decision. Finally, several validity requirements are discussed, with the overarching requirement being that "the description should be good enough for the decision."

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Keywords Mixed methods • Research design • Dialectical pluralism • Early childhood education

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11.1 Introduction

A common call in the literature on early childhood education concerns the wish and the need to make the voices of children visible, to perform research also *with* children, instead of exclusively *on* children (Liebenberg and Ungar 2015). Such calls point out the limitations of results of early childhood education studies that are based solely on quantitative research (Jones and Sumner 2009; Nicotera 2008). Quantitative research often results in very abstract statements of effects, which are considered generally applicable (Shaffer and Serlin 2004; Yanchar and Williams 2006). In the early childhood education literature, however, it is pointed out that effects can work out differently in different contexts (Ungar et al. 2007) and that it is important to understand how the experience of the children is affected by the context (Grover 2004; Hill 2006) and to reveal the diversity (Ungar 2011) and complexity (Liebenberg and Ungar 2015) of the underlying processes. Obviously, there is a need to complement the outcomes from quantitative studies with understandings from qualitative analyses.

This goes along with a call for the use of mixed methods research (Jones and Sumner 2009; Nicotera 2008). Differently from what is suggested by its label, this involves not only combining qualitative and quantitative research methods but also combining quantitative and qualitative paradigms, theoretical lenses, methodological approaches, disciplines (Creswell and Plano Clark 2011; Greene 2015), researchers' mental models (Greene 2007), and perspectives of researchers and research participants (Jones and Sumner 2009; Liebenberg and Ungar 2015). Qualitative research has the ability to reveal diversity (Maxwell and Mittapalli 2010), to deal with complexity (Johnson 2015b), and to sketch participants' perceptions and experiences (Hesse-Biber 2012). On the basis of quantitative research, generalizable statements can be formulated (Morgan 2007), i.e., conclusions that are assumed to be valid outside the specific setting in which they were drawn (Hankivsky and Grace 2015) (but see Ercikan and Roth 2009). In the context of early childhood education, many mixed methods studies are performed (e.g., O'Farrelly and Hennessy 2014; Sumsion 2014; Walsh et al. 2012), including many studies that have not been labeled as such by their authors (e.g., Clark 2005; Hargreaves et al. 2014; Marjanovič-Umek et al. 2015; Michael-Luna 2013)).

In this chapter, I present an approach and a model for mixed methods research in early childhood education. I do so as an expert in mixed methods with some knowledge of early childhood education. This chapter fits into two mixed methods traditions: the transformative and the dialectical tradition. Research in the transformative tradition (Mertens 2007, 2009, 2010) aims to give participants with little power, in this case young children, a voice in improving their situation. Transformative research focuses on generating results that are useful to the various groups and individuals to whom it applies. It does so by involving the various stakeholders, by recognizing and incorporating differences among those groups and individuals, and by collecting data in ways that are seen as appropriate and nonoffensive by those involved (Mertens 2007).

The mixed methods dialectical tradition (Greene 2007; Johnson and Schoonenboom 2016; Johnson and Stefurak 2014), although closely related in elaboration, has a different perspective. It emphasizes the dialogue with the other, whether these are other researchers, various stakeholders in a study, or other ideas. Actively seeking for different perspectives, stemming from various sources, results in a better understanding of the multifaceted and complex nature of social phenomena, and in decisions in which various stakeholders have a more equal voice (Greene 2007). An example in early childhood education is the dialectical "iterative research process" of Liebenberg and Ungar (2015). The stages of this process are dialectical in that they each incorporate perspectives of both researchers and participants and they are dialogical in that they build on each other.

This chapter first presents an ontological/epistemological and methodological foundation for mixed methods research. Next, a model of the mixed methods research process is presented, in which the researcher can go back and forth between three iterative stages. It shows how research components build on each other and how conclusions from different sources of evidence can be integrated. This process is subject to a set of validity requirements for mixed methods research in early childhood education. This approach is demonstrated on the basis of an existing and well-documented example of research in early childhood education (Clark 2005; Clark and Moss 2005, 2011).

11.2 Foundations for Mixed Methods Research

In this section, two foundations are proposed for combining qualitative and quantitative research. The first is an ontology and epistemology for mixed methods research. The second, methodological, foundation shows why and when quantitative and qualitative research need each other to obtain valid conclusions.

In the mixed methods literature, the question whether quantitative and qualitative ontologies and epistemologies can be combined with each other within one study has been much and hotly debated (Denzin 2012; Hammersley 1996; Howe 1988; Lincoln 2010). It has been argued that quantitative research assumes the existence of one reality, about which one can obtain objective knowledge. Qualitative research is based on multiple realities and different kinds of knowledge and ways of gathering knowledge. As such, quantitative and qualitative research seem incompatible.

This so-called incompatibility thesis can only stand to the test if all mixed methods research in practice proved to be flawed, which obviously is not the case. The incompatibility thesis, however, also plays a role in justifying mixed methods research. In the mixed methods literature, a good mixed methods researcher has been defined as someone who is able to easily go back and forth between the one, objective world of quantitative research and the multiple subjective realities of qualitative research. In practice, however, researchers generally do not have the feeling that they change worlds while they are performing mixed methods research (Bryman 2007). In addition, although good examples of going back and forth between

qualitative and quantitative research have been described in the literature (Greene 2015; Hesse-Biber 2010, 2012; Maxwell et al. 2015), an accurate description of the accompanying change in ontology and epistemology is missing.

Some authors have solved this problem by assuming an objective reality, which can be known in various ways (Campbell 1988; Maxwell 2012), each of which yields only provisional knowledge (Popper 1963). This critical-realist perspective combines a quantitative ontology with a qualitative epistemology. However, the function of this objective reality remains unclear. As the objective reality cannot be known, it cannot guide inquiry, and it cannot be used to derive criteria for judging which way of knowing comes closest to the objective reality (Chakravartty 2014).

By definition, a critical-realist approach has no place for multiple, subjective realities. In the practice of qualitative research, however, the latter is a very common and useful starting point. It makes sense to say that participants in qualitative research to some extent live in different realities – with different concepts, habits, interests, values, etc. – rather than that they look differently at one objective reality.

The critical-realist approach assumes that there are multiple ways to know reality, both qualitative and quantitative. This legitimizes the conduct of both qualitative and quantitative research (Maxwell and Mittapalli 2010). From the critical-realist standpoint, however, no arguments can be derived concerning the different roles of qualitative and quantitative research.

11.2.1 An Ontology and Epistemology for Mixed Methods Research

The approach of this chapter assumes a qualitative ontology and epistemology. People live in different realities, which can be known and investigated in different ways. These different realities are dynamic and changeable. Moreover, the concepts we use to speak about these realities are not fixed, and they change along as these realities change. This variability, however, has its limits, because the concepts that we use in a specific, time-bound context cannot exist without an intersubjective consensus about what they mean.

This is not the end of the story. Concepts interact with each other in endlessly complex ways and systems. Therefore, through reflection and research, we can *discover* properties of these systems, which until then had been unknown. These properties are not valid eternally, and they may change when the realities or our concepts change. However, on the basis of the intersubjective consensus of what the concepts mean, these discovered system properties can be considered objectively valid for a certain time and context (Putnam 1987).

In research, analysis of the multiple realities does not always aim to arrive at objective statements. Description and understanding are important goals of conducting research, and qualitative research is well suited for these goals. When

researchers have an additional desire to come to objective statements, quantitative research can play a role alongside qualitative research.

11.2.2 Why Quantitative Research Needs Qualitative Research

In addition to an ontological/epistemological argument, there is also a methodological argument for combining qualitative and quantitative research. Underlying quantitative effects are many, often hidden, assumptions (Howe 1988; Huberman 1987). It is possible, and sometimes necessary, to examine the plausibility of these assumptions (White 2013). Qualitative research can play a role in this.

Quantitative effects are based on correlations. When a correlation is found repeatedly, it is robust and indicates a relationship between the occurrence of phenomenon A and phenomenon B. Quantitative research is therefore suitable for "localization" (Schoonenboom 2014), for determining exploratively and objectively that "something is going on." However, correlation does not imply causation. The correlation between the number of ice creams sold and the number of drownings is very robust. Yet, this is a spurious effect, without a causal relationship. There are many ways in which a researcher can discover the causal effects underlying robust correlations. Again, qualitative research can play a role.

Quantitative effects are obtained by comparing the scores of a substantial number of individuals on two or more constructs. They are generally intended, however, to refer to a mechanism that is active in individuals (Danziger 1985). A correlation exists, e.g., between anxiety of children and their school performance. The corresponding effect is assumed to operate at the individual level: a particular child's high level of anxiety leads to low school performance of that same child.

In practice, however, quantitative research fails to demonstrate this effect in individuals. Usually, counterexamples are found within a sample, such as children with a high level of anxiety and yet good school performance. The mechanism therefore does not operate in all individuals, and quantitative research hides the diversity within the population (Maxwell 1995; Maxwell and Mittapalli 2010; Yanchar and Williams 2006). There is a need for additional qualitative inquiry into the different realities of the individuals involved, to better understand where the diversity stems from (Sandelowski 1996), when and for whom the effect may or may not occur (Pawson and Tilley 1997), and how, through which pathways, anxiety leads to poor school performance (Weisner 2005).

This ontology of multiple realities can be connected to the transformative and dialectical framework outlined above. Researchers should incorporate the different realities of the various groups and individuals involved into their research. Based on a shared understanding of the concepts used, it is then possible to arrive at objective statements. Therefore, a transformative and dialectical approach requires that researchers *design* for diversity, that they set up their research so that different perspectives from different realities are included (Greene 2007; Johnson and Schoonenboom 2016). This is how mixed methods is interpreted in this chapter.

11.3 Three Stages of Mixed Methods Research: Articulation, Integration, and Decision

In a transformative/dialectical approach, mixed methods research consists of three stages. In Stage 1, different perspectives are involved and articulated, and in Stage 2, these perspectives are analyzed and integrated. Together these two stages aim to describe the multiple realities of the various stakeholders. On the basis of this description, an informed decision is taken in Stage 3.

Describing the realities involved (Stages 1 and 2) and taking an informed decision (Stage 3) are the two fundamental goals of research. In a particular inquiry, one or the other may be emphasized. Together, they are subject to the following general validity requirement: the description of the realities should be *good enough* for making a well-informed decision. Together, the three stages connect ontology/epistemology, methodology (Stages 1 and 2), and use (Stage 3) (Cartwright 2007).

A "good" description requires content-rich, qualitative data; numerically rich, quantitative data (Shaffer and Serlin 2004) are required for a "good" decision at the level of the group or population. Depending on the balance between the aims of description and decision, the emphasis can be either on rich qualitative or rich quantitative data. Mixed methods research, therefore, does not necessarily require "thick descriptions" (Geertz 1973), qualitative descriptions that are as rich as possible, but rather qualitative descriptions that are as rich as needed for taking a well-informed decision (Schoonenboom 2015).

11.3.1 Stage 1: Articulating Perspectives

Stage 1 in conducting mixed methods research involves the articulation of various perspectives, in research terms: data collection and its preparation. In a dialectical approach, different perspectives may be involved from various stakeholders, as is the case in action research (Heron and Reason 2008; Martin 2008). Different perspectives can also involve different theories of various researchers, or different judgements by various participants on the theory of the researchers (Pawson and Tilley 1997; Torrance 2012). The number and kind of aspects that can give rise to different perspectives is fundamentally unlimited (Johnson 2015b; Johnson and Schoonenboom 2016).

Perspectives are complex wholes. Not only do different groups and individuals look with different goals to different things, but they also do so from different positions, with different responsibilities and power. In a research study, these differences in goals, responsibilities, and positions can easily lead to tensions. It is important to recognize and articulate these tensions.

Even more important from a research perspective, different goals put different demands on the generalizability (Mayring 2007) of the research outcomes, on the applicability of the conclusions of the inquiry to other situations and periods than

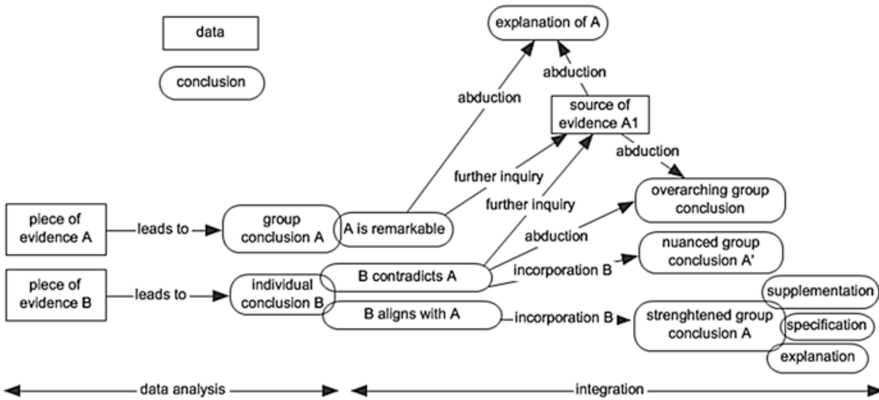

Fig. 11.1 Data analysis and integration in mixed methods research

the specific setting in which the inquiry was performed. In an intervention study in a school, e.g., teachers, management, and parents most likely will want the results to be useful for the school involved; they want to be able to generalize to future situations in their own school. Researchers usually want their results to be applicable to other similar schools or to other school types. In that case, goals of generalization differ among stakeholders.

Combining these various goals of generalization is a daunting task. Each evaluator, who has ever tried to write a scientific publication on the basis of a local evaluation, knows that this often fails, because research activities that are necessary for the scientific goal have not taken place in the evaluation (e.g., collecting certain personal details).

11.3.2 Stage 2: Integration

In Stage 2, the perspectives articulated in Stage 1 are brought together. Stage 2 consists of data analysis and integration (Fig. 11.1).

Data analysis involves the separate analysis of the perspectives obtained in Stage 1, which acquire the role of "evidence" in Stage 2. These individual results are then brought together in the phase of integration (Bazeley 2012; Bazeley and Kemp 2012; Fetters et al. 2013; O'Cathain et al. 2010). While data analysis is part of any empirical research, integration is specific to research in which data come from multiple qualitative sources or from multiple quantitative sources (multi-method), or from a combination of qualitative and quantitative sources (mixed methods). Without integration, multiple-source research leads to separate quantitative and qualitative outcomes and cannot properly be called multi-method or mixed methods research.

In a dialectical approach, integration is driven by the "both/and" principle (Johnson 2015a; Johnson and Schoonenboom 2016). The dialectical researcher

strives to give the various and different “voices” a place in the final conclusion. Integration is also dialogical: conclusions and voices build on each other. Finally, integration is hermeneutical: integration typically includes several cycles of incorporation, abduction, and further inquiry (Fig. 11.1). In a dialectical approach, data analysis and integration are not two separate, successive stages. Instead, the researcher goes back and forth between analysis and integration. In addition, the researcher can go back to Stage 1, and collect new data, if the findings give occasion to do so.

In a dialectical approach, the term *reflexivity* has a specific interpretation. A dialectical researcher is not only aware of how his or her own position affects research outcomes (Walker et al. 2013) but is also able to invite the other to contribute to the outcomes and thus to accept *changes* in the results originally planned or obtained by the researcher (Johnson and Schoonenboom 2016).

11.3.2.1 Ways of Integration: Incorporation

Integration, bringing together various outcomes, can be done in three different ways: by incorporation, abduction, and further inquiry (Fig. 11.1). Incorporation involves adding conclusion B to conclusion A. When B is in accordance with A, this leads to confirmation and strengthening of A, to what is called “triangulation” (Campbell and Fiske 1959; Greene et al. 1989). When B does not match A, this leads to disconfirmation and nuancing A (“A is valid, except in individual case B”). In the latter case, the final conclusion includes the diversity within the sample (Maxwell and Mittapalli 2010).

Triangulation has been considered an important goal of mixed methods research. However, this is an “after the fact” observation: examining additional evidence can always lead to either confirmation or disconfirmation. Therefore, the corresponding goal can better be formulated as “to investigate whether the various pieces of evidence lead to the same conclusion.”

On top of a “bare” confirmation, conclusion B can enter into dialogue with conclusion A and thus bring conclusion A further. B may, for example, supplement A, further specify A, or give an explanation for A. This is called “expansion” (Greene et al. 1989).

11.3.2.2 Ways of Integration: Abduction and Further Inquiry

Two other types of integration that further a conclusion are abduction and further inquiry. Abduction is a logical reasoning of the following form:

(P1) The surprising fact, C, is observed;
(P2) But if A were true, C would be a matter of course;
(C) Hence, there is reason to suspect that A is true (Peirce, *Lectures on Pragmatism*, cited in Hoffmann (1999, p. 278)).

Abduction plays an important role in mixed methods research (Erzberger and Prein 1997). In a dialectical approach, the inclusion of perspectives of both research-

ers and various stakeholders easily leads to conclusions that contradict each other or that are otherwise unexpected. This makes it necessary to find an explanation for these unexpected outcomes by using an existing or emerging theory. In that case, the overarching, abductive explanation forms the mechanism of integration. A fruitful strategy in the search for an explanation is to consider different levels. To understand, for example, teaching and learning in a particular class in a particular situation, simple measurement of a particular construct of interest is not enough. To interpret the results of such measurement in a sensible way, additional knowledge of the specific class, students, teacher, and school is needed, as is general knowledge of how schools operate. This is even more true when the results at the level of the simple measurements contradict expectations or common knowledge (Mathison 1988).

Conclusions can be elaborated by further inquiry (Fig. 11.1). The researcher will then search for additional evidence, which is subsequently integrated with the original conclusion. Further inquiry with the aim of explaining unexpected outcomes is called "initiation" (Greene et al. 1989). Initiation may involve the collection of new data or reanalysis of previously collected data (Creswell and Plano Clark 2011). Such an analysis may provide an explanation for the unexpected outcome A, or for the apparent contradiction between A and B, but may just as well lead to new contradictions.

11.3.3 Stage 3: The Informed Decision

Stage 3 comprises the informed decision, which may fall within or outside the actual study. In action research, the decision often falls within the study and may comprise, e.g., a follow-up of an intervention in the same setting at a larger scale. In a dialectical approach, mixed methods research is conducted to reach a decision that is better informed than a decision based solely on one of the research components (Johnson and Schoonenboom 2016; Torney-Purta 2009). That does not necessarily mean that the decision is taken democratically, but it does mean that several perspectives have been heard and listened to.

11.4 Guidelines for Mixed Methods Research in Early Childhood Education

11.4.1 An Example of Mixed Methods Research in Early Childhood Education: the Mosaic Approach

The remainder of this chapter is a demonstration of these foundations of mixed methods research on the basis of a well-known and well-described example in early childhood education, the Mosaic approach (Clark 2005; Clark and Moss 2005) (Box 11.1).

Box 11.1: A description of the Mosaic Study "Spaces to Play"
The review led to the outdoor environment being chosen as the focus for the second study, *Spaces to play* (see Clark and Moss 2005 for a full account of this research). This set out to make young children's perspectives the starting point for change to the physical environment. The study was a collaboration with Learning through Landscapes, a charity based in England that works to promote the use, development and maintenance of school playgrounds. This was part of a wider initiative by Learning through Landscapes to work with a local authority and 15 early years settings to develop accessible, replicable, 'low tech' and affordable solutions to developing their outdoor environment.

The study was based in a preschool for three- to four-year-olds. Twenty-eight children were involved, together with parents and practitioners. The preschool included a number of children with special physical or behavioural needs, including several with speech and language difficulties. It served a mixed locality including an area of social disadvantage.

The manager, practitioners and a group of parents wanted to take more advantage of the small outdoor space available to the preschool. This included a softplay surface, a small area of decking, a muddy bank and 'boggy' ground where there was an underground spring. The space was surrounded by a high-security fence, which separated the preschool from a park.

[...; one of the play objects is the playhouse JS] The playhouse was a small wooden shed given to the preschool by a local business. It had a door, which opened out onto decking, and two windows, which had clear views of the play surface, the decking and muddy ground. There was a plastic barbe[c]ue set, table and chair in the house. Four children or more could squeeze inside. [...]

There were two stages in the original study: first gathering material, then reflection and interpretation. The practical focus of: the *Spaces to play* study led to the articulation of a third stage to the Mosaic approach, in order to emphasise the decisionmaking element of the listening:

- Stage One: gathering children's and adults' perspectives;
- Stage Two: discussing (reviewing) the material;
- Stage Three: deciding on areas of continuity and change. [...]

Discussions centred around two main questions:

- Which places do children see as important in this outdoor space?
- How do the children use these places?
  […]

Starting with observation, the researcher worked with groups of children to find out their views and experiences of this existing play space in order to form the basis for any changes to the provision. Children took photographs of the space and made these into individual books. Others took the researcher on a tour of the site, recording the event with a camera and by making an audio-tape. Working in pairs or small groups, the children made maps of the outdoors using their photographs and drawings.

(continued)

Box 11.1: (continued)

The researcher interviewed children individually or in groups outside or on the move. Four practitioners and four parents were also interviewed for their perspectives on how the children used the outdoor space.

A new tool was added to the Mosaic approach for this study: the magic carpet. This was designed to open up new conversations with the children about their wider environment. What local spaces were the children aware of, what were their experiences of these places and what additional insights could these give to the current and future uses of their outdoor space? A slide show was made using images of the local town centre, local landmarks and the park (all taken from a child's height). The researcher added images of her local park as well as images taken during the study of the preschool's outdoor space. The home corner was converted into a darkened tent and children sat on a 'magic carpet' to watch the slides in groups. Christine Parker (2001) had tried this idea after her trip to Reggio Emilia as a way of talking to young children about different places.

Source: From Clark (2005, pp. 31–33). Copyright 2005 by Policy Press. Reprinted with permission.

11.4.2 Guidelines for Articulating Perspectives

11.4.2.1 Consider the Different Needs for Generalization of the Various Stakeholders, in Relation to Their Different Perspectives and Goals

In the Mosaic study, various groups are involved, each with different perspectives, goals, and needs for generalization. The goal of the manager, practitioners, and parents, as well as the interest of the children, is to improve the situation of this specific preschool. They want to be able to generalize the outcomes of the study to the future situation of their own preschool and to use the outcomes to take measures in their own preschool. Learning through Landscapes has a more far-reaching goal, namely, the development of good and affordable solutions for the outdoor environment of their preschools, of which the preschool in the Mosaic study is one. For Learning through Landscapes, it is therefore important that the research outcomes are generalizable to their other preschools.

The researchers have an entirely different goal, namely, involvement of children in a meaningful way in decisions that affect them at a very early stage (Clark and Moss 2005). The researchers aim to generalize their research method. Presumably, their need for generalization extends to preschool children in the UK and possibly beyond.

Differences in goals and perspectives easily lead to tensions and contradictions. For example, a game that is considered fun and exciting by the children may be too dangerous in the eyes of the practitioners or undesirable in the eyes of the parents. Dialectical researchers recognize and resolve these tensions, rather than deny them or automatically choose the perspective of the adult parties.

The different needs for generalization should be carefully combined and weighed. This places high demands on data collection and data analysis. For example, the answer to the questions what places in the outside environment are important to the children and how they use these places (Box 11.1) should be detailed enough to be applicable in this preschool's practice and at the same time abstract enough to be applicable in the other preschools. Consequently, researchers will have to identify the "active ingredients" in the use and appreciation of the playgrounds. Something similar applies to the active ingredients in the research method of involving children in decisions that affect them.

11.4.2.2 Use Adequate and Complementary Methods to Articulate the Perspectives

The transformative goal of the Mosaic study, the empowerment of children, can only be realized when methods are used that allow children to express their perspectives adequately. In the Mosaic study, children are given the opportunity to express their views with the help of visual means (Liebenberg and Ungar 2015): the camera. Their results are laid down in photo books, tours, and maps. The number of photographs provided information on the importance that children attached to the playhouse, its content, and how they used the playhouse.

The most detailed picture of how the children used their playgrounds was obtained by observation. Observation, however, has some limitations (Johnson and Christensen 2014). It is quite conceivable that existing cases of use accidentally do not happen to occur during the observations. The latter applies by definition to imaginable, and possibly desirable, forms of use, which have not occurred yet. In addition, some constructs do not lend themselves easily for observation, such as the importance that children attach to their playgrounds and how they appreciate them.

In the Mosaic study, information about these last two constructs was obtained by interviews. Adults and children alike are to some extent able to reflect on their experiences and to put these reflections into words (Gredler and Shields 2008; Howe 2004). Interviewing young children has some specific challenges, such as their limited ability to express themselves in language and to look back on their experiences and the impression that the adult researcher and other elements in the interview setting can make on the child (Cameron 2015).

Finally, the Mosaic researchers wanted to know how the way in which the children use their playgrounds in the preschool's outdoor environment stems from how they, as physically small people in development, look at the world. For this purpose, observation outside the preschool's outdoor environment is a conceivable but very labor-intensive method, with the risk that relevant ways of viewing the world happen not to occur during observation. Interviews are equally less suitable, because a look at the world can be verbalized only to a very limited extent. A way of looking can best be *elicited*, and this is done par excellence with the help of an experiment (Johnson and Christensen 2014), the Mosaic study's "magic carpet."

Box 11.2: Typographical adaptation of Clark (2005, p. 34)[1]
Places to expand: the house

Observing the children [1] revealed *the house to be a key resource for them*. The children **confirmed** this through their photographs [2], the tour [3] and their interviews [4]. Parents **also** mentioned [5] the house as an important space in the preschool. **However**, the interviews with practitioners [6] showed that *the house was a source of tension*. They felt *it was too small*. The review with children [7], practitioners [8] and Learning through Landscapes [9] **recognised these opposing views** and **raised some possible solutions**. The preschool has now *turfed a new area for children to use to build their own temporary structures*.

[1] Numbers in brackets indicate a method of data collection. Italic text contains conclusions. Text in bold shows how conclusions build on each other. Copyright 2005 by Policy Press. Adapted with permission.

11.4.3 Integration: How Conclusions Build on Each Other

According to the authors, the conclusions of the Mosaic study build on each other as shown in Box 11.2. Table 11.1 shows the chain of evidence of the Mosaic study, using the terminology of this chapter.

11.4.3.1 Use Conclusions to Focus the Inquiry and Formulate New Research Questions

In the Mosaic study, conclusions are not only used for incorporation, abduction, and further inquiry but also to focus the inquiry by altering, limiting, or expanding the research question. A common strategy is to focus the research question on what proves to be important to the participants (Hesse-Biber 2012; Mertens 2007, 2010; O’Cathain et al. 2013; Sandelowski 1996). Only after the playhouse had been identified as important to the children, it could become the focus of research questions 2–5 (Table 11.1). Traditionally, research subquestions are seen as substantive divisions of the research question. From a dialectical mixed methods perspective, it is often more convenient to see them as procedural divisions of the research question, as “intermediate” research questions (Schoonenboom 2014).

Using conclusions to formulate new research questions is often as important as using conclusions to answer existing research questions. In the Mosaic study, the conclusion that the playhouse was a source of tension was subsequently used to focus the inquiry on finding an explanation for this tension. This focus was deemed

Table 11.1 Chain of evidence in the Mosaic study

Question/ conclusion	Collection technique	Type	Level	Evidence	Integration process	Integration outcome
Question 1				**Which places do children see as important in the preschool's outdoor environment?**		
	Observations	Quan	Group	Children often used the playhouse	–	–
Conclusion 1a				**The playhouse is an important place for the children**		
	Photographs	Quan	Group	The playhouse was in 12 of the 60 photographs taken by the children	Incorporation	Confirmation
	Photographs	Quan	Group	The playhouse was included in the more often in the children's books than other objects	Incorporation	Confirmation
	Photographs	Qual	Group	Photographs included inside and outside shots	Incorporation	Confirmation + supplementation
	Photographs	Qual	Group	The playhouse was a place in which to hide, talk to friends, and watch what was happening outside	Incorporation	Confirmation + supplementation + explanation
	Tour		Group	Children took inside and outside photographs on their tours and included these on their maps	Incorporation	Confirmation
	Interviews	Qual	Group	The children provided detailed descriptions of the playhouse	Incorporation	Confirmation
	Interviews parents	Qual	Individual	One parent explained that her child also had a playhouse at home	Incorporation	Confirmation
Final conclusion 1				**The playhouse is an important place for the children**		
Question 2				**How do children appreciate the playhouse?**		
	Interviews children	Qual	Group	Some children call the playhouse their favorite place	–	–
Conclusion 2a				**Children appreciate the playhouse positively**		
	Interviews parents	Qual	Individual	One parent explains that her child enjoys playing in the playhouse	Incorporation	Confirmation
	Interviews practitioners	Qual	Group	Practitioners would like to give the playhouse to the children as a present	Incorporation	Confirmation

Conclusion 2b				**Children appreciate the playhouse positively**		
	Interviews children	Qual	Subgroup	Some children indicate that the playhouse is too noisy	Incorporation	Disconfirmation
	Interviews children	Qual	Individual	One single child does not appreciate the playhouse	Incorporation	Disconfirmation
	Interview practitioners	Qual	Group	The playhouse is a source of tension	Incorporation	Nuancing
Final conclusion 2				**The playhouse is appreciated, but it is also a source of tension**		
Question 3				**What causes the tension in the playhouse?**		
	Interview practitioners	Qual	Group	The playhouse is a source of tension, because it is too small	Further inquiry	Explanation
Final conclusion 3				**The playhouse is appreciated by the children, but it is also a source of tension, because it is too small**	Abduction	
Question 4				**How do the children use the playhouse?**		
	Photographs children	Qual	Group	Children took photographs of the inside and outside of the playhouse	–	–
Conclusion 4a				**The playhouse is used as an object to play with, as a space to play and as an observation post**		
	Interviews practitioners	Qual	Group	Children use the playhouse for various purposes	Incorporation	Specification
	Observation	Qual	Group	Children used the playhouse to hide, talk to friends, and watch what was happening outside	Incorporation	Specification
Final conclusion 4				**Children used the playhouse as a social place**		

(continued)

Table 11.1 (continued)

Question/ conclusion	Collection technique	Type	Level	Evidence	Integration process	Integration outcome
Question 5				**How does the way in which the children use the playhouse stem from how they look at the world?**		
	Experiment	Qual	Group	Children look at the world from children's height and like to keep an eye on what is happening outside	Incorporation	Specification
Final conclusion 5				**The way in which the children use the playhouse stems from how they look at the world**		
Decision				**The playhouse is a place to expand**		
Decision				**The children should have an area to use to build their own temporary structures**		

important by the researchers, but not necessarily by the participants. The children's general appreciation of the playhouse made it imperative to give the playhouse a prominent place in the redesign of the outdoor environment, and this in turn made it necessary to find a solution for the encountered negative tension. Hence, using conclusions to focus the inquiry is very important, and it is should therefore preferably be applied as a general strategy wherever possible, rather than being only invoked in the case of unexpected outcomes. This applies equally well to finding explanations, to finding out what is important to participants and to localization (Schoonenboom 2015), and to finding out "where the action is."

11.4.3.2 Do Not Ignore Individual Negative Evidence

The principle that quantitative effects are valid for all individuals involved leads to two guidelines for integration, "Do not ignore any individual" and "Do not ignore any negative evidence," combined, "Do not ignore individual negative evidence." In a dialectical approach, a conclusion B at individual level which contradicts a previous conclusion A at group level is not ignored but is used to nuance A, or to search for a new overarching conclusion, in which the contradiction is resolved (Fig. 11.1).

The Mosaic study makes good use of individual and negative evidence. There are some children who depreciate the playhouse and some others who do appreciate the playhouse but also see it as a source of tension. Thus, on the basis of some individuals' negative evidence, the researcher subsequently searched for an explanation for the tension in the playhouse, which was then found.

11.4.3.3 Quantitize Qualitative Data Where Applicable

The Mosaic study is to a large extent driven by a decision goal at the group level on the redesign of the preschool's outdoor environment. This goal requires rich quantitative data: the decision-makers have to know *at the group level* how children appreciate the various playgrounds in the preschool's outdoor environment. Knowing that, how, and why certain opinions and ways of using the playgrounds exist – typical outcomes of qualitative inquiry – is not enough. One also has to know *to what extent* these occur.

Quantitative outcomes can be obtained in different ways. Sometimes, the data collection technique is quantitative, and is then followed naturally by a quantitative technique of data analysis, as in a survey study. An example within the Mosaic study is counting the number of photographs showing the playhouse to determine the importance of the playhouse for the children. Sometimes, the data collection technique is qualitative, and the obtained qualitative data are then converted into quantitative data, which is called "quantitizing" (Collingridge 2013; Sandelowski et al. 2009). The importance of the playhouse for the children was additionally determined by counting how often the playhouse was mentioned in the interviews and how this related to the number of times other playing objects were mentioned.

Counting codes in interviews is not without risk. If the playhouse is not mentioned in a specific interview, this does not necessarily mean that it is not important for the interviewee. In addition, the interviewer might elaborate more on what the interviewee says about the playhouse in one interview than in another. This does not necessarily mean that the playhouse is less important to the interviewee of the latter interview.

11.4.4 The Informed Decision: Validity Requirements

For a well-informed decision, the description of the multiple realities involved should be good enough. "Good enough" has been described in the literature under the heading "validity." The methodological literature makes a sometimes more, sometimes less clear distinction between validity as an outcome, threats to validity, measures to increase validity or to address validity threats, and validity requirements or validity criteria (Bryman et al. 2008; Eisenhart and Howe 1992; Maxwell 1992, 2013; O'Cathain 2010; Onwuegbuzie and Johnson 2006; Spencer et al. 2003; Teddlie and Tashakkori 2009; Yin 2013). This section emphasizes measures to increase validity, because I believe that researchers benefit most from advice on what they can do. In the Mosaic study, the following measures have been taken to increase validity:

General

1. The study has been conducted in a real setting:

Articulating perspectives.

2. All stakeholders involved have been heard.
3. All stakeholders have been given the opportunity to make their voice heard through appropriate means.
4. A voice has been given to those with less power.
5. Multiple methods have been used with complementary capabilities and limitations.

Analysis and integration.

6. The information of all voices has been used.
7. The study focused on what was most important to the most relevant and at the same time least powerful stakeholder: the playhouse.
8. Individual information, especially individual negative information, has been used.
9. Additional information has been used not only to strengthen and nuance conclusions but also to come to new insights through further data analysis and abduction.

These validity measures reflect and extend the validity measures and criteria mentioned in the literature. Measure 1 leads to *ecological validity* (Hammersley 1996): The study's conclusions translate well to real-life situations.

Measures 6–9 reflect Yin's (2013) first of four "principles" of good case studies, namely, that the research should attend to all the evidence. This principle is reflected in Measure 6, the use of information of all voices, and in Measure 8, the use of individual and negative information.

Measure 8 extends Yin's (2013) third principle that the researcher should address the most significant aspect of the case study, by specifying that what is most relevant is determined by the least powerful stakeholder. Measures 4 and 7 refer to the voices of the least powerful stakeholders, to what I would like to call *transformative validity*.

Measure 9 leads to what I would like to call *dialogical validity*: Conclusions from different sources of evidence are used to further other conclusions. This validity criterion comes to the fore without label in Greene (2015) and Hesse-Biber (2012).

Measures 2–5 relate to generating the various pieces of evidence. Measures 2–5 remain undiscussed with Yin and other writers on validity (Eisenhart and Howe 1992; O'Cathain 2010; Spencer et al. 2003) or are only broadly described as the "involvement of users" (Bryman et al. 2008). Together, Measures 2–5 lead to *inside-outside legitimation* (Onwuegbuzie and Johnson 2006), an accurate representation by the researcher of both the insider's and the observer's view. In addition, Measures 2–4 also indicate which of the insiders the researcher should represent ("all" in Measure 2 and in particular those with less power in Measure 4) and how the researcher should represent them (through appropriate means in Measure 3).

Measure 3 leads to *analytic adequacy* (O'Cathain 2010; Teddlie and Tashakkori 2009): Data analysis techniques are appropriate for the research question and are applied properly.

Measure 5 leads to *weakness minimization* (Onwuegbuzie and Johnson 2006): The weakness of one approach is compensated by the strengths of the other, which I prefer to call "the incompleteness of one method is complemented by the other."

Together, these measures lead to *political validity*: The consumers of mixed methods research value the meta-inferences stemming from both the quantitative and qualitative components of a study (Onwuegbuzie and Johnson 2006).

One important validity criterion has not been considered in the description of the Mosaic study. That is Yin's (2013) second principle:

10. The analysis should address, if possible, all major rival interpretations.

The researcher should actively look for alternative explanations and then take steps to eliminate them as much as possible.

The following three validity measures apply to the relationship between the description and the decision:

11. The study is a sufficient preparation for the decision.
12. The decision fits the preparatory description well.

13. The quality of the preparatory description is high enough, but not necessarily higher than necessary for a good decision.

Taking Measures 1–9 automatically leads to the fulfillment of Measure 10. However, if the decision-maker ignores the preparatory description in his or her decision, then this decision is not a valid overall conclusion, hence the necessity of Measure 12. The description in Boxes 11.1 and 11.2 only globally indicates how in the Mosaic study the decision relates to the preparatory description.

Measure 13 corresponds to the "good enough" principle. "Good enough" means that it is not necessary to include "everything" in the study. As such, it is "good enough" to base the decision to expand the playhouse upon the quantitative outcome that a large majority of the children uses and appreciates the playhouse. Similarly, "good enough" means that matters are excluded that are less relevant to the decision, such as little-used play objects, or in-depth explanations for nonproblematic aspects of the playhouse. What is good enough depends partly on how decisive a piece of evidence is (Morse and Niehaus 2009). Counting the photographs of the playhouse requires a less stringent check on reliability and validity, because it is only one of the indicators of the playhouse's importance.

11.5 Discussion

11.5.1 Summary of the Mosaic Study as an Example of Mixed Methods Research

The Mosaic study describes from a transformative and dialectical perspective the multiple realities of the various stakeholders; the stakeholders were given the opportunity to contribute to this description through data collection instruments that fit their own capabilities. Next, the conclusions from the various data sources were brought together. In this process, the separate group and individual conclusions were maintained and used to conduct further inquiry and to come to overarching conclusions. From bringing together these multiple subjective realities, an objective picture emerged. Given our shared understanding of the playhouse and of the term "appreciate," it makes little sense to call the conclusion that the children appreciate the playhouse "intersubjective." Next, the description of the multiple realities has been used to take an informed decision, which at first sight appears to be "good enough."

In the Mosaic study, quantitative evidence has played a modest role and has always be accompanied by further exploration of its underlying assumptions. Concluding that the playhouse was important for the children on the basis of the number of photographs on which the playhouse occurred was done under the assumption that children take photographs and make these into books of objects that they find important – and not of arbitrary object, objects that are too big to ignore, or objects with an attractive shape. To test this assumption, qualitative interviews

were held with children, in which they could articulate the importance of the playhouse to themselves.

11.5.2 The Added Value of This Chapter

This chapter provides a foundation for acting in mixed methods research, in particular for the use of individual negative evidence. Because quantitative effects refer to principles that operate in individuals, they should in principle apply to all individuals involved. Contradictory conclusions, based upon individual negative cases, can therefore be used to nuance the main conclusion or to conduct further research. This chapter also provides a basis for the division of labor between qualitative and quantitative research. For the description of the multiple subjective realities, qualitative research is needed, while quantitative outcomes are needed for a description at group level.

This chapter is a further specification of Liebenberg and Ungar's (2015) iterative research process, because it makes clear how various conclusions build on each other, a process in which an important role is played by abduction and further inquiry. In this chapter, the example of the Mosaic study has been placed in two relevant mixed methods tradition: the transformative tradition of giving a voice to the least powerful and the dialectical tradition of designing for divergence. From the literature, those validity criteria have been selected that are most important to early childhood education, and these have been further elaborated.

Finally, this chapter offers a further elaboration of the three research stages in the Mosaic study (Box 11.1). The first two stages together are considered "the description of the multiple subjective realities involved," and a fundamental principle has been formulated that this description should be good enough to enable a well-informed decision in the third research stage. I hope this chapter has brought mixed methods research in early childhood education one small step further.

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References

Bazeley, P. (2012). Integrative analysis strategies for mixed data sources. *American Behavioral Scientist, 56*, 814–828. doi:10.1177/0002764211426330.

Bazeley, P., & Kemp, L. (2012). Mosaics, triangles, and DNA: Metaphors for integrated analysis in mixed methods research. *Journal of Mixed Methods Research, 6*, 55–72. doi:10.1177/1558689811419514.

Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of Mixed Methods Research, 1*, 8–22. doi:10.1177/2345678906290531.

Bryman, A., Becker, S., & Sempik, J. (2008). Quality criteria for quantitative, qualitative and mixed methods research: A view from social policy. *International Journal of Social Research Methodology, 11*, 261–276. doi:10.1080/13645570701401644.

Cameron, H. L. (2015). Ethical, narrative, and projective processes in research interviews with young children. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education: Research methodologies* (pp. 277–321). Charlotte: Information Age.

Campbell, D. T. (1988). *Methodology and epistemology for social sciences: Selected papers*. Chicago: The University of Chicago Press.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*, 81–105. doi:10.1037/h0046016.

Cartwright, N. (2007). *Hunting causes and using them: Approaches in philosophy and economics*. New York: Cambridge University Press.

Chakravartty, A. (2014). Scientific realism. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2014 ed.). Stanford: Stanford University http://plato.stanford.edu/archives/spr2014/entries/scientific-realism/.

Clark, A. (2005). Ways of seeing: Using the Mosaic approach to listen to young children's perspectives. In A. Clark, A. T. Kjørholt, & P. Moss (Eds.), *Beyond listening: Children's perspectives on early childhood services* (pp. 29–49). Bristol: Policy Press.

Clark, A., & Moss, P. (2005). *Spaces to play: More listening to young children using the Mosaic approach*. London: National Children's Bureau.

Clark, A., & Moss, P. (2011). *Listening to young children: The Mosaic approach* (2nd ed.). London: NCB.

Collingridge, D. S. (2013). A primer on quantitized data analysis and permutation testing. *Journal of Mixed Methods Research, 7*, 81–97. doi:10.1177/1558689812454457.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Los Angeles: SAGE.

Danziger, K. (1985). The methodological imperative in psychology. *Philosophy of the Social Sciences, 15*, 1–13. doi:10.1177/004839318501500101.

Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research, 6*, 80–88. doi:10.1177/1558689812437186.

Eisenhart, M. A., & Howe, K. R. (1992). Validity in educational research. In M. D. LeCompte, W. L. Millroy, & J. Preissle (Eds.), *The handbook of qualitative research in education* (pp. 643–680). San Diego: Academic Press.

Ercikan, K., & Roth, W.-M. (2009). *Generalizing from educational research: Beyond qualitative and quantitative polarization*. New York: Routledge.

Erzberger, C., & Prein, G. (1997). Triangulation: Validity and empirically-based hypothesis construction. *Quality and Quantity, 31*, 141–154. doi:10.1023/A:1004249313062.

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs-principles and practices. *Health Services Research, 48*, 2134–2156. doi:10.1111/1475-6773.12117.

Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.

Gredler, M. E., & Shields, C. C. (2008). *Vygotsky's legacy: A foundation for research and practice*. New York: The Guilford Press.

Greene, J. C. (2007). *Mixed methods in social inquiry*. San Francisco: Jossey-Bass.

Greene, J. C. (2015). Preserving distinctions within the multimethod and mixed methods research merger. In S. Hesse-Biber & R. B. Johnson (Eds.), *The Oxford handbook of multimethod and mixed methods research inquiry* (pp. 606–615). New York: Oxford University Press.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analyis, 11*, 255–274. doi:10.2307/1163620.

Grover, S. (2004). Why won't they listen to us?: On giving power and voice to children participating in social research. *Childhood, 11*, 81–93. doi:10.1177/0907568204040186.

Hammersley, M. (1996). The relationship between qualitative and quantitative research: Paradigm loyalty versus methodological eclecticism. In J. T. E. Richardson (Ed.), *Handbook of qualitative research methods for psychology and the social sciences* (pp. 159–174). Oxford: Blackwell.
Hankivsky, O., & Grace, D. (2015). Understanding and emphasizing difference and intersectionality in multimethod and mixed methods research. In S. Hesse-Biber & R. B. Johnson (Eds.), *The Oxford handbook of multimethod and mixed methods research inquiry* (pp. 110–127). New York: Oxford University Press.
Hargreaves, D. J., Robson, S., Greenfield, S., & Fumoto, H. (2014). Ownership and autonomy in early learning: The Froebel Research Fellowship project, 2002–2015. *Journal of Early Childhood Research, 12*, 308–321. doi:10.1177/1476718x14536718.
Heron, J., & Reason, P. (2008). *Extending epistemology within a co-operative inquiry The SAGE handbook of action research: Participative inquiry and practice* (2nd ed.pp. 366–380). London: SAGE.
Hesse-Biber, S. (2010). Qualitative approaches to mixed methods practice. *Qualitative Inquiry, 16*, 455–468. doi:10.1177/1077800410364611.
Hesse-Biber, S. (2012). Weaving a multimethodology and mixed methods praxis into randomized control trials to enhance credibility. *Qualitative Inquiry, 18*, 876–889. doi:10.1177/1077800412456964.
Hill, M. (2006). Children's voices on ways of having a voice: Children's and young people's perspectives on methods used in research and consultation. *Childhood, 13*, 69–89. doi:10.1177/0907568206059972.
Hoffmann, M. (1999). Problems with Peirce's concept of abduction. *Foundations of Science, 4*, 271–305. doi:10.1023/A:1009675824079.
Howe, K. R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational Researcher, 17*(8), 10–16. doi:10.3102/0013189x017008010.
Howe, K. R. (2004). A critique of experimentalism. *Qualitative Inquiry, 10*, 42–61. doi:10.1177/1077800403259491.
Huberman, M. (1987). How well does educational research really travel? *Educational Researcher, 16*(1), 5–13. doi:10.3102/0013189x016001005.
Johnson, R. B. (2015a). Dialectical pluralism: A metaparadigm whose time has come. *Journal of Mixed Methods Research*. Advance online publication. doi:10.1177/1558689815607692.
Johnson, R. B. (2015b). Conclusions: Toward an inclusive and defensible multimethod and mixed science. In S. Hesse-Biber & R. B. Johnson (Eds.), *The Oxford handbook of multimethod and mixed methods research inquiry* (pp. 688–706). New York: Oxford University Press.
Johnson, R. B., & Christensen, L. B. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Los Angeles: SAGE.
Johnson, R. B., & Schoonenboom, J. (2016). Adding qualitative and mixed methods research to intervention studies: Interacting with differences. *Qualitative Health Research, 26*, 587–602. doi:10.1177/1049732315617479.
Johnson, R. B., & Stefurak, J. (2014). Dialectical pluralism: A metaparadigm and process philosophy for "dynamically combining" important differences. *QMiP Bulletin, 17*, 63–69.
Jones, N., & Sumner, A. (2009). Does mixed methods research matter to understanding childhood well-being? *Social Indicators Research, 90*, 33–50. doi:10.1007/s11205-008-9311-y.
Liebenberg, L., & Ungar, M. (2015). Using mixed methods in research with young children across cultures and contexts. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education: Research methodologies*. Charlotte, Information Age.
Lincoln, Y. S. (2010). "What a long, strange trip it's been…": Twenty-five years of qualitative and new paradigm research. *Qualitative Inquiry, 16*, 3–9. doi:10.1177/1077800409349754.
Marjanovič-Umek, L., Fekonja-Peklaj, U., Sočan, G., & Tašner, V. (2015). A socio-cultural perspective on children's early language: A family study. *European Early Childhood Education Research Journal, 23*, 69–85. doi:10.1080/1350293X.2014.991096.
Martin, A. W. (2008). *Action research on a large scale: Issues and practices* (pp. 394–407). London: SAGE.

Mathison, S. (1988). Why triangulate? *Educational Researcher, 17*(2), 13–17. doi:10.3102/0013189x017002013.

Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review, 62*, 279–301.

Maxwell, J. A. (1995). Diversity and methodology in a changing world. *Pedagogia, 30*, 32–40.

Maxwell, J. A. (2012). *A realist approach for qualitative research*. Los Angeles: SAGE.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Los Angeles: SAGE.

Maxwell, J. A., & Mittapalli, K. (2010). Realism as a stance for mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *SAGE handbook of mixed methods in social & behavioral research* (2nd ed., pp. 145–167). Los Angeles: SAGE.

Maxwell, J. A., Chmiel, M., & Rogers, S. (2015). Designing integration in mixed method and multi-method research. In S. Hesse-Biber & B. Johnson (Eds.), *The Oxford handbook of multimethod and mixed methods research* (pp. 223–239). New York: Oxford University Press.

Mayring, P. (2007). On generalization in qualitatively oriented research. Forum: Qualitative Social Research, 8(3) 1–8. http://www.qualitative-research.net/index.php/fqs/article/view/291/641

Mertens, D. M. (2007). Transformative paradigm: Mixed methods and social justice. *Journal of Mixed Methods Research, 1*, 212–225. doi:10.1177/1558689807302811.

Mertens, D. M. (2009). *Transformative research and evaluation*. New York: The Guilford Press.

Mertens, D. M. (2010). Transformative mixed methods research. *Qualitative Inquiry, 16*, 469–474. doi:10.1177/1077800410364612.

Michael-Luna, S. (2013). What linguistically diverse parents know and how it can help early childhood educators: A case study of a dual language preschool community. *Early Childhood Education Journal, 41*, 447–455. doi:10.1007/s10643-013-0574-9.

Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*, 48–76. doi:10.1177/2345678906292462.

Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Walnut Creek: Left Coast Press.

Nicotera, N. (2008). Children speak about neighborhoods: Using mixed methods to measure the construct neighborhood. *Journal of Community Psychology, 36*, 333–351. doi:10.1002/jcop.20197.

O'Cathain, A. (2010). *Assessing the quality of mixed methods research: Towards a comprehensive framework. SAGE handbook of mixed methods in social & behavioral research* (2nd ed.pp. 531–555). Los Angeles: SAGE.

O'Cathain, A., Murphy, E., & Nicholl, J. (2010). Three techniques for integrating data in mixed methods studies. *BMJ, 341*. doi:10.1136/bmj.c4587.

O'Cathain, A., Thomas, K. J., Drabble, S. J., Rudolph, A., & Hewison, J. (2013). What can qualitative research do for randomised controlled trials? A systematic mapping review. *BMJ Open, 3*(6). doi:10.1136/bmjopen-2013-002889.

O'Farrelly, C., & Hennessy, E. (2014). Watching transitions unfold: A mixed-method study of transitions within early childhood care and education settings. *Early Years, 34*, 329–347. doi:10.1080/09575146.2014.968838.

Onwuegbuzie, A. J., & Johnson, R. B. (2006). The "validity" issue in mixed research. *Research in the Schools, 13*(1), 48–63.

Parker, C. (2001). 'She's back!' The impact of my visit to Reggio Emilia. In L. Abbott & C. Nutbrown (Eds.), *Experiencing Reggio Emilia: Implications for pre-school provision* (pp. 80–92). Buckingham: Open University Press.

Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. London: SAGE.

Popper, K. (1963). *Conjectures and refutations: The growth of scientific knowledge*. London: Routledge.

Putnam, H. (1987). *The many faces of realism*. Chicago: Open Court.

Sandelowski, M. (1996). Focus on qualitative methods: Using qualitative methods in intervention studies. *Research in Nursing & Health, 19*, 359–364. doi:10.1002/(sici)1098-240x(199608)19:4<359::aid-nur9>3.0.co;2-h.

Sandelowski, M., Voils, C. I., & Knafl, G. (2009). On quantitizing. *Journal of Mixed Methods Research, 3*, 208–222. doi:10.1177/1558689809334210.

Schoonenboom, J. (2014). The multilevel mixed intact group analysis: A mixed method to seek, detect, describe and explain differences between intact groups. *Journal of Mixed Methods Research* . doi:10.1177/1558689814536283.Advance online publication.

Schoonenboom, J. (2015). The realist survey: How respondents' voices can be used to test and revise correlational models. Manuscript submitted for publication.

Shaffer, D. W., & Serlin, R. C. (2004). What good are statistics that don't generalize? *Educational Researcher, 33*(9), 14–25. doi:10.3102/0013189x033009014.

Spencer, L., Ritchie, J., Lewis, J., & Dillon, L. (2003). *Quality in qualitative evaluation: A framework for assessing research evidence*. London: Government Chief Social Researcher's Office.

Sumsion, J. (2014). Opening up possibilities through team research: An investigation of infants' lives in early childhood education settings. *Qualitative Research, 14*, 149–165. doi:10.1177/1468794112468471.

Teddlie, C. B., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Los Angeles: SAGE.

Torney-Purta, J. V. (2009). International psychological research that matters for policy and practice. *American Psychologist, 64*, 825–837. doi:10.1037/0003-066X.64.8.825.

Torrance, H. (2012). Triangulation, respondent validation, and democratic participation in mixed methods research. *Journal of Mixed Methods Research, 6*, 111–123. doi:10.1177/1558689812437185.

Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry, 81*, 1–17. doi:10.1111/j.1939-0025.2010.01067.x.

Ungar, M., Brown, M., Liebenberg, L., Othman, R., Kwong, W. M., Armstrong, M., & Gilgun, J. (2007). Unique pathways to resilience across cultures. *Adolescence, 42*, 287–310.

Walker, S., Read, S., & Priest, H. (2013). Use of reflexivity in a mixed-methods study. *Nurse Researcher, 20*(3), 38–43. doi:10.7748/nr2013.01.20.3.38.c9496.

Walsh, R. L., Kemp, C. R., Hodge, K. A., & Bowes, J. M. (2012). Searching for evidence-based practice: A review of the research on educational interventions for intellectually gifted children in the early childhood years. *Journal for the Education of the Gifted, 35*, 103–128. doi:10.1177/0162353212440610.

Weisner, T. S. (2005). *Discovering successful pathways in children's development: Mixed methods in the study of childhood and family life*. Chicago: University of Chicago Press.

White, H. (2013). The use of mixed methods in randomized control trials. *New Directions for Evaluation, 2013*(138), 61–73. doi:10.1002/ev.20058.

Yanchar, S. C., & Williams, D. D. (2006). Reconsidering the compatibility thesis and eclecticism: Five proposed guidelines for method use. *Educational Researcher, 35*(9), 3–12. doi:10.3102/0013189x035009003.

Yin, R. K. (2013). *Case study research: Design and methods* (5th ed.). Los Angeles: SAGE.

Chapter 12
Current Approaches in Quantitative Research in Early Childhood Education

Linda J. Harrison and Cen Wang

Abstract Research in early childhood education has witnessed an increasing demand for high-quality, large-scale quantitative studies. This chapter discusses the contributions of quantitative research to early childhood education, summarises its defining features and addresses the strengths and limitations of different techniques and approaches. It provides an overview of new directions and state-of-the-art approaches in quantitative research, outlined under four key topic areas: identifying and understanding naturalistic groups (i.e., chi-square analysis, analysis of variance, cluster analysis), identifying mechanisms (i.e., correlation, regression analysis, structural equation modelling), identifying causation (i.e. randomised controlled trial, regression discontinuity) and identifying trajectories and patterns of change in individual learning, development and wellbeing (i.e. latent growth curve modelling, growth mixture modelling). Each section explains the selected research methods and illustrates these with recent examples drawn from early childhood quantitative research conducted in Australia, Canada, Germany, the United States and Chile.

Keywords Postpositivist approaches in early childhood research • Statistical analysis in early childhood research • Testing causation in intervention studies • Trajectories of learning and development • Quantitative research in early childhood

12.1 Introduction

Research approaches in early childhood education can be broadly categorised as quantitative, qualitative and mixed method studies that combine qualitative and quantitative methods. Each of these methods has merit, and the researcher's first task is to determine which approach is best suited to their specific research topic and

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questions (Mackenzie and Knipe 2006). Some questions can only be answered using a quantitative design, whereas others are best suited to mixed methods. The focus of this chapter is to discuss quantitative research methods as they are currently applied in early childhood education research and explain the logic of commonly used as well as new data analysis techniques. Examples of recent early childhood education research are drawn on to show how these techniques are applied in addressing specific research questions.

Quantitative research uses a deductive approach to test theories and hypotheses (Bryman 2012). Researchers using this approach seek to explain some aspect of the natural world through observation or experimentation and the collection of empirical (or measureable) data. As such, quantitative research has its roots in the positivist paradigm: it follows the scientific method, applying a series of steps to generate research questions, define a sample of participants, design a set of procedures for data collection that draw on well-substantiated measures, conduct data analysis in accordance with the sample and measures, interpret results and reach conclusions (Mertens 2010). Current approaches in quantitative research tend to align with a postpositivist paradigm which retains the idea of objective truth, or the existence of one reality, but warrants that the discovery of such reality is limited to a certain realm of probability. Postpositivism accepts that the theoretical frames, background, knowledge and values of the researcher influence what is observed or measured (Mertens 2010).

12.1.1 Why Is Quantitative Research Important for Early Childhood Education?

In early childhood education, quantitative research methods have been applied to questions about the effects of early education and care, or the impact of intervention programmes, on children's learning and development. Results of this type of research are often cited in the justification and design of early childhood policies; see, for example, Australia's National Early Childhood Development Strategy (Council of Australian Governments 2009) and the standards and curriculum frameworks adopted for the provision and regulation of early childhood education and care, such as the US Quality Rating and Improvements Systems (Office of Child Care 2014).

Increasingly, governments and nongovernment organisations are looking to large-scale, or population-based, studies for evidence to inform policy development. In New Zealand, for example, the Dunedin Multidisciplinary Health and Development Study has tracked the progress of 1,037 babies born over a 1-year period between 1972 and 1973 and provided invaluable information about their health, development and behaviour to inform national and international policy (Silva and Stanton 1996). Similarly, the Longitudinal Study of Australian Children (LSAC) with a sample of 10,000 children recruited in 2004 and followed every 2 years is producing a wealth of information on parenting, family relationships and children's health, development and wellbeing that is being drawn on to advance knowledge and facilitate policy reforms in early childhood education and care (Gray

and Sanson 2005). In the United Kingdom, the results of the Effective Provision of Preschool Education (Sylva et al. 2010) longitudinal study of 3,000 children have had a major influence on the focus of early childhood policy development, not just in that country but around the world.

Governments are not only supporting long-term studies through research funding bodies but are also collecting particular types of data at a national or state/provincial level. In Canada and Australia, for example, the Early Development Index has been used to collect teacher reports on five domains of children's development in the first year of school (Janus et al. 2016). National and international testing of school achievement outcomes is also playing an important role in government policy. Longitudinal datasets can be linked to the achievement test scores that governments collect; for example, the LSAC sample is linked to children's scores on the National Assessment Program – Literacy and Numeracy (NAPLAN) at Years 3, 5, 7 and 9 of primary school.

There is also an increasing interest in testing the effects of intervention programmes or curriculum approaches on children's learning and development outcomes. For example, in the United States, the effectiveness of Early Head Start (0–3 years) and Head Start (3–5 years) programmes for young children growing up in poverty has been examined in large-scale randomised controlled trials (RCT). The Head Start Impact Study of 5,000 children (Puma et al. 2010) and the Early Head Start Study of 3,000 children (Love et al. 2005), which tested immediate- and long-term benefits for children's social and emotional development, school readiness and academic achievement at school, provided evidence to enable communities to continue to receive ongoing government funding to support these programmes. In Australia, the New South Wales government recently announced the introduction of the Fostering Effective Early Learning Study which will apply a clustered, randomised controlled trial to evaluate the impact of a professional development intervention programme in the year children transition to school (NSW Education, 2015).

12.1.2 What Are the Defining Features of Quantitative Research Methods?

Quantitative research has been described as essentially "the study of relationships between variables" (Punch 2003, p.2). In quantitative research, variables are specific characteristics that are defined in numeric terms. At the simplest level, a variable indicates a code or category. This type of variable is referred to as a nominal (or categorical) variable. Examples of nominal variables are sex, language(s) spoken at home or type of childcare used at a specific age. Each of the codes in a nominal variable is distinct and independent of the other codes. In some cases, however, the codes can indicate a sequence, or ordered set of levels. These variables are referred to as ordinal. For example, level of qualification can be coded in increasing steps, such as certificate III, diploma, bachelor degree and master degree, to create a four-level ordinal variable. Most variables in quantitative research, however, are

measured more precisely, with each point indicating an equivalent or measureable increase in value. These are referred to as interval (or continuous) variables. Common examples of continuous variables are family income (in dollars), age (in years or months), education (in years), quantity of childcare (in hours per week) or scores on an achievement test. Continuous variables are also created from surveys or questionnaires that collect ratings, e.g. on a five-point scale from strongly agree to strongly disagree, for a series of related items that are designed to measure one construct. For example, the Student-Teacher Relationship Scale – short form (Pianta 2001) is a 15-item questionnaire completed by caregivers or teachers about their interactions with a study child. Two constructs are measured: closeness, which is measured by the average rating on the five-point scale for seven items, and conflict, measured by the average rating for eight items.

Quantitative data appear as variables represented in numeric form. In a variable-centred approach, the relationships between variables are tested through statistical analyses (Punch 2003). There are two major types of variable-centred analyses: parametric and non-parametric. Non-parametric tests are used for nominal or ordinal data and are limited in scope as the variables represent the number or percentage of the sample population in each category (e.g. 100 or 50 % boys in a sample of 200 children). Non-parametric tests are used to compare distributions across groups, for example, the proportion of boys and girls who attend preschool. A common non-parametric test is chi-square analysis. Parametric tests, on the other hand, are used when the variables are measured by continuous data which represent a range of scores across the sample population (e.g. families' average, minimum and maximum income). Parametric tests are used to examine the relationships among variables and provide insights into the relative magnitude or strength of the relationship, for example, assessing the predictive relationship between family income and children's scores on a test of vocabulary. Some common parametric tests are correlation analysis, regression analyses and structural equation modelling.

A feature of parametric analyses, and the variable-centred approach to statistical analysis in general, is the use of unidimensional variables to describe the functioning of each participant in relation to the overall sample; for example, a child's score on a vocabulary test will be higher or lower than the average score for the sample of children tested. The results of variable-centred analyses also report average findings for the sample being tested: for example, a correlation test of the association between family income and child vocabulary will generate a figure that is the average correlation for the sample being studied. Whilst variable-centred analyses can take account of individual or group differences, these are typically described in terms of precoded characteristics (variables) such as gender, cultural background or disability status. The focus on 'average' or generalised findings for a population has been seen as a limitation of variable-centred approaches in quantitative research.

An alternate approach is person-centred analysis, which focuses on relationships among individuals rather than relationships between variables. In these methods, the analysis takes account of the multidimensional nature of human functioning to explore the combinations of dimensions within individuals and provide a picture or profile of the individuals (Magnusson and Bergman 1988). The goal of the analysis is to "group individuals into categories, each one of which contains individuals who are similar to each other and different from individuals in other categories" (Muthén and Muthén 2000, p. 882). Some common person-centred analysis techniques include cluster analysis, latent class analysis and growth mixture modelling.

12.1.3 The Limitations and Challenges of Quantitative Research

As with any other type of research methodology, quantitative research has its limitations and challenges. These include the availability of a large enough sample to meet the requirements of statistical data analyses; the appropriateness of quantitative methods for collecting data with young children; the cultural appropriateness of some assessment tools; the reliability of some measures, such as self-report questionnaires, which can be affected by social desirability; measurement error; and the need for multiple sources of data to avoid bias in testing measured outcomes. Despite these limitations, quantitative research methods can help researchers examine key questions in early childhood education research.

The increased use of quantitative research designs and statistical analyses to address key research questions and inform policy poses new challenges for future early childhood researchers. Quantitative research is a complex and rapidly changing field. New approaches to data collection, and improvements to analytical tools and techniques, are moving the field forward at an astonishing pace. In this chapter, we discuss some of these new directions and state-of-the-art approaches, illustrating them with recent examples drawn from early childhood quantitative research conducted in Australia, Canada, Germany, the United States and Chile. The following sections are organised according to four topics: identifying and understanding naturalistic groups; identifying mechanisms – the processes and contexts that affect children's learning, development and wellbeing; identifying causation – the programmes and treatments that make a difference to children's learning, development and wellbeing; and identifying trajectories and patterns of change in individual learning, development and wellbeing. Each section explains the selected research methods and discusses strengths and limitations of these techniques and approaches.

12.2 Identifying and Understanding Naturalistic Groups (Categories)

An important first step in early childhood research is the identification and description of naturalistic groups and subgroups of children. Groups are described in terms of specific characteristics. From here, it is possible to identify factors that predict these characteristics, or to test the effects of these characteristics on children's performance or other aspects of their development. The identification of groups helps researchers to design more targeted interventions.

There are different ways that groups or subgroups of children can be identified. Existing differences such as gender and language (s) spoken at home are common ways for researchers to identify groups and compare their differential functioning in areas of interest. Identification methods can also include direct testing of children's ability, such as speech and language skills. Based on the outcome of these tests, children can then be grouped into identified categories, for example, as typically developing children and children with special needs.

Increasingly, person-centred statistical procedures are being applied to generate and identify groups of children based on a combination of dimensions. For example, researchers who are interested in different dimensions of behavioural problems may extract groups based on statistical analysis of data measuring children's emotional problems and conduct problems. These analyses may generate multiple groups: for example (1) children with elevated problems in both emotion and behaviour measures, (2) children with high emotional problems but low behaviour problems, (3) children with low emotional problems but high behaviour problems and (4) children with low problem scores on both emotion and behaviour measures. These groups are unlikely to be identified without the use of sophisticated statistical procedures. The researchers can then explore predictors of different group membership and the functioning of these groups.

In this section, three analytical tools that are commonly used to identify naturalistic subgroups and/or test differences between groups will be presented: chi-square analysis, which examines relationships between two categorical variables; analysis of variance (ANOVA), which compares two or more groups on unidimensional variables; and cluster analysis, which identifies groups by analysing relationships among multiple variables. Each of these is defined, illustrated using an example of recent research and discussed in relation to the strengths and limitations of the method.

12.2.1 Chi-Square Analysis

Chi-square analysis is a non-parametric test that is a very common analytical tool in social science. It can be used when researchers want to examine the association between two categorical variables that have two or more categories (i.e. two

nominal variables). Specifically, the chi-square test compares the distribution of people within and across groups and analyses statistically whether the observed frequency is similar to the expected frequency. Chi-square tests assume there is no known association between the two categorical variables. Significant differences between observed and expected frequency will result in significant chi-square (χ 2) statistics which suggests that there is an association between the two categorical variables.

Verdon et al. (2014) used chi-square analysis to investigate language maintenance and loss among multilingual children participating in the Longitudinal Study of Australian Children (LSAC) birth cohort ($n = 4252$). First, they identified categories of multilingual children who maintained or did not maintain speaking a language other than English from age 0–1 years (wave 1) to 2–3 years (wave 2) and 4–5 years (wave 3). Next, they tested the association between language maintenance and a number of personal and environmental factors, including gender, parental language use, presence of grandparent in the home, presence of an older sibling in the home, generations since migration, type of childcare and support of languages other than English in the learning environment. Each of these variables was also categorical; for example, two categories of children's language maintenance (maintained vs. not maintained) were tested against child gender (boys vs. girls), to generate a 2×2 table (four cells). Language maintenance was also tested against the type of childcare children received (three categories: centre based, family based, and no external childcare), in a 2×3 table (6 cells). The results of the chi-square tests showed significant results for five of the family factors. Children were more likely to have language maintenance when their parent spoke a language other than English, when there was the presence of a grandparent in the home, when the children were identified as first-/second-generation migrants, when children attended family-based day care as compared with centre-based day care and no childcare, and when languages other than English were supported in the learning environment.

However, there are a few limitations of chi-square test. To have confidence in the chi-square result, the expected frequency (number of participants) in each cell should not be lower than 5. This is a risk in small samples, particularly if the variables have many categories. Another limitation is that a significant χ 2 can only indicate an association between the two variables; it cannot analyse which combination of variables in the table contributes to the significant difference. Researchers usually make a judgement based on the size of the observed vs. the expected percentages to understand the details of this association, but this judgement can be misleading.

12.2.2 Analysis of Variance (ANOVA)

ANOVA is used to understand how different groups (identified by a nominal variable) are related to variables that are measured on a continuous scale, such as family income or children's vocabulary. As such, ANOVA is included within the broad

category of parametric tests. To conduct ANOVA, the independent variable should be a categorical variable with two or more categories, and the dependent variable should be continuous and normally distributed.

Using the Longitudinal Study of Indigenous Children (LSIC) child cohort data, McLeod et al. (2014) investigated Indigenous Australian children's speech and language competence at ages 5–7 years. The question of interest was whether children's expressive vocabulary varied in relation to children's level of geographical isolation. Isolation was coded using an ordinal variable with five levels: none, low, moderate, high and extreme. Children's expressive vocabulary was measured using the Renfrew Word Finding Vocabulary Test which produces scores ranging from 0 to 50. To answer their research question, McLeod et al. (2014) conducted one-way analysis of variance (ANOVA) to test if different levels of isolation (the independent variable) were related to children's expressive vocabulary scores (the dependent variable). Post hoc analysis was conducted to understand specifically which pair of categories in the independent variable was significantly different on the outcome measure (vocabulary). Children who were living in areas coded as moderately isolated had significantly lower scores on expressive vocabulary than those living in low or no isolation areas.

An extension of this research could test whether the significant differences observed among different levels of isolation were the same for boys and girls. To do this, researchers would conduct a two-way ANOVA which requires two independent categorical variables (i.e. level of isolation and gender) and test whether there is a significant interaction between levels of isolation and gender on the outcome: vocabulary.

Note that in the above one-way and two-way ANOVAs, there are different people in each of the categories. If, however, researchers were interested in testing children's expressive vocabulary each year for 3 years to see if there are increases over time, they would have scores for the same people over three time points or categories (time 1, time 2 and time 3). In this case, the researchers would conduct a one-way repeated measures ANOVA. A more complex scenario could test whether the increase in children's expressive language over 3 years was the same for children from different levels of isolation. In this case the researchers would conduct a mixed between-within subjects ANOVA, with the same children in the categories of time (within subjects) and different children in the categories for levels of isolation (between subjects).

ANOVA is a very versatile and useful procedure. Although there are assumptions that should be met when conducting ANOVA, ANOVA is quite robust to minor assumption violation. A detailed discussion of these assumptions and the corrections to implement when assumptions are violated is beyond the scope of the current chapter. Interested readers can consult Field (2005). Researchers can also consider its non-parametric counterpart, the Kruskal-Wallis test, when assumptions of ANOVA are violated. One limitation of ANOVA is that it can test only one dependent variable at a time. If the researchers have several dependent variables, running multiple ANOVAs may inflate Type I error rate which means that significant group differences may be found when there are, in fact, none. More importantly, if the

dependent variables are theoretically related to each other, ANOVA cannot take into account the correlations among the dependent variables which may lead to the failure to detect significant group differences. Therefore, if researchers have a series of dependent variables that are theoretically related to each other, multivariate analysis of variance (MANOVA) should be used to detect such effects.

12.2.3 Cluster Analysis

Cluster analysis is a person-centred data analytical technique that explores the relationships of variables among individuals and identifies homogenous subgroups in a heterogeneous sample (Jung and Wickrama 2008). The generated subgroup members have similar response patterns on the variables of interest. The concept of cluster analysis is informative and interesting for researchers as it can make interventions or strategic actions more targeted and effective for different groups of people.

An example of how cluster analysis has been used in early childhood research is seen in Ahnert et al.'s (2012) study of 105 children at the end of their first school year. They collected children's saliva samples at 8 am, 11 am, 2 pm and 6 pm on a Monday and a Friday of the same week to understand changes in cortisol, as a measure of children's levels of stress. Their research question was whether student-teacher relationship profiles were differentially related to children's capacity to downregulate their stress levels. Student-teacher relationships were measured using three subscales: closeness, dependency and conflict. These data were subjected to cluster analysis to generate different combinations of closeness, dependency and conflict. Four different profiles (i.e. clusters) were generated, identified as a conflict-loaded (CI) profile, which was characterised by higher conflict, lower closeness and higher dependency; a distant-independent (DI) profile characterised by lower conflict but also lower closeness and dependency; a proximal-dependent (PD) profile with lower conflict but higher dependency and closeness; and a proximal-balanced (PB) profile with low conflict, high closeness and low dependency. They conducted ANOVA to examine how different profiles were related to children's capacity to downregulate stress. Results showed that students experiencing proximal-balanced relationships with their teacher were better able to regulate (reduce) cortisol levels over the course of the day at school, than the rest of the students.

The above example suggested that there are four distinct groups of children with varying patterns of relationships with their teachers. To further progress this finding, the researchers could conduct additional analyses to understand what other characteristics might be related to each unique subgroup. Such results could lead to group-specific intervention strategies to support teachers to be aware of and guide their interactions with children towards a more adaptive relationship profile.

One limitation of cluster analysis is that it is not always straightforward to determine the number of clusters (subgroups). There are a number of statistical fit indices that facilitate the identification of optimal number of clusters. However, there are no "golden rules", and, more often than not, different indices may suggest a different

number of clusters. Researchers should consult these indices, but the key criteria to consider are the theoretical basis for identifying different clusters and the meaningfulness of the profiles.

12.3 Identifying Mechanisms – The Processes and Contexts That Affect Children's Learning, Development and Wellbeing

As a tool for studying relationships between variables (Punch 2003), quantitative research is uniquely placed to examine the processes and contexts that influence children's lives. In quantitative terminology, dependent variables [DV] (also known as outcome variables) are influenced by independent variables [IV] (sometimes referred to as predictor variables). For example, closeness in the student-teacher relationship (DV) may be influenced by the quality of the classroom environment [IV]. Other factors that are known to affect the DV also need to be included in the analysis of process; these are referred to as control variables. For example, closeness is known to be higher for girls, so child gender would be included as a control variable in an analysis testing the effect of the IV on the DV. Identifying the ways that variables are related can shed light on how to make a difference in children's life.

In this section, three analytical tools that are commonly used to identify the processes and contexts that affect children's learning, development and wellbeing will be presented: correlation, which is the basic tool for testing relationships between variables; regression, which is used to explain, or predict, scores on an outcome variable from one or more other variables; and structural equation modelling, which is used to create and analyse latent variables.

12.3.1 Correlation

Correlation is the basic statistical technique that explores linear relationships between variables. Because correlation tests the relationship between two variables, it is also referred to as bivariate correlation. Correlation analysis compares scores on one variable with scores on another to test the strength and direction of the relationship between the two variables. The direction can be positive (i.e. a correlation between 0 and 1.0), negative (a correlation between 0 and −1.0) or null (a correlation of 0). The strength of the correlation is described as weak (±0.1), moderate (±0.3) and strong (±0.5). When the two variables being tested are continuous or interval variables, then Pearson *r* should be used as the statistical test. If the two variables are ordinal, then Spearman's *rho* should be used.

Correlation analysis serves as a useful first step for data screening and exploration to inform more complex data analysis. As such, it is rarely used as the sole basis for a published paper, but a correlation table would be expected in the initial descriptive

presentation of the results. The exception to this rule would be a report that is designed to test the structure and reliability of a questionnaire or rating scale. A correlation matrix would be generated to test the strength and direction of the relationship between the set of items on the scale. Strong correlations (> .05) would support the computation of an overall score for the construct that the scale is designed to measure.

12.3.2 Regression Analysis

Based on correlations, regression analyses allow further exploration of the relationships among a predefined set of variables. The aim is to explain, or predict, an outcome from one or more variables. In regression, the outcome variables can be either continuous (i.e. simple and multiple regression analyses) or categorical (i.e. logistic regression analyses), but the same conceptual understanding applies to both. Regression analyses are strongly theory based in that theories should support the selection of one variable or multiple variables as predictors of the outcome variable.

Using data from the Longitudinal Study of Australian Children (LSAC) birth cohort, Williams et al. (2015) used regression analysis to examine the extent to which exposure to early home music activities when children were 2–3 years old was associated with children's outcomes 2 years later at 4–5 years old, in a sample of 2,376 children. Seven separate outcomes were tested: children's vocabulary, numeracy, school readiness, attentional regulation, emotional regulation, prosocial skills and behaviour problems. The authors controlled for the effects of socio-demographic variables, such as Indigenous status, language background (English vs. non-English) and maternal history of depression and also took account of the effects of early shared book reading activities. Using multiple regression analyses, they showed that early home music activities had a small but significant positive relationship with three of the outcomes: numeracy skills, attentional regulation and prosocial skills.

There are many advantages to conducting regression analyses. Regression analyses can include multiple predictors (in the form of continuous as well as categorical variables) which allow researchers to statistically control for the influence of a range of other variables and examine if the predictor of interest can explain the outcomes over and beyond the statistical controls. Williams et al. (2015), for example, examined if early home music activities contributed to child outcomes after controlling for important demographic information. Researchers can also compare the relative importance of different predictors on the outcome variables. Williams et al. (2015) examined the relative predictive value of early home music activities and early shared book reading on children's developmental outcomes. One of the attractions of regression analysis is being able to test what variables (circumstances and prior experiences) predict an outcome. This is informative for identifying risks and supports. The results of well-designed regression analyses can provide strong evidence for the design of intervention programmes.

Cautions, however, need to be taken into account. It is important to ensure that a thorough preliminary stage of data screening is conducted before running regres-

sion analyses. Regression analysis is very sensitive to the presence of outliers (participants whose scores are very high or very low in comparison to the population sample being studied). Exceedingly high correlations between predictor variables (≥0.9) can also lead to erroneous results. Regression also requires a relatively large sample especially when there are many predictors. A limitation of regression analyses is that there can only be one outcome variable tested at a time. If there are multiple outcome variables, this can potentially inflate Type I error. A solution is to use multivariate regression which can include multiple outcomes. Another limitation is that as a variable-centred analysis, regression analysis does not account for the combinations of dimensions within individuals in a sample (Magnusson and Bergman 1988). Rather, it provides a picture of the unidimensional "functioning of a statistically defined 'average' child" (Magnusson and Bergman 1988, p. 49). Finally, it is important to note that regression analyses can test prediction, but not causation.

12.3.3 Structural Equation Modelling

Structural equation modelling (SEM) is an increasingly popular statistical technique in education and psychology. It aims to test the fit of multiple hypothesised models for explaining mechanism, based on a sound theoretical and conceptual rationale, and select the model that best represents the data. SEM is different from regression in two important ways.

First, regression can analyse observed (coded or measured) variables, whereas SEM can analyse both observed and latent variables. A latent variable is a hypothesised construct that is indirectly measured through multiple observed indicators (Kline 2011). A classic example of a latent variable is intelligence, which is a construct that cannot be directly observed or measured. Instead, researchers use a number of tests that capture different aspects of intelligence, such as reasoning, processing speed, memory and knowledge, to indirectly capture the construct of intelligence. The difference between observed and latent variables lies in their approaches to measurement errors. Observed variables assume that all variables are measured without error, which is impossible in social science research. In contrast, latent variables are able to account for the random and systematic measurement errors in the indicator variables (Kline 2011). As such, SEM using latent variables is more likely to produce trustworthy results with strong statistical power.

Second, SEM is a multivariate statistical technique that can be used to test comprehensive models with multiple variables. The complex relations among all variables can be estimated simultaneously rather than running separate regression models. One example of complex relations is a mediation model, which is a common application of SEM in social science.

An example of a mediation model is reported by Feng, Shaw and Moilanen (2011) who investigated the relations among children's shyness, emotional regulation strategies and internalising problems in a longitudinal study of 257 boys from low-income families. They measured children's shyness at ages 1.5–2 years, emo-

tion regulation strategies at age 3.5 years and internalising problems through both mother and teacher report at age 6–7 years. They hypothesised that children's shyness (a latent variable assessed by indicators of unusual fear, cautiousness and withdrawn behaviour) would be related to children's internalising problems at school age. They expected that this relationship would be mediated by children's emotion regulation strategies. They hypothesised that, in stressful situations, children who used adaptive emotion regulation strategies, such as active distraction, would be less likely to develop internalising problems, whereas children who use maladaptive strategies, such as passive waiting, standing and requesting to be held, would be more likely to develop internalising problems. A path analysis model was used to simultaneously estimate the paths from shyness to emotion regulation strategies, from emotion regulation strategies to internalising problems and from shyness to internalising problems. The results confirmed the authors' hypothesis. Specifically, the active distraction regulation strategy mediated the relations between early shyness and maternal report of internalising symptoms, and the passive/dependent regulation strategy mediated the relations between shyness and teacher report of internalising symptoms.

SEM is a powerful analytical tool; however, it has specific requirements for researchers to be able to use it appropriately. First, SEM requires a large sample size. Although there are no strict guidelines, a sample larger than 200 is usually necessary to ensure statistical power and the validity of the results (see Kline 2011 for a review on the issue of sample size). The sample size requirement increases as the complexity of the model and analysis increases. Second, SEM requires researchers to have a strong theoretical rationale for the model(s) that are proposed and tested and a solid knowledge of the relevant literature. This is because SEM aims to find the best model that represents the data. In social science, there can be multiple theoretically supported models. Therefore, the researchers need to compare the validity of the preferred model and multiple alternative models. Third, mediation modelling within SEM is inherently an analysis of causation. Therefore, it is critical to have a clear theoretical rationale of causal processes and to have longitudinal data. For a more elaborated discussion, please refer to Cole and Maxwell (2003).

12.4 Identifying Causation – The Programmes and Treatments That Make a Difference to Children's Learning, Development and Wellbeing

Researchers, educators and policy makers are increasingly interested in establishing causation. For example, a state education department responsible for early childhood education might want to know whether a particular curriculum will make a difference to children's learning, or reduce behaviour problems, before committing government funds to the large-scale purchase of the curriculum. Similarly, providers of teacher education programmes or governments may want to find out whether

a professional development programme will enhance teachers' efficacy and teaching quality, before rolling out the programme to a large number of teachers. To be able to establish causation, careful attention is required to the design of the research method, ensuring that potential threats to validity are addressed.

Before designing a causal study, it is critical that researchers clearly define the research questions, the "cause" to be tested, the outcome(s) that will be affected and how these will be measured and the population for the study. This is necessary to be clear about what causal effect, and to what population, the results can be generalised. The ideal design for addressing causal questions is an experiment, which deliberately manipulates the levels of "cause" by an independent agent outside the participants in the research (Murnane and Willett 2010). This approach is common in scientific and even medical research, but experiments are rarely possible in the social sciences. Causal studies in early childhood lean towards randomised controlled trials, often with a wait-list design, and quasi-experimental designs.

12.4.1 Randomised Controlled Trial

The most robust experimental design is a randomised controlled trial (RCT) in which participants are randomly selected from the population of interest and then randomly assigned into a treatment and a control group. Randomisation in selection and assignment ensures that the two groups are similar in all aspects except for their group assignment. Therefore, any observed differences between the two groups can be attributed to the presence or absence of the "treatment", which makes it possible to claim that the treatment causes the outcome. Having a control group is important in addressing the potential threats to the validity of experiments, such as history, maturation and experimental mortality (see Mertens 2010 for a detailed account of threats to validity). The more rigorous the RCT study design, the simpler the statistical analysis. For studies where a true randomised controlled trial is conducted, a simple comparison of the results for the two groups, such as an independent t-test, can be used to answer the question of causation.

However, in educational research, it is unlikely that researchers would randomly select and assign individuals to treatment and control groups. More often, randomisation occurs at the level of the school or classroom so that all the individuals in a class (or school) are assigned to treatment and control groups. This approach is referred to as a clustered randomisation design. For both randomised controlled trials and clustered randomised controlled trials, it is important to ensure the sample size is sufficient to achieve reasonable power to detect the treatment effect, if it indeed exists. However, when conducting clustered randomised trials, the statistical power is determined by the number of intact groups such as classrooms rather than the number of individuals per classroom. Statistical analysis strategy for clustered RCTs also requires multilevel analyses such as hierarchical linear modelling to account for the higher level effect (i.e. individuals are nested among classrooms, which are nested among schools) and accurately reflect the effect of the treatment.

Yoshikawa et al. (2015) conducted a clustered RCT to examine the impact of a 2-year teacher professional development programme (Un Buen Comienzo [UBC]) in publicly funded prekindergarten and kindergarten in Chile. The outcomes of interest were classroom quality and child language and behavioural outcomes. Six municipalities with a total of 64 schools participated in the study. Among them, 32 schools with a total of 51 classrooms, 66 teachers and 1,033 children were randomly assigned to the full UBC condition, and the other 32 schools with a total of 39 classrooms, 53 teachers and 843 children were assigned to the comparison condition. Using multilevel linear regression analysis to account for the nested nature of the data, the research showed that the UBC programme produced moderate to large effects for classroom quality outcomes, namely, emotional support, instructional support and classroom organisation. However, the UBC programme did not produce significant effects for child outcomes, namely, vocabulary, letter-word identification, early writing, self-regulation and problem behaviours.

12.4.2 Quasi-experimental Designs: Regression Discontinuity

Understandably, in real life research, randomisation experiments can be impossible to conduct due to practicality and/or ethical issues. Quasi-experimental designs can also test causality where participants are not randomly assigned to the groups. Regression discontinuity (RD) pretest-posttest designs are one type of quasi-experimental research that offer an alternative to randomisation experiments when carefully and rigorously administered. RD design uses a non-random quantitative cut-off value such as a test score to group people. For instance, students who are below the cut-off on a pretest score will be given a remedial programme, whereas those who are above the cut-off pretest score will not receive the treatment. Then the post-programme test scores will be measured for the two groups of students. The rationale for RD design is that without the remedial programme, students' posttest scores should be a linear continuous function of their pretest scores. If the remedial programme is effective, then there would be a jump or discontinuity of the linear line at the cut-off score.

Weiland and Yoshikawa (2013) conducted a study using a quasi-experimental regression discontinuity design to examine the impact of a prekindergarten programme that implemented established language and literacy and math curricula, with teacher coaching support. The outcomes that were used to test the effectiveness of the programme were children's ability level in mathematics, language, literacy, executive function and emotional development. The sample was approximately 2000 students enrolled in Boston Public Schools, identified as either treatment or control by the non-random cut-off variable of the child's birthday. Children who had turned 4 on September 1 were eligible for the pre-K programme, whereas those who were not 4 on September 1 could not attend pre-K and thus did not receive the treatment. Regression models were fitted for samples that fell within the 365 days of the cut-off to produce unbiased estimates of the average causal effects of the pro-

gramme. The researchers applied highly complex analytical techniques to test the effects of pre-K on children allocated to the treatment group and, within this, subgroups of children from low-income and Hispanic backgrounds. Results showed that the prekindergarten programme produced moderate to large effect on children's language, literacy and mathematics skills and small effects on children's executive functioning and emotional skills, with the highest effects being noted for Hispanic and low-income subgroups.

Regression discontinuity (RD) designs have been applied as an alternative to RCT in some education studies. The requirement for a relevant and precise "cut-off" is the main challenge, but when found in "real-world interventions", these studies can generate strong practical evidence of the effectiveness of education policy (Meredith and Perkoski 2015). Often relying on existing data, RD designs can be very cost-effective in comparison to experimental RCT designs. They are also not subject to the ethical concerns that RCT studies raise when participants are allocated to the nontreatment (control) group. To address this, many RCT studies use a staggered or wait-list delivery design, so that all participants can be assured that they will receive the treatment and therefore the benefits of participating.

12.5 Identifying Trajectories and Patterns of Change in Individual Learning, Development and Wellbeing

In social science, it is informative and sometimes necessary when designing intervention programmes to understand the developmental trajectories of children's learning and wellbeing. This area of research is concerned with individual change over time, the mechanisms that affect change and the methodological features of longitudinal studies of change. In early childhood, we tend to think of growth in terms of increasing levels of ability (such as reading), but statistical models can be equally applied to outcomes that decrease over time (Singer and Willett 2003). For example, research has shown that children's intrinsic motivation tends to decrease as they move from primary to secondary schools. Along with understanding the nature of this decrease in intrinsic motivation, it is informative to explore factors that predict the beginning level of intrinsic motivation and the decreasing developmental trajectory and how the developmental trajectory is linked to other longitudinal outcomes such as academic achievement. Studies of changes in motivation can provide useful information for the design of effective intervention programmes that support the development of protective factors, such as positive relationships at school, and discourage risk factors.

In recent years, a number of specialist statistical techniques for modelling change over time have been developed. Singer and Willett (2003) outline three methodological features that these techniques share: multiple waves of data collection, outcomes that change systematically over time and a sensible metric for measuring time. The third feature, time, introduces a new challenge to researchers who must

consider when data collection should start (at what age or what point in an intervention trajectory) and how frequently data collection should occur after the start. There are no hard and fast rules, but the metric chosen needs to reflect "the cadence you expect to be the most useful for your outcome" (Singer and Willett p. 11). In this fourth and final section, we present two approaches to collecting and analysing longitudinal data. First, we look at a recent example of researchers who use data linkage techniques to create longitudinal datasets from administrative data held by government. Next, we present two approaches to analysing growth trajectories in students: latent growth curve modelling and growth mixture modelling, using data collected in traditional longitudinal studies.

12.5.1 Longitudinal Data Linkage

The design and implementation of traditional longitudinal research, as exemplified by the LSAC study (illustrated earlier in Verdon et al. 2014; Williams et al. 2015) and other international studies, is a lengthy and costly undertaking. Questions about the cost-benefits of early childhood education and care programmes, for example, require many waves of data, often into adulthood, to be thoroughly answered. Finding alternate sources of data, and even alternate ways of identifying a study sample, has therefore become a recent focus in early childhood research. Through the establishment of strong partnerships between researchers and government organisations, and the increased attention on the part of governments to the early childhood years, data linkage has arisen as a new and exciting research opportunity. A further benefit, and opportunity, comes from the fact that government data are collected from populations, not samples. These large, inclusive datasets make it possible to study populations as well as "population sub-groups within the larger population to generate comparative studies that provide compelling insights into implications for educational practice, and possible points and mechanisms for intervention" (Janus et al. 2016, p. 3).

Brownell et al. (2016) linked birth and prebirth data available from the Manitoba Centre for Health Policy with Early Development Instrument (EDI) ratings provided by teachers when children were ages 4–5 years for a sample of just under 9,000 children. They used structural equation modelling (SEM) to model the interrelationships among EDI cognitive and language outcomes and early child and family factors, including maternal prenatal health behaviours, child health at birth, family risk factors and neighbourhood socioeconomic status. Results indicated that family risk factors were the key driver of academic school readiness and that family risk, in turn, was strongly influenced by neighbourhood socioeconomic status. The implications drawn from this study are, firstly, that trajectories of development start early, and, secondly, that interventions and policies that support communities and the families that live in them may have a greater impact on early childhood development than interventions that focus on individual children.

12.5.2 Latent Growth Curve Modelling

Latent growth curve modelling (LGCM), which is a member of the SEM family of quantitative analysis techniques, is a powerful tool to analyse growth trajectories among children. It is also more advantageous compared to other repeated measures statistics such as repeated measures ANOVA in that LGCM can model measurement errors. LGCM can also statistically test whether the developmental trajectory is linear (showing a steady increase or decrease over time) or nonlinear. A variety of curvilinear (nonlinear) trajectories can be identified, such as rapidly increasing then levelling off, increasing then decreasing or decreasing and then increasing. The accuracy of these trajectory graphs improves with the number of data collection points.

LGCM can be applied to research questions that include a continuous variable that is repeatedly measured at three or more times. It is strongly recommended that the measurement tool is the same at each time to ensure that the changes reflect true change rather than being an artefact of the changing system of measurement. However, in some cases different measures need to be used to ensure age appropriateness. In these situations, the measures should have the same units/scaling and indeed capture the same construct the researchers intended to measure (Kline 2011).

Wetter and El-Sheikh (2012) conducted latent growth curve modelling to examine the trajectories of 251 US children's internalising symptoms such as anxiety and depressive symptoms. They further investigated the role that maternal internalising symptoms, respiratory sinus arrhythmia (RSA) and child gender play in the developmental trajectory of internalising symptoms. Specifically, children's internalising symptoms were measured at three time points (8, 9 and 10 years of age), with results showing that internalising symptoms decreased from 8 to 10 years. Lower maternal internalising symptoms predicted steeper decline of children's internalising problems, and higher RSA served as a protective factor. Children with higher RSA and lower maternal internalising symptoms showed the lowest internalising symptoms at age 10. However, this was only true for girls but not boys.

Note that the researchers used the same measure of internalising symptoms at all three time points. They have also accounted for measurement errors by modelling a latent variable of internalising symptoms with two indicators. A limitation of LGCM is that it produces the average developmental trajectory for the population sample, based on the assumption that all participants come from the same population, which is not necessarily true in all situations.

12.5.3 Growth Mixture Modelling

Growth mixture modelling (GMM) is an extension of LGCM which aims to identify trajectories that differ from the average developmental trajectories. It also requires at least three time points of data collection and a large sample size. Being able to

identify different developmental trajectories is immensely helpful because researchers can then explore the personal and environment characteristics of the most concerning groups of children and from this information design and implement interventions that can effectively target these risk factors.

GMM was used by Spilt et al. (2012) in a study of 657 US students with below-average literacy skills in Grade 1, the majority of whom were from families with low socioeconomic status. They focused on examining how conflict in student-teacher relationships changed from Grade 1 to Grade 5 and the implications of different relationship trajectories for academic achievement. The analyses generated four developmental trajectories of teacher-student conflict for boys and three for girls. These were a low-stable trajectory which was identified as the most adaptive trajectory, a low-increasing trajectory with low initial levels of conflict that increased over the course of primary school and a high-decreasing trajectory with high initial conflict that decreased over the course of primary school. They also identified a small group of boys who had consistently high teacher-child conflict throughout primary school. The results showed that for both girls and boys, the low-stable and high-declining groups did not differ in their academic achievement, and children in both these groups achieved better outcomes than children in the low-increasing group. The worst academic performance was noted for the group of boys who had high stable teacher-child conflict. The results also showed that children's externalising behaviours, IQ, ethnicity and socioeconomic status were related to their differential developmental trajectories.

12.5.4 Challenges and Limitations of Longitudinal Research

A key challenge in analysing longitudinal data, whether in traditional recruited samples or in linked datasets, is attrition or missingness. Participants either drop out of a study, drop out temporarily and then come back, or do not provide some of the data that are being linked. Researchers need to understand who is missing and determine if criteria for "missing at random (MAR)" or "missing completely at random (MCAR)" are met (Singer and Willett 2003). MAR and MCAR retain the original sample, but a sample can become imbalanced if, for example, vulnerable families are found to be more likely to have dropped out. There are a number of ways that researchers can deal with missing data. Imputation techniques can be used to replace missing data where MAR or MCAR can be argued (Kline 2011). In other cases, the researcher sets out a detailed flow chart or written explanation of the included and excluded sample. It is then incumbent on the researcher to test for important differences between the groups who were included in the analyses and those who were excluded. This information is then used when drawing overall conclusions.

12.6 Discussion

The aim of this chapter was to provide readers with an overview of current directions and approaches in the use of quantitative research methods in early childhood education. Four broad themes were presented (identifying groups, identifying mechanisms, identifying causation and identifying trajectories), along with particular statistical techniques that are applied in each of these areas of research, illustrated by specific studies drawn from international literature. The studies chosen as exemplars have met rigorous peer-review processes and are all worthy of further reading. The authors range from novice researchers, reporting PhD studies to established researchers recognised as leaders in the field. In addition to the statistical methods each of the authors applies, these papers also illustrate the wide variety in sample size (from 100 to 9,000 children) and composition (from birth to age 10 years, specific and normative samples) and measures (test scores, teacher and parent ratings and administrative health records) that are typical of quantitative research studies. We hope that the brief summaries of these published papers will inspire readers to follow up with a deeper reading of specific research studies or specific analytical techniques. We also hope that when researchers read about or undertake quantitative research, they will consider each study they read or conduct in relation to the four overarching themes (identifying groups, mechanisms, causation and trajectories) and the extent to which researchers attend to the principles, statistical techniques and limitations of each.

References

Ahnert, L., Harwardt-Heinecke, E., Kappler, G., Eckstein-Madry, T., & Milatz, A. (2012). Student-teacher relationships and classroom climate in first grade: How do they relate to students' stress regulation? *Attachment and Human Development, 14*, 249–263. doi:10.1080/14616734.2012.673277.

Brownell, M. D, Ekuma, O., C. Nickel, Chartier, M., Koseva, I., & Santos, R. G., (2016). A population-based analysis of factors that predict early language and cognitive development. *Early Childhood Research Quarterly, 35*, 6–18. doi:10.1016/j.ecresq.2015.10.0040885-2006

Bryman, A. (2012). *Social research methods*. New York: Oxford University Press.

Cole, D. A., & Maxwell, S. E. (2003). Testing meditational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology, 112*, 558–577. doi:10.1037/0021-843X.112.4.558.

Council of Australian Governments [COAG]. (2009). *Investing in the early years – a national early childhood development strategy*. Canberra: Commonwealth of Australia.

Feng, X., Shaw, D. S., & Moilanen, K. L. (2011). Parental negative control moderates the shyness-emotion regulation pathway to school-age internalizing symptoms. *Journal of Abnormal Child Psychology, 39*, 425–436. doi:10.1007/s10802-010-9469-z.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London: Sage Publications.

Gray, M., & Sanson, A. (2005). Growing up in Australia: The longitudinal study of Australian children. *Family Matters, 72*, 4–9 https://aifs.gov.au/sites/default/files/mg(2).pdf.

Janus, M., Harrison, L. J, Goldfeld, S., Guhn, M., & Brinkman, S. (2016). International research utilizing the Early Development Instrument (EDI) as a measure of early child development: Introduction. *Early Childhood Research Quarterly, 35*, 1–5. doi:10.1016/j.ecresq.2015.12.0070885-2006.

Jung, T., & Wickrama, K. A. S. (2008). An introduction to latent class growth analysis and growth mixture modeling. *Social and Personality Psychology Compass, 2*, 302–317. doi:10.1111/j.1751-9004. 2007.00054.x.

Kline, R. B. (2011). *Principles and practice of. structural equation modeling* (3rd ed.). New York: Guilford.

Love, J. M., Kisker, E. E., Ross, C., Raikes, H., Constantine, J., Boller, K., … & Vogel, C. (2005). The effectiveness of Early Head Start for 3-year-old children and their parents: Lessons for policy and programs. *Developmental Psychology, 41*(6), 885–901.

Mackenzie, N. & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodologies. Issues in. *Educational Research, 16*. Accessed online: http://www.iier.org.au/iier16/mackenzie.html

Magnusson, D., & Bergman, L. R. (1988). Individual and variablebased approaches to longitudinal research on early risk factors. In M. Rutter (Ed.), *Studies of psychosocial risk* (pp. 45–61). New York: Cambridge University Press.

McLeod, S., Verdon, S., & Kneebone, L. B. (2014). Celebrating young Indigenous Australian children's speech and language competence. *Early Childhood Research Quarterly, 29*, 118–131. doi:10.1016/j.ecresq. 2013.11.003.

Meredith, M, & Perkoski, E. (2015). Regression discontinuity design. Emerging trends in the social and behavioral sciences: An interdisciplinary, searchable, and linkable resource. Wiley Online Library. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/9781118900772.etrds0278/abstract

Mertens, D. M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed. methods* (3rd ed.). Los Angeles: Sage.

Murnane, R., & Willett, J. (2010). *Methods matter*. Oxford: Oxford University Press.

Muthén, B., & Muthén, L. K. (2000). Integrating person-centered and variable-centered analyses: Growth mixture modeling with latent trajectory classes. *Alcoholism: Clinical and Experimental Research, 24*(6), 882–891.

NSW Education (2015). NSW Government launches groundbreaking new study.http://exar.nsw.gov.au/nsw-government-launches-groundbreaking-new-study-in-early-education-practices/

Office of Child Care. (2014). *A foundation for quality improvement systems: State licensing, preschool, and QRIS program quality standards*. Washington, DC: Department of Health and Human Services.

Pianta, R. (2001). *Student–teacher relationship scale–short form*. Lutz: Psychological Assessment Resources.

Puma, M., Bell, S., Cook, R., Heid, C., Shapiro, G., Broene, P., … & Spier, E. (2010). *Head start impact study. Final Report.* Washington, DC: Administration for Children & Families, United States Department of Health and Human Services.

Punch, L. (2003). *Survey research: The basics*. London: Sage Publications.

Silva, P. A., & Stanton, W. R. (Eds.). (1996). *From child to adult: The Dunedin multidisciplinary health and development study*. Oxford University Press.

Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis. Modeling change and event occurrence*. New York: Oxford University Press.

Spilt, J. L., Hughes, J. N., Wu, J.-Y., & Kwok, O.-M. (2012). Dynamics of teacher-student relationships: Stability and change across elementary school and the influence on children's academic success. *Child Development, 83*, 1180–1195. doi:10.1111/j.1467-8624. 2012.01761.x.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (Eds.). (2010). *Early childhood matters: Evidence from the effective pre-school and primary education project*. Routledge.

Verdon, S., McLeod, S., & Winsler, A. (2014). Language maintenance and loss in a population study of young Australian children. *Early Childhood Research Quarterly, 29*, 168–181.

Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. *Child Development, 84*(6), 2112–2130.

Wetter, E. K., & El-Sheikh, M. (2012). Trajectories of children's internalizing symptoms: The role of maternal internalizing symptoms, respiratory sinus arrhythmia and child sex. *Journal of Child Psychology and Psychiatry, 53*, 168–177. doi:10.1111/j.1469-7610. 2011.02470.x.

Williams, K. E., Barrett, M. S., Welch, G. F., Abad, V., & Broughton, M. (2015). Associations between early shared music activities in the home and later child outcomes: Findings from the Longitudinal Study of Australian Children. *Early Childhood Research Quarterly, 31*, 113–124.

Yoshikawa, H., Leyva, D., Snow, C. E., Treviño, E., Barata, M., Weiland, C., … & Arbour, M. C. (2015). Experimental impacts of a teacher professional development program in Chile on preschool classroom quality and child outcomes. *Developmental Psychology, 51*(3), 309–322.

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Western Europe and UK*

Bert van Oers and David Whitebread

Chapter 13
Quality in Early Childhood Education: The Contribution of Developmental Psychology

David Whitebread

Abstract Historically, there has been a strong contribution of Western European thought to high quality in early childhood education (ECE). Nevertheless, the powerfully child-centred approach running through the contributions of Steiner, Montessori, Isaacs and many others has in recent years been increasingly challenged. This chapter introduces the issues addressed in the Western European section, which reflect the current state of flux arising from the rapidly changing political, professional and research scenarios in which ECE provision is evolving within this region. Chapters address the impact of neuroscience research, the debate concerning school readiness and the 'schoolification' of ECE, the responses to the increases in migrant and other disadvantaged children and the current trends towards the professionalisation of the ECE workforce. In the second half of this chapter, culturally varying approaches to the issue of quality in ECE across Western Europe are reviewed, and the potential contribution of developmental psychology is outlined. The evidence of the individual and mutually supportive contributions of play, oral language and self-regulation to positive outcomes for young children is outlined, alongside the findings of studies concerned with pedagogies which support these key aspects of development. As much of this research has been conducted with school-aged children, the chapter concludes with a plea for more research focused on how these early developing abilities can be nurtured during the very early years of children's lives.

Keywords Issues in early childhood education • Process and structural quality in ECE • Measurement of quality in ECE • Developmental psychology • Play • Oral language • Self-regulation

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13.1 Introduction: The Historical Contribution of Western European Thought to High-Quality Early Childhood Education

The philosophical, psychological and practical consideration of what is required to ensure high quality in early childhood education (ECE) has a long and distinguished history within the UK and Western Europe. The influence of the nineteenth- and early twentieth-century European thinkers and educationalists, including such as the Austrian Rudolf Steiner (see Volume 2, section on 'Pedagogies in Early Childhood'), the Italian Maria Montessori (see Volume 2, section on 'Pedagogies in Early Childhood') and the British Susan Isaacs, to name only a few of many, is present today, across the world, as ECE provision expands and high quality is sought. In some aspects these approaches appear to have quite different emphases. Steiner, as a spiritualist and philosopher, emphasised the importance of education supporting the development of the whole child, both emotionally and intellectually, and the role of the arts and pretence play with simple, natural play materials to nurture children's imaginations. By contrast, Montessori, as a trained medical doctor, emphasised a more scientific approach and developed specific materials with which children should play to learn life skills and develop their reasoning abilities. Her approach, however, like Steiner's, was essentially based on a model of children's development, which she believed was most optimally supported by allowing children to make choices and to construct their own understandings through activity with her materials, rather than direct instruction. Both Steiner and Montessori developed models of stages of development, although their first stages ended at age 7 for Steiner and age 6 for Montessori. Nevertheless, they both emphasised the role of early education in supporting children's natural development, rather than in providing instruction. Isaacs (1930), coming from the different traditions of psychoanalytic theory, nevertheless shared some of the same beliefs as Steiner and Montessori. Her principal contribution, however, was to emphasise the importance of nurturing the child's ability for independent thinking. Like Steiner and Montessori, nevertheless, she also believed that this was best nurtured through play, which she described as the child's work. She also recognised the importance of social interaction, both with other children and with adults. Like Steiner, she emphasised the importance of the child's emotional life and the role of pretence play in supporting this. She also believed that early education should support children's natural development and that schooling before the age of 7 would be damaging.

These early approaches, developed within early modern Western European philosophical, scientific and psychological traditions, have been, and continue to be, enormously influential. There are today literally thousands of Steiner, Waldorf and Montessori kindergartens and schools across Europe and the wider world, and their influence, together with that of Isaacs, on the 'constructivist' and play-based approach to children's learning within ECE, later supported within developmental psychology by the works of Piaget (himself significantly influenced by Montessori, in particular) and many others, has been profound.

13.2 The Current Crisis in Western European ECE

And yet, within countries across Western Europe, over the last few decades, some of the fundamental principles which these early and influential figures espoused have come under increasing pressure. The powerfully child-centred approach fundamental to all these long-standing approaches, and to the traditions of the British Infant School, the Danish First School and kindergartens across Western Europe, has been increasingly challenged.

This challenge has come principally from governments and from their acolytes working in the policy arena. The key drivers here appear to have been, perversely, the recognition of the significance of ECE for individual development, and consequently for the growth of the economy, and the publication of international league tables, based on narrow measures of academic achievement. This has led to the rapid expansion of early childhood services across Western Europe, but also the increasing involvement of central governments in its funding and its curricula. Accompanied, particularly in the UK, by an increasingly draconian accountability agenda and the introduction of a baseline assessment for 4-year-olds on their entry to school, and a phonics test at the age of 6, this has fostered, perversely, a push towards the earlier introduction of direct instruction of literacy and formal mathematics and a belief that 'earlier is better'. While, within the international ECE community, there is a strong drive to develop evidence-based, high-quality practice, at the policy level, across Western Europe, these current policy trends are in danger of undermining the very qualities of ECE environments which make them so powerfully effective.

13.3 Issues Addressed in the Western European Section

Against this backdrop of expansion and tension within early childhood education across Western Europe, the four subsequent chapters in this section address significant current trends and concerns. Having briefly introduced the issues addressed in these chapters, however, in this chapter, I wish to address the historical and current approaches adopted within Western Europe to the development of quality in ECE and the potential contribution of modern developmental psychology to achieving high quality of provision. This latter owes its origins to the works of the pioneers discussed above. Stimulated originally by the works of the Swiss Jean Piaget, and latterly by those of the Russian Lev Vygotsky, modern developmental psychology, over the last few decades, has provided an impressive and important body of evidence regarding young children's development and learning upon which any attempt to provide high-quality ECE must be based.

The immediately following chapter, entitled 'Neuroscience and Early Childhood Education' and authored by Sinclair-Harding, Vuillier and Whitebread, addresses a body of work, and its interpretations, which has directly contributed to the recent

recognition of the importance, individually and at the level of society, of ECE. As with much current commentaries on this area, the chapter recognises the potential contribution of neuroscience and the considerable interest and enthusiasm which it has generated amongst the policy and practice communities. However, it also addresses the potential dangers of over-interpreting early findings from what is a very young science exploring the astonishing complexity of the human brain. Examples of such 'neuromyths' are discussed. At the same time, there is already clear evidence of the impact of emotional warmth and responsiveness in early interactions and of the impact of play on brain growth. The authors further report strong indicative evidence that too early instruction in formal literacy can result in dysfunctional neural changes, further disadvantaging children who are not 'ready' for such formal instruction. The main contribution of neuroscience within ECE at the present time, however, the authors suggest, is likely to be in the early diagnosis of atypical developments, including problems with skills related to literacy and numeracy, social and emotional problems related to stress and specific conditions such as autism and ADHD.

The following chapter, authored by Bingham and Whitebread and entitled 'School Readiness in Europe: Issues and Evidence', addresses directly the tensions created in ECE in across Western Europe by the 'earlier is better' approach favoured by many politicians and policymakers. The chapter first reviews the current trend for children to commence formal schooling at younger ages than before, either officially or in practice, arising from the perceived international competitive pressures. This is followed by a section which examines the evidence on school starting age, showing that there is no evidence supporting an earlier start to schooling or the 'schoolification' of ECE. However, there is a significant body of evidence that reducing the period of time children spend in play-based, high-quality ECE provision of the kind advocated by the early pioneers discussed earlier, and supported by subsequent developmental psychology research, is potentially damaging, particularly for children from disadvantaged backgrounds. The authors conclude by presenting evidence of the beneficial effects of early interventions with parents which can crucially enhance young children's 'readiness' to learn through the more formal instructional approaches of schooling. The advantages of delaying the start of school until at least 6 or 7 years of age are also highlighted.

The third chapter in this section, authored by Soler and Flecha and entitled 'Early Childhood Education with Disadvantaged Children: Actions for Success', reports on a particular intervention, of the type advocated in the previous chapter, with disadvantaged children and their parents. In this particular case, the disadvantaged group addressed consisted of Moroccan families who had arrived as immigrants into Spain. This is greatly apposite, given the considerable numbers of minority ethnic groups within across Western Europe, a situation which can only increase further. As I write this chapter, the refugee crisis in Western Europe is headline news, with thousands of families fleeing from the civil wars, persecutions and terrorist unrest across much of the Middle East and Northern Africa. The young children in these families are clearly highly vulnerable and in need of high-quality support if they are to start out successfully on their school careers. The chapter

begins by reviewing the international evidence of the positive impact of early childhood education and care (ECEC) interventions with such disadvantaged children and goes on to examine the particular efficacy of the interactive group methodology, involving a dialogic approach to early learning, with adults from the community, including parents, working with small groups of children on collaborative tasks. In the particular case of the Moroccan children, Dialogic Literary Gatherings, in which parents and children together were supported to read and discuss classic literary texts, were shown to have highly significant outcomes for the parents and children's literacy and their attitudes to themselves as learners and readers.

Finally, in this section, the chapter authored by Pirard, Camus and Barbier, entitled 'Professional Development in a Competent System: An Emergent Culture of Professionalization', addresses a further currently highlighted development within ECEC across Western Europe. It is widely acknowledged that high-quality ECEC relies crucially upon a well-qualified and professional workforce. However, what is understood by professionalism and the professionalisation of ECEC vary across different European countries. The chapter reviews the various aspects of professionalism which need to be considered, which include working with children, with parents and within teams of co-professionals. The issue of the type of role adopted within each of these spheres is further discussed, with the authors arguing that the 'democratic professional' is preferable to the 'technical expert' model. The second half of the chapter reports a case study of the development of a professionalised ECEC service within a rural setting in the province of Luxembourg, situated in the Wallonia-Brussels Federation of Belgium. Within this the concept of professional ECEC practitioners as 'accompaniers', who work collaboratively with children, parents and fellow, multidisciplinary professionals to establish and carry out joint projects, is developed.

13.4 Western European Approaches to High-Quality ECE

Underpinning all the subsequent chapters in this section, however, is a concern to work towards and support high-quality ECE both within Western Europe and worldwide. In the remainder of this chapter, I want to set out the evidence we have concerning the development of high-quality ECE in Western Europe and to outline the potential contribution of modern developmental psychology to its further development. The most comprehensive evidence we have on this appears in the OECD's Starting Strong (OECD 2012) and Education at a Glance reports (OECD 2014). These reports cover the 34 most economically developed countries across the world, of which 24 are European and 19 in Western Europe (including Scandinavia).

From the data presented in these reports, it is clear that, simply in relation to provision and access to ECE, Western Europe is the strongest region in the world. In a majority of OECD countries, education now begins for most children well before they are 5 years old. More than three-quarters of 4-year-olds (84 %) are enrolled in ECE and primary education across OECD countries, but amongst these

countries that are part of the European Union, this figure rises to 89 %. In Belgium, Denmark, France, Germany, Iceland, Italy, Norway, Spain, Sweden and the UK, more than 90 % of 3-year-olds are now enrolled in ECE.

As a number of studies have demonstrated, however, provision of ECE alone is not sufficient. Indeed, as Minervino (2014) has recently reported, the evidence is quite clear that attendance at low-quality ECE actually has detrimental effects for children from disadvantaged backgrounds, medium-quality ECE has no effect and only high-quality provision is associated with improved 'school readiness', academic success and a range of positive emotional and social outcomes. While the general overall assessments on which these conclusions are based have been demonstrated to be fairly robust, however, the identification and measurement of the key elements that ensure high quality in ECE have proved to be difficult. As Slot et al. (2015) note, in a recent review of this literature, this arises from the complex relationships between the factors associated with high-quality ECE which have been identified. These factors are generally categorised as process characteristics (i.e. those describing the child's direct experience of the physical environment, activities, materials and social interactions in the ECE setting) and structural characteristics (i.e. those describing organisational features of the ECE setting such as adult-child ratios, group size, level of teacher qualifications and so on). While the evidence clearly indicates that process characteristics are most directly responsible for the individual and societal benefits of high-quality ECE (Vandell et al. 2010), governments and members of the policy community are generally concerned with structural characteristics, which are amenable to legislation and which are assumed to facilitate process characteristics. However, as Slot et al. (2015) demonstrate, 'the evidence for strong and consistent relationships between structural and process quality is far from conclusive' (p.64).

A recent study of ECEC in five Western European countries for the European Commission illustrates the complexities of the relations between structural and process characteristics within different cultural contexts (Slot et al. 2015). Secondary data analysis techniques with existing longitudinal data sets from England, Germany, Portugal, the Netherlands and Finland revealed quite different interactions between structural and process variables and various cultural variables, across these different countries. For example, in England their analyses revealed an interaction between teacher qualification level and type of provision. Poorly qualified staff provided a higher level of process quality in educationally orientated settings than they did in care-orientated ones. In Germany, they revealed an interaction between teachers' years of service and the proportion of children from immigrant families. More experienced teachers provided a higher level of process quality than less experienced teachers in classes with high immigrant numbers. In Portugal, there was an interaction between public and private sector settings and teacher-child ratios. Staff working in the public sector provided higher levels of process quality in settings with less favourable teacher-child ratios. In the Netherlands, they found several interaction effects, including one between opportunities for professional development and teacher-child ratios. A higher level of such opportunities was associated with a higher level of process quality in classes with less favourable teacher-child ratios.

Finally, in Finland an interaction was found between the location of the setting (in a day-care centre or a school) and group size. Teachers in day-care centres provided higher process quality with small class groups, whereas teachers in school settings provided higher process quality with large class groups.

Given these complex relations between the various structural and process elements that might be seen to make up high-quality ECE provision, it is easy to see why it has been difficult to establish reliable and consistent quality indicators and why the academic community has found it difficult to make clear recommendations to policymakers and governments as to how to achieve high quality. Slot et al. (2015) found some relatively consistent relations between structural and process elements across the five countries studied, principal amongst them being the level of qualifications of teaching staff and the opportunities for in-service professional development. However, it is clear that these factors do not directly affect the cognitive and emotional development of the children, but merely make it more likely that whatever experiences support these developments will be provided.

In addition, it needs to be recognised that the process quality variables examined in this literature are themselves fairly ill-defined. The process quality measures available to Slot et al. (2015) in their five-country study consisted of the Early Childhood Environment Rating Scale-Revised (ECERS-R) and its extension (ECERS-E) and the Classroom Assessment Scoring System (CLASS). These observational measures, together with the Infant-Toddler Environment Rating Scale-Revised Edition (ITERS-R), are the dominant measure of process quality used in the research in this area. However, with the exception of CLASS, these mix structural and process elements typically include measures of the quality of the physical setting, the curriculum, caregiver-child interactions, health, safety, time scheduling, indoor and outdoor play spaces, teacher qualifications, play materials, setting administration and the meeting of staff needs. Revealingly, psychometric analyses of ECERS-R (Perlman et al. 2004) and ITERS-R (Bisceglia et al. 2009) have shown that these both measure just one global quality factor rather than distinguishing between the individual aspects around which they are structured.

13.5 The Potential Contribution of Developmental Psychology

Clearly, if we are to establish the essential qualities of high-quality ECE, we need to be able to distinguish which aspects of early development are most crucial in providing young children with the bases for strong intellectual and emotional development, and we need to be more precise about which ECE practices provide significant support in this regard. Modern developmental psychology, very much inspired by the early European pioneers discussed earlier, but with the advantage of increasingly sophisticated empirical methods of investigation, is well equipped to support this endeavour. In this final part of the chapter, I want to set out what is currently

established in relation to early child development and how this can help us to give much more precise advice, at the level of policy and practice, in order to ensure high-quality ECE.

In their study of ECE quality in the Netherlands, Slot et al. (2015) point out that they have extended the measurement of process quality by including observations of teacher-child interactions and teacher reported developmental and educational activities. In order to achieve this, they used the CLASS observation instrument, which includes measures of emotional support, classroom organisation and instructional support, and combined this with a self-report questionnaire completed by the teachers, which covered their practices related to emotional support, play and self-regulation (which they considered to be indicators of emotional process quality) and pretence play, language activities, literacy activities and math activities (which they considered to be indicators of educational process quality).

The results of this study were able to show that, very much in line with the previous research in other European countries, process quality was moderate to high in relation to emotional support. Evidence was gathered of teachers frequently comforting children and showing them verbal and physical affection. However, educational or cognitive support, again in line with earlier studies in other European countries, was only low to moderate. Teachers much less frequently guided or participated in pretence play or in academically focused activities. High levels of process quality were also shown to be related to teacher professional development and the use of a comprehensive educational programme, such as High/Scope (see Volume 2, section on 'Pedagogies in Early Childhood') or Tools of the Mind (Volume 2, section on 'Innovative and longstanding programs').

This study has clearly considerably improved the conceptualization of what is understood by high-quality ECE and, in particular, has demonstrated the value of focusing on process quality. However, I want to argue that a more systematic examination of the findings of modern developmental psychology can help us to further specify the essential elements in high process quality by identifying the key aspects of development in young children that predict long-term, high levels of cognitive and emotional outcomes. As I have elaborated elsewhere in much greater detail than can be included in the present chapter (Whitebread 2012), the key drivers of children's emotional and cognitive development can be conceptualised most clearly under the general heading of 'self-regulation'. The psychological journey from babyhood to adolescence can fundamentally be characterised as one of increasing awareness and control by children of their own mental processes (often referred to as 'metacognitive' abilities), of developing independence from adult support and of the gradual transition from reliance on other regulation to self-regulation. This includes children's emotions, their social competencies and their motivations, perceptions, memories, reasoning, decision-making, cognitive strategies and conceptual understandings across all the domains of knowledge and ability. A widely recognised definition of the processes of self-regulation was provided over 20 years ago by Schunk and Zimmerman, two prominent researchers and theorists in this area:

> The process whereby students activate and sustain cognitions, behaviours, and affects, which are systematically oriented toward attainment of their goals. (Schunk and Zimmerman 1994, p. 309)

From an educational perspective, a very considerable body of research, conducted over the last few decades, has established two very significant features of children's developing self-regulatory abilities. First, a range of studies have shown that early self-regulation predicts long-term academic outcomes and emotional well-being more powerfully than any other aspect of children's development, including, for example, IQ (Veenman and Spaans 2005) and early reading achievement (McClelland et al. 2013). Second, it has been clearly established that self-regulatory abilities are significantly influenced by children's early experiences and that, as a consequence, they can easily be encouraged within educational settings (Dignath et al. 2008). Importantly, practices which support children's self-regulation have been shown to be those that make the processes of learning 'explicit' or 'visible' (Whitebread et al. 2015), that engage them in achievable regulatory challenges and that support and nurture their natural playfulness and curiosity (Whitebread et al. 2015).

Within this general framework, there are particular considerations relating to different emotional, social and cognitive aspects of development, and there are specific abilities and processes which significantly contribute to the early achievement of self-regulation. In relation to each of these various aspects of development and contributory processes, research in this area has established clearly defined educational practices which provide essential support.

In relation to emotional development, research has focused upon the crucial significance of early secure attachments, on the fundamental links between emotions and cognition, on the role of emotion regulation in developing resilience and on the emotional and cognitive components of motivation. Within the self-regulation intervention literature, the growing recognition of the importance of emotion regulation has led to a marked shift away from the direct teaching of metacognitive skills and strategies to a clearer emphasis on classroom 'ethos' and the emotional environment (Boekaerts and Corno 2005). It is notable, for example, that in highly successful interventions supporting self-regulation in the primary classroom, there is a strong emphasis on practices which promote a positive emotional climate and which support children's sense of autonomy, competence and relatedness (key motivational needs identified within the now widely accepted framework of self-determination theory developed by Deci and Ryan 2008), for example, giving children opportunities for decision-making, setting their own challenges, assessing their own work, encouraging positive feelings towards challenging tasks, emphasising personal progress rather than social comparisons and responding to and training children's helpless beliefs (Perry 1998). Underpinning all this, however, an emotional climate which is warm, responsive and non-judgmental, in which emotional issues are openly discussed and addressed, is fundamental to supporting children to develop emotional well-being, resilience and positive attitudes to themselves as learners, which are crucial to enabling children to derive the most positive benefit from their

educational experiences. Cefai (2008) has produced a very useful review of approaches to promoting children's resilience in the classroom.

As regards social development, research has focused on the early social competencies of young children, the skills of friendship and on social understandings, or children's developing 'theory of mind', and on the impact of early social environments on children's developing social regulation. This research has dealt with relations with peers and with parents and other significant adults. Howe (2010) has produced an authoritative review of children's social interactions and learning in classroom peer groups and has drawn from this review important implications for classroom practice. The first of these is that children's social experiences in classrooms, particularly in relation to their experiences of friendships, have a very powerful effect on a range of academic and emotional outcomes. The review thus endorses the importance of teachers' support of friendship skills at the individual level particularly, for example, with children who are overly aggressive and have difficulties making friends as a consequence or with children who are shy or anxious.

The research on adult-child interactions has mostly focused on parental behaviour and has identified two dimensions of this behaviour which appear to account for the most significant outcomes for the children, namely, 'responsiveness' and 'demandingness'. Combining these two basic dimensions of parenting led to the description of four characteristic styles, as developed in an integrative review by Maccoby and Martin (1983). Of these four styles, 'authoritative' parenting, which is high in parental responsiveness and in the demands and expectations made by the parents on the child, has been consistently shown, in a considerable body of research, to lead to positive outcomes for the child. Authoritative parents are the most emotionally warm and affectionate towards their children. In addition, however, they also set clear and consistent standards for their child's behaviour and convey high expectations of their performance. At the same time, they demonstrate clear respect for the child's developing need for autonomy and independence and support the child's adherence to the standards and rules established through discussion and negotiation, explaining their reasoning rather than simply asserting their authority. This style has been shown to support children's developing self-efficacy (i.e. feelings of competence) and self-regulation and, hence, their success as learners. Authoritative parenting has also been found to be associated with a range of positive outcomes in relation to children's social competence. As children they most easily make relations with other children and adults and are generally the most popular amongst their peers. Although much of this work has been undertaken with parents, a very clear message for ECE teachers is the crucial significance of structures and procedures within classrooms. The poor outcomes for social competencies and friendships arising in classrooms where individual performance is emphasised, and children are grouped by ability, have been contrasted with the positive social outcomes in classrooms where cooperation is emphasised, and working on tasks collaboratively in mixed ability groups is a more common feature (McGrath and Noble 2010).

Much of the research on cognitive aspects of development has focused on metacognitive processes related to children's memory abilities and their development of increasingly sophisticated cognitive strategies in relation to mathematics, literacy and other areas of learning. Early research in the area of metamemory and children's knowledge of learning strategies suggested that metacognitive abilities did not begin to emerge until around the age of 8 years. However, observational studies showed evidence of much earlier metacognitive abilities in children as young as 3 years of age (Whitebread et al. 2005, 2009), and subsequent research has suggested that interactions between parents and children in the first few months of life impact on children's early metacognitive and self-regulatory abilities (Whitebread and Basilio 2012; Brinck and Liljenfors 2013).

This area of research has also been focused on the specific abilities and processes which significantly contribute to the early achievement of self-regulation. Amongst these, the two areas of research with clear implications for developing high-quality ECE have been those relating to oral language and play. The crucial role of oral language in early childhood development is, of course, well established. This relationship is presaged very clearly in Vygotsky's model of development, in which social interaction and language are seen as central drivers in children's learning. As Vygotsky expressed it:

> Children solve practical tasks with the help of their speech, as well as with their eyes and hands. The unity of perception, speech and action … constitutes the central subject matter for any analysis of the origins of uniquely human forms of behaviour. (Vygotsky 1978, p. 26)

There is certainly a growing body of evidence to support this view in relation to the development of early metacognition and self-regulation. A number of studies, for example, have directly linked early language development with later emerging aspects of self-regulation. An American study of 120 toddlers in New England showed strong relationships between vocabulary size at 14, 24 and 36 months and a range of observed self-regulatory behaviours, for example, the ability to maintain attention on tasks and to adapt to changes in tasks and procedures (Vallotton and Ayoub 2011).

Three key implications emerge from the research on oral language and self-regulation in relation to educational concerns. First, those episodes of joint attention between adults and children are crucially important in children's development of their language abilities. Research has shown that there are considerable variations in the sensitivity and style of communication of adults when interacting with young children and that these variations are clearly related to individual differences in children's learning, particularly in relation to language development. As Schaffer (2004) reviews, adults who follow children's interests, rather than attempt to shift the conversation to their own agenda, are far more effective in fostering children's language development. This has very significant implications for the style of dialogue which is likely to be most productive within ECE classrooms. As long ago as the 1980s, Tizard and Hughes (1984), in a classic study of 4-year-old girls attending pre-school in the mornings and spending time with their mothers at home in the

afternoons, presented evidence of these young children engaging in intellectual search through conversations with their mothers. The kinds of meaningful dialogues they shared with their mothers, unfortunately, were sadly lacking in their pre-school experience. More recently, the EPPE study in the UK, a large longitudinal study of factors leading to effective ECE provision, identified episodes of ‘sustained shared thinking’ between adults and children as characteristic of high-quality pre-school settings which significantly impacted upon a range of emotional and cognitive gains, even overriding the effects of social disadvantage (Sylva et al. 2004).

Second, a series of studies within educational contexts have explored the impact of ‘metacognitive talk’ between teachers and children. For example, Ornstein et al. (2010) demonstrated that the amount of contingent metacognitive talk naturally produced by first-grade math teachers was a strong predictor of academic outcomes. Children taught by teachers who regularly made suggestions of memory strategies they could use and asked metacognitive questions aimed at eliciting strategy knowledge, such as ‘how could you help yourself to remember this?’, showed significantly improved strategy use at the end of the first grade, and, notably, this improvement was still present 3 years later, at the end of the fourth grade. The importance of metacognitive talk in supporting children’s developing ability as effective learners is explained by research showing a disjunction in the developmental trajectories of monitoring and strategic control, the two complimentary processes which comprise metacognitive ability. The development of monitoring skills in children (e.g. their ability to be aware of how well they are doing on a task) appears to be predominantly a maturational process, mostly dependent upon age and largely unaffected by developing ability. However, conversely, their strategic control abilities (e.g. their ability to select an appropriate strategy or way of going about undertaking a task) appear to be directly related to cognitive ability (Bryce and Whitebread 2012). Specifically, it appears that, even when they are taught an effective approach to a specific task and have shown they are able to produce an improved performance using it, the link between their use of the strategy and their successful performance needs to be made very explicitly clear to young children and particularly to those less able young children who would otherwise not make this connection for themselves (Fabricius and Hagen 1984). Numerous studies have confirmed the importance of this type of metacognitive talk in making the processes of learning explicit or ‘visible’ to young children (Hattie 2009; Whitebread et al. 2015).

Third, the link between oral language and self-regulation has been exemplified in research concerning the use of collaborative groupwork between peers within educational contexts. A range of recent and current classroom-based research has begun to identify in more detail the specific elements of a successful ‘dialogic’ pedagogy appropriate for children in ECE (Mercer and Littleton 2007). These elements include children constructing their own agreed ‘rules for talk’ which are required for productive dialogue, including supporting their views or opinions with reasons and attempting to agree on the solution to the problem under discussion. Following these general guidelines, Littleton et al. (2005) showed that young children could make significant strides in their ability to argue their case and provide explanations for their views and that there were measurable gains in both the quality of their

language and their non-verbal reasoning skills. Additionally, a recent study with Year 1 children (i.e. 5–6-year-olds) in the UK showed that this type of activity significantly enhanced the children's metacognitive abilities (Whitebread et al. 2015).

The second area of research investigating the specific abilities and processes which significantly contribute to the early achievement of self-regulation is concerned with children's play. This is a less developed area than that related to oral language, but one which is enjoying something of a renaissance currently arising from a range of highly promising recent findings. To begin with, within the motivational literature, the central significance of activities and experiences which support children's sense of autonomy has been indicated in a wide range of studies, both in classrooms and in the parental home. Overcontrolling interactions between parents and children have consistently been related to poor self-regulatory development (Stevenson and Crnic 2012), while parental support for their children's autonomy has emerged in a number of studies as a key predictor of self-regulation and academic achievement (Pomerantz and Eaton 2001). On a similar theme, in a recent study, the amount of less structured time experienced by young children in their home life was also shown to significantly predict their early metacognitive development (Barker et al. 2014).

Within educational settings, a number of strands of research related to all kinds of physical, constructional and social play have indicated that these provide opportunities for children to directly develop their skills of intellectual and emotional 'self-regulation'. For example, pretence play involves children in increasingly sophisticated processes of symbolic representation, involving oral language skills, which, as we discussed above, themselves support the development of self-regulatory abilities (Berk et al. 2006). A growing number of empirical educational studies have found that early play experiences enhance young children's academic achievement by supporting the early development of self-regulation (Ponitz et al. 2009). Children who attend pre-schools based predominantly upon models emphasising play rather than academic outcomes have been found to achieve higher scores on measures of self-regulation (Hyson et al. 2006). In a recent study investigating a playful intervention designed to support young children's narrative skills, the evidence supported the hypotheses that high-quality groupwork, involving significant episodes of 'exploratory talk', would support the children's development of metacognition, creativity and narrative skills and that playfulness within the group, particularly involving pretence play, would enhance the effectiveness of the intervention in these respects. It was also clearly evidenced that low-ability children made the strongest gains within these playful groupwork activities (Whitebread et al. 2015).

13.6 Conclusion

This chapter has reviewed a range of approaches to quality in ECE, ranging from the pioneering educationalists of Western Europe in the late nineteenth and early twentieth centuries to the modern attempts to define and measure the essential structural

and process characteristics of high quality. I have argued, however, that modern developmental psychology can advance our endeavours in this area, providing well-evidenced indications of the key early developments which predict children's long-term outcomes, both educationally and in relation to emotional well-being. As part of this, I have offered self-regulation as a compelling framework within which to move towards a coherent view of the essential nature of high-quality ECE.

There are studies within the self-regulation literature which have examined the qualities of classroom environments that support high levels of children's self-regulation. Perry (1998), for example, observed second and third grade classrooms during literacy activities. She found that classrooms supporting high levels of self-regulation were characterised by challenging and open-ended writing activities by opportunities for children to control the level of challenge and opportunities for them to engage in self-assessment. The teachers also provided support for the children's autonomy through strategy instruction and encouragement of a mastery-oriented approach to learning, fostering positive feelings towards challenge and emphasising personal progress and mistakes as opportunities for learning. However, these studies have overwhelmingly been set in classes with children over the age of 7 years, rather than in ECE settings. What is clearly required, if we are to significantly enhance the quality of children's experience within ECE settings in ways which support their development as powerful learners and equip them to be emotionally resilient and socially adept, is an expansion of studies within ECE settings which examine practices with young children that effectively and reliably support their attainment of the full gamut of metacognitive and self-regulatory abilities. Hopefully, this chapter has set out a framework which can guide this important research effort over the coming years.

References

Barker, J. E., Semenov, A. D., Michaelson, L., Provan, L. S., Snyder, H. R., & Munakata, Y. (2014). Less-structured time in children's daily lives predicts self-directed executive functioning. *Frontiers in Psychology, 5*, 593. doi:10.3389/fpsyg.2014.00593.

Berk, L. E., Mann, T. D., & Ogan, A. T. (2006). Make-believe play: Wellspring for development of self-regulation. In D. G. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play=learning: How play motivates and enhances children's cognitive and social-emotional growth* (pp. 74–100). Oxford: Oxford University Press.

Bisceglia, R., Perlman, M., Schaack, D., & Jenkins, J. (2009). Examining the psychometric properties of the infant–toddler environment rating scale-revised edition in a high-stakes context. *Early Childhood Research Quarterly, 24*, 121–132.

Boekaerts, M., & Corno, L. (2005). Self-regulation in the classroom: A perspective on assessment and intervention. *Applied Psychology: An International Review, 54*(2), 199–231.

Brinck, I., & Liljenfors, R. (2013). The developmental origin of metacognition. *Infant and Child Development, 22*, 85–101.

Bryce, D., & Whitebread, D. (2012). The development of metacognitive skills: Evidence from observational analysis of young children's behaviour during problem-solving. *Metacognition and Learning, 7*(3), 197–217.

Cefai, C. (2008). *Promoting resilience in the classroom: A guide to developing pupils' emotional and cognitive skill*. London: Jessica Kingsley Publishers.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology, 49*(3), 182–185.

Dignath, C., Buettner, G., & Langfeldt, H. P. (2008). How can primary school students learn self-regulated learning strategies most effectively? A meta-analysis on self-regulation training programs. *Educational Research Review, 3*, 101–129.

Fabricius, W. V., & Hagen, J. W. (1984). Use of causal attributions about recall performance to assess metamemory and predict strategic memory behaviour in young children. *Developmental Psychology, 20*, 975–987.

Hattie, J. (2009). *Visible learning: A synthesis of 800 meta-analyses relating to achievement*. London: Routledge.

Howe, C. (2010). *Peer groups and children's development*. Chichester: Wiley.

Hyson, M., Copple, C., & Jones, J. (2006). Early childhood development and education. In K. A. Renninger & I. Sigel (Eds.), *Handbook of child psychology*, *Child psychology in practice* (Vol. 4, pp. 3–47). New York: Wiley.

Isaacs, S. (1930). *Intellectual growth in young children*. London: Routledge.

Littleton, K., Mercer, N., Dawes, L., Wegerif, R., Rowe, D., & Sams, C. (2005). Talking and thinking together at key stage 1. *Early Years, 25*, 167–182.

Maccoby, E. E., & Martin, J. A. (1983). Socialisation in the context of the family: Parent-child interaction. In E. M. Hetherington (Ed.), *Handbook of child psychology, vol IV: Socialisation, personality and social interaction*. New York: Wiley.

McClelland, M. M., Acock, A. C., Piccinin, A., Rhea, S. A., & Stallings, M. C. (2013). Relations between preschool attention span-persistence and age 25 educational outcomes. *Early Childhood Research Quarterly, 28*(2), 314–324.

McGrath, H., & Noble, T. (2010). Supporting positive pupil relationships: Research to practice. *Educational and Child Psychology, 27*(1), 79.

Mercer, N., & Littleton, K. (2007). *Dialogue and the development of children's thinking: A socio-cultural approach*. London: Routledge.

Minervino, J. (2014). *Lessons from research and the classroom: Implementing high-quality pre-k that makes a difference for young children*. Seattle: Bill & Melinda Gates Foundation.

Montessori, M. (1912). *The Montessori method*. New York: Frederick A. Stokes Company.

OECD. (2012). *Starting strong III – a quality toolbox for early childhood education and care*. Paris: OECD Publishing.

OECD. (2014). *Education at a glance 2014: OECD indicators*. Paris: OECD Publishing.

Ornstein, P. A., Grammer, J. K., & Coffman, J. L. (2010). Teachers' "Mnemonic Style" and the development of skilled memory. In H. S. Waters & W. Schneider (Eds.), *Metacognition, strategy use & instruction*. New York: The Guilford Press.

Perlman, M., Zellman, G. L., & Le, V.-N. (2004). Examining the psychometric properties of the Early Childhood Environment Rating Scale-Revised (ECERS-R). *Early Childhood Research Quarterly, 19*, 398–412.

Perry, N. (1998). Young children's self-regulated learning and contexts that support it. *Journal of Educational Psychology, 90*(4), 715–729.

Pomerantz, E. M., & Eaton, M. M. (2001). Maternal intrusive support in the academic context: Transactional socialization processes. *Developmental Psychology, 37*(2), 174–186.

Ponitz, C. C., McClelland, M. M., Matthews, J. S., & Morrison, F. J. (2009). A structured observation of behavioral self-regulation and its contribution to kindergarten outcomes. *Developmental Psychology, 45*(3), 605.

Schaffer, H. R. (2004). *Using language. Ch. 9 in Introducing child psychology*. Oxford: Blackwell.

Schunk, D. H., & Zimmerman, B. J. (1994). *Self-regulation of learning and performance: Issues and educational applications*. Hillsdale: Lawrence Erlbaum Associates.

Slot, P. L., Leseman, P. P. M., Verhagen, J., & Mulder, H. (2015b). Associations between structural quality aspects and process quality in Dutch early childhood education and care settings. *Early Childhood Research Quarterly, 33*, 64–76.
Slot, P., Lerkkanen, M-K. & Leseman, P. (2015a). *Report D2.2: The relations between structural quality and process quality in European early childhood education and care provisions: Secondary analyses of large scale studies in five countries*. Report on Curriculum Quality Analysis and Impact Review of European ECEC (CARE). European Commission.
Steiner, R. (1981). *The education of the child in the light of anthroposophy* (2nd ed.). London: Rudolph Steiner Press.
Stevenson, M., & Crnic, K. (2012). Intrusive fathering, children's self-regulation and social skills: A mediation analysis. *Journal of Intellectual Disability Research, 57*(6), 500–512.
Sylva, K., Melhuish, E. C., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2004). *The effective provision of pre-school education (EPPE) project: Technical paper 12 – The final report: Effective pre-school education*. London: DfES/Institute of Education, University of London.
Tizard, B., & Hughes, M. (1984). *Young children learning*. London: Fontana.
Vallotton, C., & Ayoub, C. (2011). Use your words: The role of language in the development of toddlers' self-regulation. *Early Childhood Research Quarterly, 26*(2), 169–181.
Vandell, D. L., Belsky, J., Burchinal, M., Steinberg, L., Vandergrift, N., & NICHD ECCRN. (2010). Do effects of early child care extend to age 15 years? Results from the NICHD study of early child care and youth development. *Child Development, 81*, 737–756.
Veenman, M. V. J., & Spaans, M. A. (2005). Relation between intellectual and metacognitive skills: Age and task differences. *Learning and Individual Differences, 15*, 159–176.
Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
Whitebread, D. (2012). *Developmental psychology and early childhood education*. London: Sage.
Whitebread, D., & Basilio, M. (2012). The emergence and early development of self-regulation in young children. *Profesorado: Journal of Curriculum and Teacher Education Monograph Issue: Learn to Learn. Teaching and evaluation of self-regulated learning, 16*(1), 15–34.
Whitebread, D., Anderson, H., Coltman, P., Page, C., Pino Pasternak, D., & Mehta, S. (2005). Developing independent learning in the early years. *Education, 3-13*(33), 40–50.
Whitebread, D., Bingham, S., Grau, V., Pino Pasternak, D., & Sangster, C. (2007). Development of metacognition and self-regulated learning in young children: The role of collaborative and peer-assisted learning. *Journal of Cognitive Education and Psychology, 6*, 433–455.
Whitebread, D., Coltman, P., Pino Pasternak, D., Sangster, C., Grau, V., Bingham, S., Almeqdad, Q., & Demetriou, D. (2009). The development of two observational tools for assessing metacognition and self-regulated learning in young children. *Metacognition and Learning, 4*(1), 63–85.
Whitebread, D., Jameson, H., & Basilio, M. (2015a). Play beyond the foundation stage: Play, self-regulation and narrative skills. In J. Moyles (Ed.), *The excellence of play* (4th ed., pp. 84–93). Maidenhead: Open University Press.
Whitebread, D., Pino-Pasternak, D., & Coltman, P. (2015b). Making learning visible: The role of language in the development of metacognition and self-regulation in young children. In S. Robson & S. Quinn (Eds.), *The Routledge International handbook of young Children's thinking and understanding* (pp. 199–214). London: Routledge.

Chapter 14
Neuroscience and Early Childhood Education

Lysandra Sinclaire-Harding, Laura Vuillier, and David Whitebread

Abstract Research in neurobiology and cognitive psychology has travelled a great distance in its journey to shed light on child development. The remarkable tools of brain imaging; powerful methods for measuring cognition, emotion and learning; and discoveries for genetics have opened vast opportunities for this emerging field. Governments around the world are investing enormous sums of money in understanding differences, disorders and diseases of the brain, and there is huge potential for science to inform us about child development. What enables a child to acquire the skills to read, write and calculate? Why do some children struggle to engage in learning opportunities and require additional support to adapt their behaviour to the social learning environment of the classroom? This chapter provides evidence from neuroscience and cognitive psychology related to how early experience lays a foundation for the range of student behaviours and capabilities educators witness each day in class. Research theory relevant to teaching practice is discussed in respect of the development of particular functions and processes required for early childhood, including literacy and number acquisition, regulating and sustaining attention and managing emotions and behaviour. Early years practitioners are challenged to consider the design of learning environments that optimise effective learning and encourage healthy development.

Keywords Neuroscience • Education • Child development

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For any teacher, standing in front of a class of young people and preparing to respond to their persistent needs and questions is a daunting task. Early years teachers have a special responsibility, not just as educators but also as providers of responsive childcare. During their early years of schooling, parents and policymakers expect children to be taught number, letter and sound recognition. In addition to these fundamental skills, early years practitioners are also expected to teach children to fasten their own coat, await their turn and match each foot to the correct shoe.

Whilst teacher knowledge, experience and confidence are gained over years of practice, the needs of children are constantly evolving in response to transformations in the social and economic environment within which they are growing up. Family structure, gender roles, parental working hours, technical innovations and increasing cultural diversity (Shonkoff 2003) are all factors that influence the development of our children. Keeping apace with such changes and the impact they have on the care and learning needs of young people presents both challenge and opportunity for practitioners.

Research from neurobiological and behavioural scientists reveals new perspectives for educators on the impact of these social variables on child development and has led to growing excitement about the potential for how an understanding of developing brain architecture and functionality might impact upon pedagogical practices (Pickering and Howard-Jones 2007). Whilst new findings from the laboratory have clear potential, their usefulness to teachers is not immediately obvious and, for benefits to materialise, requires educators that are both curious to engage and cautious in their interpretations.

In support of this ambition, this chapter will summarise the key neuroscientific contributions to psychological explanations for how biology and experience combine to shape the foundations for learning. To begin, an introduction to the neurobiological prerequisites for healthy development will be presented, together with explanations for how loving, secure and responsive human relationships joined with enriched, playful environments support the development of the curious, thriving child.

In recognition of the concerns and priorities of early years practitioners, some of the known biological factors associated with difficulties in literacy and number acquisition will be considered alongside problems of a social and emotional nature often observed in the early years classroom, including those that occur as a result of significant life stress or unstable family relationships. Throughout this chapter, some of the misconceptions of neuroscientific interpretations for education will also be exposed.

A child's first few years are powerful indicators of how they will fare in later life. In acknowledgement and support of early child development, this chapter concludes with some suggestions for how practitioners can provide the kinds of relationships and secure, playful environments which form positive foundations for future achievement.

14.1 History and Methods of Neuroscientific Research

Since the optic nerve was first described in 500 B.C., a large volume of data on the brain has accumulated. Having emerged from neuroscience and psychology, the discipline of cognitive neuroscience is concerned with the relationship between the brain, the mind and the behaviour. The first anatomical proof of the localisation of brain function came in the 1860s from a French physician named Paul Broca. He studied the brains of patients who had lost the ability to speak after injury (lesion) to the posterior inferior frontal gyrus (Broca 1861). This region, named after Broca, is now well established as fundamental for the production of speech and language. Neuropsychology, with the analysis of brain lesions, has proven to be a great tool for understanding the relationship between the brain and behaviour. However, brain lesions are not always specific and analysing damaged brains has a limited use for understanding healthy brains. New tools and methods of noninvasive neuro-imagery techniques have proved invaluable in increasing our knowledge about the brain. There are two main techniques used in neuroscience research related to early child development and education: electroencephalography (EEG) and functional magnetic resonance imaging (fMRI).

The first recording of brain activity took place in 1929 when Hans Berger reported that by placing an EEG electrode on the scalp, one could measure the electrical activity of the human brain (Berger 1929). When matching specific events to this constant brain activity, event-related potentials (ERPs) can be measured. ERPs are employed in research interested in language, memory, response inhibition and emotion. For example, infants might be asked to listen to a series of distinct sounds whilst EEG signals from specific areas of the brain are carefully monitored. fMRI, although less precise time wise, is extremely precise in terms of location. This technique uses magnetism and radio-frequency waves to produce images of the brain. The haemoglobin in the blood flow has a different resonance when it is oxygenated to when it is not. With sufficient analysis, it is possible to visualise the parts of the brain that are working hardest to achieve a certain goal (e.g. recognise a written word) as the active region demands oxygenated blood.

14.2 Neurobiological Prerequisites for Healthy Development

The human brain begins life from just one single cell of the embryo. Contained inside this cell is a copy of the genes we inherit from each of our parents. Genes provide the instructions for creating proteins that in turn induce the cell to perform its function. At conception, these instructions are simply to divide and replicate, until the original generation of cells gives birth to others that differentiate, forming new and specialised cells. Once formed, they quickly migrate to their designated cortical region where they will form connections with other neurons.

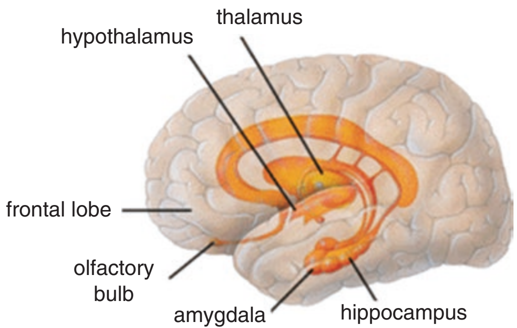

Fig. 14.1 *'The Emotional Nervous System'* (Boeree 2011)

The early signs of brain activity appear within the first few weeks in utero. The initial collection of neural cells roll up into a tube that will form the spinal cord (Stiles 2008). Cells at the head of this tube will continue to divide and expand into the fore-, mid- and hindbrain, each of which in turn gives rise to key neural structures with specific functions. Among many others, these structures include the thalamus responsible for translating sensory information to the brain, the hypothalamus for regulating thirst and appetite, the olfactory structures for smell, the hippocampus for memory, the basal ganglia for controlling movement and the amygdala for attaching emotional significance to experience (see Fig. 14.1).

Once a neuronal cell has acquired its identity, genetic signals guide it to a new destination (Gurdon 1999). Ongoing research seeks to better understand the molecular mechanisms that determine the process by which cells born deep inside the brain travel out to build the multiple layers of the cerebral cortex. Once their destination is reached, these cells grow and branch allowing new connections and networks to form. This process continues for several years, although some parts reach maturity sooner than others. For example, the connections between cells in the frontal cortex continue to grow and mature well into adulthood forming the most complex part of the brain that allows us to develop higher functions such as reasoning, perspective taking and abstract thinking.

14.3 Stimulating Environments and Neuroplasticity

Before and after the infant is born, stimulating environmental experiences trigger the growth of neuronal fibre connections (axons, synapses and dendrites). Initially, a far greater number of connections are grown, many more than will be retained into adulthood. This proliferation, occurring between 4 and 12 months (Goswami 2004), creates immense potential for the developing brain. Infants begin life with a nervous system wired for infinite possibilities but such a surplus is inefficient. The young brain consumes 50% more energy than the adult brain (Klingberg 2013), and this demand cannot be sustained into adulthood. As a child grows up and responds to the demands of his or her particular world, competition occurs between nerve cells that

will determine which neurons and neuron connections will survive. One aspect of this occurs as synapses compete for potential binding sites on receiving neurons. As connections engage, a chemical signal is stored, and if stimulated regularly, this will stabilise over time (Corrigall and Wilkinson 2003). These useful connections contribute to functional networks that remain and grow stronger whilst those that are unused, perish and disappear (Courchesne et al. 1994).

At around 8 months old, the infant brain begins to protect itself through a process called myelination. Likened to the plastic insulating layer that protects electrical cabling, many layers of the myelin membrane form around the developing axons. Not only does the myelin protect the brain cells, it also supports their communication by accelerating transmission signals. The frontal cortex is the last area to be myelinated, occurring well into childhood and coinciding with the development of advanced coordinated skills such as walking, talking and abstract thinking.

Some aspects of human development, such as eye colour and skin colour, are genetically predetermined and occur independently of any external influences or learning experiences. Other aspects, including the visual and auditory systems, are described as experience expectant. The infant's gradual introduction to the complex sights and sounds of early experience acts as a catalyst without which eye coordination, colour differentiation and discrimination between sounds would not naturally occur as neural pathways would remain disorganised (Greenough and Black 1992). The developing brain 'expects' and relies on these typical experiences for growth. For example, visual impairments may arise in infants that experience prolonged visual deprivation from congenital cataracts (Goswami 2004). Similarly, children affected by middle ear infections during the first 3 years of life are likely to find it difficult to discriminate between the distinct units of sound that are important for later speech and language acquisition (Roberts et al. 2004).

Experience-dependent aspects are those that develop in response to the specific features or demands of the environment. This type of brain development can be fostered throughout life and is unique to each child and the environment in which they are raised. For example, a young child that learns to master a stringed instrument will develop specific neural connections as a consequence (Pantev et al. 2003). Studies that investigate how experience modifies brain structure and function have found such modifications following experience as diverse as juggling (Draganski et al. 2004), music training (Elbert et al. 1996), video game playing (Green and Bavelier 2008) and a career in taxi driving (Maguire et al. 2000).

14.4 Language Acquisition

The way in which children acquire language reflects this early adaptation to the needs of everyday experience, and in early childhood, the acquisition of speech and language is the focus of intense study using neuroscience technologies. The world's languages contain around 600 consonants and 200 vowels (Ladefoged 2004), yet each language generally uses only 40 distinct units of sound or phonemes.

Early behavioural studies demonstrate that newborns have the ability to detect differences between phonetic contrasts used in all the world's languages (Eimas et al. 1971; Streeter 1976). This capacity is fine-tuned as the young child is exposed to distinct units of speech and, over time, develops into a language-specific phonetic capacity (Kuhl and Riveral-Gaxiola 2008).

One series of studies in America investigated the impact of exposure to a second language using behavioural (Kuhl et al. 2003) and brain measures (Kuhl and Rivera-Gaxiola 2008). Researchers invited native speakers of Mandarin to talk and read to 9-month-old infants of English-speaking parents. After 12 sessions listening to the Mandarin speakers, the infants' sensitivity to a range of Mandarin phonetic units was tested. The children who had spent time with the Mandarin speakers were able to recognise the Mandarin-specific phonetic units compared to a control group who had listened only to English (Kuhl et al. 2003). These studies went on to show that without continued exposure, the acquired sensitivity to Mandarin speech sounds declined over time (Kuhl 2004), perhaps reflecting the initial proliferation of specific connections in brain regions that provide the foundations for foreign language acquisition and the subsequent decline from the lack of use.

Research that explains the process by which infants acquire language has resulted in speculation about whether there are critical or sensitive periods for language development. A common misconception has arisen from such discussions, suggesting that a 'critical period' exists for learning foreign languages and that, once this biological window is missed, the opportunity to learn is lost. However, it is now known that the mature adult brain is able to generate new neurons (Eriksson et al. 1998) and that brain development continues on into maturity. A number of studies have shown that native-speaking levels can be achieved with sufficient motivation at any age (see Marinova-todd et al. 2000 for a review). So whilst there does appear to be a sensitive period for which young children possess some advantages in the early learning of a second language, it cannot be said that if exposure does not occur before a certain age, then a second language may never be learnt perfectly.

14.5 Self-Regulation and Play

The research into sensitive periods for the development of speech and language has led to questions as to whether there are similar windows for developing other processes such as attention, memory and self-regulation. Early years teachers recognise the huge variability in 'school readiness' that young children exhibit in relation to acquiring new knowledge and skills. Traditionally, the priority for teachers is to develop competency in reading, writing and arithmetic, but, increasingly, teachers and researchers realise the importance of developing self-regulation for school readiness. Difficult to fully define within the scope of this chapter (but see Kopp 1982), these complicated processes that allow children to adaptively and effectively respond to their environment are termed 'self-regulation' (Bandura 1991). Self-regulation allows students to understand and regulate their own thoughts, behaviours and

feelings and organise this knowledge towards taking greater responsibility for their independent learning. Researchers and teachers are discovering how capable preschoolers are at learning such skills.

In the early years, a child that stops playing when asked and begins cleaning up, seeks support when needed or shares a toy with a classmate is one that is learning to self-regulate, i.e. to evaluate cues from self and others, to adapt their behaviour in response to the demands of the situation and to initiate or cease a behaviour even if he or she does not want to do so (Maxwell et al. 2009). Proficient self-regulators can control their impulses and attention; they can plan, set goals, organise, monitor and self-evaluate at various points during their learning. These students are found to have the most success in school and life (Meltzer 2011). When obstacles are encountered such as a set of confusing instructions, distraction from peers or suboptimal learning conditions, competent self-regulators proactively seek out information and advice, find supportive friends and places that will help them engage, sustain attention and utilise appropriate learning strategies (Zimmerman 1990).

Early signs of self-regulation can be seen in the first weeks of life. Newborns are able to reduce levels of stimulation by turning away from the source, closing their eyes and eventually engaging in self-soothing activities such as thumb sucking (Kopp 1982, 1989). An important aspect of nurturing relationships is that the infant's caregiver provides a stimulating environment that changes in response to the infant's moods and interests. Whilst infants are developing their capacity to regulate their own arousal and impulses in response to this stimulation, they require help to co-regulate emotional reactivity and behavioural response from a sensitive parent or caregiver. As they develop, most children begin to self-regulate without prompts or assistance, learn how to manage incoming information, choose what to attend to and select appropriate responses (as well as control unhelpful impulses), whilst maintaining a level of arousal that allows them to actively participate in learning and to cope with challenging events (Sroufe 1996). Early years teachers play a vital role in helping children to develop these foundational skills of self-regulation that makes future learning possible.

There is growing evidence for how self-regulation can be taught in the classroom from researchers and practitioners exploring the developmental benefits of play (Diamond et al. 2007). In the 1940s, researchers began to consider the impact of growing up in playful and stimulating environments compared to deprived or disadvantaged conditions. Due to the difficulties of such research with humans, most knowledge has accumulated from studies with animals. Mark Rosenzweig at the University of California designed a paradigm in which groups of rats or mice were raised in large cages containing numerous toys such as tunnels, steps, exercise wheels and objects for the animals to explore (Rosenzweig et al. 1962). The physical activity of the enriched, playful environment was found to have a positive impact on learning and memory (Markham and Greenough 2004).

Researchers distinguish between different types of play: physical play, intellectual play and social/emotional play (Moyles 1989). Neuroscience demonstrates that playful experience stimulates growth of neurons and synaptic activity in the brain. The relationship between play and brain size has been compared in different animal

species (e.g. Iwaniuk et al. 2001), and animals with larger brains are more likely to engage in play than smaller-brained animals because more complex behaviour requires more neural tissue (Jerison 1973). Comparative studies have shown that particular parts of the brain are enlarged in response to specific types of play. For example, the amygdala and hypothalamus increased in anatomical volume with social play but not with object play (Pellis and Pellis 2009).

In humans, researchers have shown that children growing up in deprived, understimulated environments suffer from cognitive delays or deficits (e.g. Beckett et al. 2007), but as yet, no single factor has been identified to explain the full effect of an enriched play environment (Klingberg 2013). This may in part be due to the inherently spontaneous and unpredictable nature of play, which hinders the controlled definition and measurements necessary for scientific research (Whitebread 2012). Yet the empirical evidence from cognitive psychology for the benefits of childhood play is accumulating (see Bingham & Whitebread, this volume), and so in spite of the challenges, neuroscientists continue to seek explanations for how human brain mechanisms are modified as a consequence of childhood play (e.g. Pellis et al. 2010).

At least as far as laboratory animals have shown, neuroscience demonstrates that in different structures of the brain, enriched environments stimulate the growth of neurons and synaptic activity. These include the auditory cortex (Greenough et al. 1973), hippocampus (Fiala et al. 1978), amygdala (Nikolaev et al. 2002) and basal ganglia (Comery et al. 1995). Such effects have often been used to justify educational toys, cognitive training or early schooling for very young children. Many scholars refute the validity of these interpretations. DeLoache et al. (2010) conducted a study looking at children's increase in vocabulary from watching a DVD specifically designed for this purpose. In fact, they found that children's vocabulary increased when the parents, instead of the baby media, were teaching them the same words. Such misconceptions seem to have come from animal studies demonstrating that a complete absence of stimulation impairs the development of brain structures and that enriched environments stimulate the growth of neurons and synapse activity (Comery et al. 1995; Fiala et al. 1978; Greenough et al. 1973). However, caution is necessary. These studies do not justify the intense (over) use of educational toys and cognitive training in humans. Furthermore, overstimulation (stress) can also have a detrimental impact on development (Shonkoff 2011), and as yet, we have no idea what a recommended daily dose of stimulation might be.

What is clear are the beneficial effects of a stimulating, playful environment for young children's development as self-regulated learners. In the early years, children learn self-regulation best when they – rather than adults – set, negotiate and follow the rules (Sylva et al. 1976). Children who attend preschools that emphasise informal play-based learning, rather than academic achievement, are found to achieve higher scores on measures of self-regulation (Hyson et al. 2006). Pretend or dramatic play and games with rules are found to be particularly effective activities for developing self-regulation in the early years (Bodrova and Leong 2008).

For many children, school is the first and only place in which they learn to regulate themselves, and thus activities that provide opportunities to rehearse self-regulation in the early years are fundamentally important. As the child matures,

these necessary self-regulatory skills act as foundational precursors from which develops the child's capacity to learn via formal instruction, concentrated reading, writing and problem-solving activities.

14.6 Social Relationships and Emotional Development

As has been discussed, the process of brain development is constantly modified by the external environment. Undoubtedly, the most significant aspects of the environment to influence the infant's development are their relationship experiences. Secure infant-parent attachments are strongly associated with the development of social and emotional competence. Sensitive parenting provides stimulation that is gradual, nurturing, predictable, repetitive and attuned to the child's developmental stage (Perry and Pollard 1998). Nurturing that includes sensitive handling, responsive eye gaze, talking, singing, playing and reading to the child provides the security and cognitive challenges to exercise young minds and is the active ingredient to healthy brain growth. Many of these occur quite naturally, for instance, during 'parentese,' the musical sing-song talk that facilitates early sound discrimination and language development and is characteristic of parents talking to a young infant.

Caregivers do many things to stimulate development. Since young infants have not yet developed the capacity to regulate their own arousal and impulses, they require help from a sensitive caregiver to co-regulate their own emotional reactivity and behavioural response to distress, to help deal with frustration, to direct and focus attention and to restore a calm emotional state, free of anxiety (Glaser 2000). In this way, the secure infant-caregiver relationship acts as a protector from the stresses of infancy and prepares young children for the social and emotional challenges of early childhood and formal learning. Where young children feel secure and nurtured and protected from harm, we find a curious child eager to explore and embrace learning challenges.

The young mind is astonishingly active, creating new knowledge and learning experiences every day. Relationships are not just important within the immediate family; they include other relationship attachments that young children develop and depend upon during their early childhood such as with their peers and adults at school. A child's social and emotional development in early childhood is directly linked to their later ability to adapt to new social settings such as school, to form emotionally healthy relationships and to sustain attention and motivation for new learning opportunities. An infant learns to respond to emotional stimuli in part by the model demonstrated by his or her caregiver, and healthy interactions with significant adults provide the learning opportunity for appropriate social and emotional responding. Caregiving routines that provide support and structure for activities to make them manageable for a child, that stimulate playful curiosity and that sensitively respond to and manage a child's emotions, provide the optimal environment for promoting early cognitive, socio-emotional and neurobiological growth without the need for special educational toys, Mozart CDs or flashcards (Thompson 2001).

14.7 Biological Development: When Things Go Wrong

Whilst the early years have considerable opportunity for rapid growth and development, they are also the periods of greatest vulnerability where brain development can go wrong. For instance, if the neural tube of the developing embryo fails to close at the tail end, a child will be born with spinal complications such as spina bifida (Northrup and Volcik 2000). Problems with myelination of brain cells can lead to motor disorders such as multiple sclerosis (Kutzelnigg et al. 2005). The infant brain needs protection from hazardous drugs, viruses like rubella, environmental toxins, a lack of essential nutrients and sustained exposure to stress (Thompson 2001). A mother's use of alcohol during pregnancy can result in abnormal patterns of neurons found in children born with foetal alcohol syndrome (Garrett 2011), and chronic maternal stress during pregnancy and in infancy can also threaten healthy brain development due to the toxic effect of stress hormones (Talge et al. 2007).

Significant maternal stress during particularly sensitive periods of prenatal brain development is found to adversely impact learning and development. For example, in January 1998, Quebec was hit by successive storms over 7 consecutive days, described as the greatest natural disaster in Canada's history (Kerry et al. 1999). Several hundred thousand people were made homeless, among which were many pregnant mothers. The children whose mothers were in their first trimester of pregnancy when the storms hit went on to have delays in language acquisition, whereas the speech of toddlers whose mothers were further on in their pregnancy was unaffected (Laplante et al. 2004). Protecting the developing brain by keeping parental stress manageable during the first 4 to 5 months of pregnancy appears to be particularly important during this sensitive period.

Where developmental anomalies are present, the demands of the school environment may reveal a child's difficulties, and the early years educator may be the first to witness initial signs of learning or behavioural problems in the classroom. Such difficulties in language acquisition and number processing or from maladaptive behavioural, emotional and social disorders are of great concern to parents and teachers of early years children and are of enormous interest to the neuroscience research community.

14.8 Literacy Problems

Learning to read places advanced demands on the brain. The ability to process written words begins with the visual system that can recognise the lines and curves of letters and words. Regardless of whether the reading language is Arabic, Urdu or English, neuroimaging studies find that the same small area of the visual cortex (ventral occipito-temporal region) is active in response to letter strings (Dehaene 2009). As the child is taught to recognise letters and words, to link them with speech

sounds and to remember their meanings, a specialised circuit of connections is being organised within their brain. As reading skill advances, activity in this circuit increases, reflecting a functional change that allows for the production of spoken language through the visual system (Dehaene 2009). Some children in their early years struggle disproportionately with learning to read and write. Such problems may lead to a diagnosis of developmental dyslexia.

Dyslexia is of genetic origin, since it most often occurs in families. Some have suggested hormonal factors play a role, such as foetal testosterone levels during pregnancy. This interpretation is perhaps due to the large prominence of males with dyslexia, but empirical evidence is lacking (Tønnessen 1997). Several candidate genes have been isolated and implicated, and although the precise function of these genes is not fully understood (Klingberg 2013), it is believed they play a key role in influencing how the cortex is formed during development (Scerri and Schulte-Körne 2010).

Dyslexia is related to the unusual migration of neurons. Perhaps, the most significant contribution in recent decades to the neurobiology of dyslexia comes from studies of the brains of deceased men (Galaburda and Kemper 1979; Galaburda et al. 1985) and women (Humphreys et al. 1990) with developmental dyslexia. Compared to non-dyslexic brains (Kaufmann and Galaburda 1989), these studies found several congregations of displaced neuronal cells in abnormal locations. It is possible that during the migration phase of development, these neuronal cells lost their way, suggesting that particular migrating neurons fail to arrive at their correct cortical destination.

Dyslexia is often characterised by poor motor skills, balance and postural control (McPhillips and Jordan-Black 2007). Such observations have led to investigations between literacy achievement and deficits in motor coordination. Neuroimaging studies have shown unusual patterns of activation in a number of brain regions in adults with dyslexia, including the cerebellum (Sun et al. 2010). The cerebellum is one of the earliest regions of the brain to develop, beginning in the fifth week of gestation and continuing after the infant is born (Garel et al. 2011). This protracted growth means the cerebellum is vulnerable to a broad spectrum of developmental events, and abnormal cerebellar activation patterns of babies born prematurely or exposed to alcohol in utero have been associated with later difficulties with reading and writing (Stoodley and Stein 2013).

Many problems associated with dyslexia have been traced to the integration of primary reflexes, a system of coordinated movements that originates in the cerebellum (Welsh and Harvey 1992). For example, the asymmetrical tonic neck reflex (ATNR) is elicited by the rotation of the head to one side, resulting in the extension of the arm and leg on the same side whilst the opposite limbs flex. This reflex is thought to assist in the birth process and considered a precursor to coordination. Primary reflexes, such as grasping and sucking, are observed in the first few months of life and are essential to support the infant until they develop proficient motor control. As the growing infant establishes expertise with eye movements, rolling, sitting, balance, walking and running, these primary reflexes are inhibited and usually disappear (Blythe 2011). Neural connections are formed and strengthened

and muscles grow, providing increased control and range of movement. Children who retain these primary reflexes may have weak gross or fine motor skills. They may appear clumsy and have difficulties with balance and coordination. If the ATNR remains active in a school-aged child, it may interfere with balance, left-right coordination and control of the hand (Blythe 2011). Since writing is a motor task that depends on the coordination of the hands and eyes as well as the postural system, it is suggested that these motor-related skills affect reading and writing.

Several theories for dyslexia exist (for review, see Habib 2000), and neuroimaging methodologies allow researchers to distinguish between these different theories such as whether dyslexia has a visual or linguistic basis (Goswami 2004) as well as testing the impact of training interventions. For most, dyslexia reflects an impaired ability to process phonemes, and neuroimaging studies show less activation in the occipito-temporal area (Shaywitz et al. 2002). Neuroscience research has revealed the biological circuits that are enhanced as a child learns to read. This research shows that the regular teaching of how letters map onto speech sounds leads to rapid establishment of the brain's visual and phonological circuits (De Schotten et al. 2014) and provides useful support for how remedial interventions (see Singleton 2009) can optimise the reading process for children who struggle. Shaywitz and colleagues (2002) went on to show that children who undertake phonological training not only improve their reading, they also show increased activity in the posterior temporal lobe. Such findings support classroom training programmes designed to improve phoneme perception and letter coding and allow children with dyslexia to adapt and compensate for their difficulties.

In relation to identifying specific contributions that cognitive neuroscience can offer to education, dyslexia is one of the most promising and established areas of research application. Neuropsychological research has begun to show how children with difficulties can be identified in order that they can receive early intervention and, furthermore, that such intervention actually shapes the areas of the brain that are affected (Gabrieli 2009).

14.9 Number Problems

The ability to handle and process number varies across every classroom, but those children in the early years that particularly struggle with the acquisition of arithmetic skills in spite of adequate home environment, educational opportunity and normal learning ability across other school subjects may be later assessed and diagnosed with developmental dyscalculia. Although many are sceptical that children who have trouble with mathematics should be diagnosed with a disorder, there can be no doubt that some will experience great numerical difficulties, and research is underway, concerned with better understanding the relationship between mathematical skill and the brain.

Dyscalculia is highly heritable (Shalev et al. 2001), and this genetic effect appears to exist both for normal variation in mathematical ability and for those with

particular difficulties or at risk for dyscalculia (Ansari and Karmiloff-Smith 2002). Aside from the normal variation in mathematical skills, there are several medical conditions that are associated with increased risk of dyscalculia. These include epilepsy, Turner's syndrome, fragile X syndrome and extremely premature birth (Klingberg 2013). One fMRI study looked at the brains of a group of teenagers, all of whom were born prematurely and were later diagnosed with dyscalculia. These young people had thinner layers of grey matter in the intraparietal cortex (Isaacs et al. 2001) when compared to the control group. Children that are born prematurely with low birth weight seem to be at the greatest risk of facing difficulties with number processing.

One brain region that often emerges in studies of dyscalculia is the intraparietal sulcus (Rubinsten and Henik 2009). Studies of brain activity during visuospatial working memory tasks (Rotzer et al. 2009) and number magnitude processing (Price et al. 2007) find that children with dyscalculia have specific regions in the right intraparietal cortex, as well as two areas of the frontal lobe and occipital lobe that are less active compared to children without dyscalculia.

Developmental dyscalculia appears to have a similar prevalence to dyslexia, but in comparison, the neurological bases are only just beginning to be investigated. Researchers have identified three main aims for this area of research (Wilson and Dehaene 2007). The first is a neurocognitive description of dyscalculia that will allow for better identification, remediation and even prevention of dyscalculia. Based on this description, the second aim is to develop tests for accurate measurement of numerical ability. Finally, the third aim is to develop and test new interventions that will target children's core deficits.

14.10 Social and Emotional Problems

This chapter has emphasised the central role of the environment in shaping infant development. As has been discussed, secure family relationships that provide stimulation, interaction and nurture will promote adaptation and growth in neural structures that respond to the needs and demands of everyday experience. Where the conditions are less than optimal, perhaps in situations of insecure maternal attachments, chronic stress or malnourishment, the development of the child may suffer, and an absence of positive adult relationships is found to increase the risk for maladaptive behavioural and emotional problems in school settings (McCrory et al. 2010).

Ongoing research is beginning to reveal the genetic contributions that can either protect individuals or increase the risk of developing emotion or behavioural disorders such as anxiety, attention deficits or conduct disorders. Genes that are present at birth only have an effect if they are expressed, and current research efforts explore how the social environment can trigger the expression and thus effects of genes in a biological embodiment of experiences. In one such example, children with low activity of the monoamine oxidase A (MAOA) gene and who experience maltreatment

and adversity more often develop antisocial behaviours such as conduct disorder, whereas those found to have the high-activity MAOA variant seem to be protected (Caspi et al. 2002). Six-year-olds with the short version of the dopamine transporter (DAT1) gene are more impulsive and have less attention control than those with the long version of DAT1 (Rueda et al. 2005). In the classroom, such children would benefit from additional support and training to regulate their impulses and attention.

One such school-based therapeutic approach was developed in the 1970s by Marjorie Boxall, an educational psychologist in inner city London. Nurture groups (Bennathan and Boxall 2000) were set up to support the large numbers of children entering school with alarming emotional problems and disruptive behaviour and who are unable to meet the demands of kindergarten or infant school. It was Boxall's view that the problems children face in regulating their behaviour, forming relationships and responding appropriately to their peers, arose from impoverished early nurturing (Cooper and Whitebread 2007). In a secure space within the educational setting, children are encouraged to develop trusting and caring relationships with adults. From this foundation, children are able to learn prosocial skills with peers and engage in the challenges of formal curricular tasks. Studies have shown the effectiveness of nurture groups not only in improving emotional well-being but also in areas of academic achievement (Reynolds et al. 2009).

For children whose biological systems are still maturing, the greatest problems arise from the combined and cumulative effects of genetic vulnerability and negative environmental factors. These will be considered in the following section with examples from two disorders increasingly identified in early years classrooms: autistic spectrum disorder and attention deficit hyperactivity disorder.

14.11 Autistic Spectrum Disorders

Autistic spectrum disorders are characterised by impairments in social interaction, imaginative ability and repetitive, restrictive patterns of behaviour (Williams et al. 2001). The number of children diagnosed with ASD is on the rise (Baron-Cohen et al. 2009), and the disorder has been the focus of intense research over the last decade. Since the education and policymakers of many countries call for the inclusion of ASD children in classrooms with typical peers (e.g. National Research Council 2001; National Institute for Health and Clinical Excellence 2011), it is likely that most early years teachers will have the experience of supporting a child with ASD at some point in their career.

Early in their development, children begin to understand that the beliefs and intentions of others may be different from their own, and they begin to show empathy towards others who are experiencing sadness or pain. Empathy is a social skill that is fundamental to interpersonal sensitivity and successful human relationships (Gordon 2009). Baron-Cohen et al. (1985) demonstrated that children with autism had particular difficulties in understanding the beliefs of others and suggested that

they lacked a 'theory of mind' (ToM). This claim has been supported by a wealth of studies and has led some to argue that autism is caused by ToM deficits (e.g. Happe and Frith 1996; Leslie 1991 & Baron-Cohen 2000). However, others describe such explanations as unsatisfactory for a number of reasons. Firstly, ToM does not become robust in children until the age of 3 or 4. Secondly, the primary deficit is more accurately characterised as broadly socio-affective and by a lack of empathic and emotional engagement with others (Hobson 1993). Finally, ToM deficits do not well accommodate explanations for the repetitive behaviour, obsessive desire for sameness, delayed and deviant language development and difficulties perceiving or planning high levels of organisation (Williams et al. 2001).

Genetic studies have identified a number of different genes involved in ASD (Rutter 2005), and research suggests environmental triggers may collude with genetic vulnerability to increase the risk of ASD (e.g. Geschwind and Levitt 2007; Muhle et al. 2004). Some of the most well-reported findings have derived from Michael Rutter's studies of orphans who suffered extreme neglect in Romanian institutions and were then later adopted into UK families. Autistic-like behaviours were found in 9.2% of the adoptees, compared with 0% in the domestic control group of adopted children (Rutter et al. 2007). These studies followed the children from age 4 to their teenage years and found that distinctive social deficits faded away with time spent with their adoptive families.

Closely related to studies of autism, neuroscience research is interested in how learning is acquired through imitation. Research finds that repeated observations of actions (either passive or active) increase brain activity (Chong et al. 2008). It is believed that learning through imitation is made possible by a group of specific brain cells called mirror neurons (Rizzolatti and Craighero 2004). The mirror neuron system is a set of brain regions that are active both when we perform a specific action (such as clenching a fist) and when we observe this same action performed by another (Iacoboni et al. 2005). It has been suggested that through the mirror neuron system, children develop empathy, i.e. the ability to understand the actions and intentions of others (Blakemore et al. 2004; although see Dinstein et al. 2008 and Lingnau et al. 2009 for an alternative perspective).

Neuroimaging studies reveal a specific network in the typically developing human brain, near the right temporo-parietal junction, that is specifically active when people are thinking about other people's thoughts (Saxe and Wexler 2005). Children with autistic spectrum disorders are found to have anatomical differences in several areas of the brain, and research has identified their impact on learning (see Branson 2013 for review). One of the most consistent findings is that children with ASD have excess neuronal growth in infancy. This early overgrowth is followed by slowed or arrested growth in adolescence (e.g. Carper and Courchesne 2005). Furthermore, there is evidence that ASD is associated with under-connectivity within brain regions that would typically work together to accomplish tasks such as language processing, social interaction and goal-directed planning and monitoring. Many questions remain regarding autistic spectrum disorder, which early childhood teachers will appreciate in relation to the apparent variability of behaviours between children diagnosed with ASD in their classrooms.

14.12 Inattention, Impulsivity and Hyperactivity

All young children are naturally active, impulsive and easily excitable. Even excessive behaviour of this nature is most often due to immaturity and eventually outgrown. For some children, however, attention span is so short, activity levels so high and impulse control so limited that learning and social development are severely impaired (Barkley 2013). In the UK, inattention and hyperactivity are now the most common problem for children in the early years classroom (Brown and Schoon 2010). All young children have to learn sustained attention, concentration and regulation in order to control their emotional and behavioural impulses. A child with good impulse control can refrain from hitting another child during a conflict, pay attention to the teacher's instructions and wait his or her turn when playing a game.

Attention deficit hyperactivity disorder (ADHD) is a developmental disability characterised by deficits in sustaining attention and resisting distractions, behavioural impulsivity, lack of self-control and problems in regulating activity (hyperactivity or restlessness). Children with attentional deficits have greater difficulty in focusing, following tasks through to completion and sustaining effort and motivation. They are easily sidetracked, forgetful and disorganised, fail to plan ahead and have inconsistent school performance, mood swings, a quick temper and difficulties with social relationships (Barkley 2013).

Precise causes have not yet been identified but there is little question that ADHD is highly heritable. A number of genes have been identified, and it is likely that more will be as research continues. For example, the dopamine receptor (DRD4) gene is found in 50 to 60% of the ADHD population (Polanczyk et al. 2007). Stimulant drugs (such as methylphenidate), which act directly on dopamine receptors, are found to effectively reduce ADHD symptoms (Swanson et al. 2000) and have lead to the theory that dopamine has a key role in the manifestation of the disorder (Levy 1991). Where heredity does not seem to be a factor, other contributors have been identified, such as foetal exposure to alcohol and nicotine, or complications during pregnancy, difficult labour or premature birth. Research does not support popularly held views that ADHD arises from excessive sugar intake, food additives, excessive viewing of television or poor parenting (Sciutto et al. 2000; Barkley 2013) although such factors can contribute unhelpfully. It seems that a combination of early environmental factors, together with certain genetic susceptibility, is required for the full ADHD to emerge.

Neuroscience research is working towards a more complete understanding of the neurobiological and chemical processes involved in the development and regulation of attention. Since many questions remain about these mechanisms in normal, healthy development, it is difficult to know all that can go wrong. However, whilst the exact brain mechanisms that underpin attentional deficits have yet to be fully explained, neuroimaging and genetic studies have revealed some anomalies. A number of imaging studies have demonstrated that in children with ADHD, the size of specific anatomical structures (prefrontal cortex, basal ganglia and cerebellum) is found to be significantly smaller than in typical children (Castellanos et al. 2002).

These structures are found to be especially rich in dopamine receptors which have led to the hypothesis that the underlying problem for children with ADHD is related to dysregulation of the dopamine signalling system (Swanson et al. 2000).

With much uncertainty about the disorder, many questions exist regarding the most effective treatment for ADHD. Interventions are conceived around finding a means for the child to accommodate, cope with and compensate for their developmental difficulties and may include medications that can provide relief from symptoms (Barkley 2002). The main psychosocial treatments with proven efficacy for the management of ADHD include (1) parent training in child behaviour management (Barkley 1997), (2) teacher training in classroom management (DuPaul and Eckert 1997) and (3) combined pharmacological and behavioural treatments (Carlson et al. 1992). Few studies on psychosocial interventions for ADHD have conducted follow-up re-evaluations on the maintenance of treatment gains over time and across different school and home settings. In time, replication and follow-up studies will provide more conclusive recommendation for non-medication interventions.

Due to the difficulties with defining the causes of ADHD and the increasing certainty that causes are both biological and social, many questions arise over the prevalence of diagnosis and the ethics of treating children with stimulant drugs. At the time of writing, ADHD is one of the most heavily invested areas of research in childhood mental health. Over the next decade, it is likely that this research will increase our understanding of both the causes and nature of the disorder. Findings from this investment may even suggest new variants or subtypes of ADHD. For example, clinicians have begun to describe a different type of attention disorder named sluggish cognitive tempo (SCT). Those affected are described as daydreamers, acting as if they are in a mental 'fog,' staring frequently, seemingly sleepy and not attending to events around them and with slow processing speed and reaction times (Palmer and Finger 2001). Although they share similar attentional deficits, these children are not impulsive or hyperactive like those with ADHD, but actually lethargic and slow-moving compared to their peers. Unlike children with ADHD, they are likely to be quiet whilst working, yet not fully processing the task and its instructions (Barkley 2013).

Much of the discussion here in relation to inattention and impulsivity involves under control, i.e. impulsive children. However, at the other extreme is the child who may be overcontrolled, inhibited and anxious. Studies have shown that self-control is not always positive. For example, shy 2-year-olds rated as having high self-control are found to be more socially withdrawn and less socially competent (Fox et al. 2008). These children may be less visible in the classroom than the hyperactive, impulsive child as they are highly skilled at controlling their activity, nevertheless, they may suffer disruptions to attention processes, due to the potential for bias or preoccupation towards negative emotions or upsetting events (for a discussion on this topic, see Mathews et al. 1997). Current diagnostic criteria for ADHD do not yet fully accommodate such overlapping but distinct symptoms of attention deficit, and it is hoped that ongoing research will provide much needed understanding and support for those affected.

One intriguing area of promise for training attention and self-regulation arises from a programme developed by Helen Neville at the University of Oregon, from which promising preliminary findings have recently been published. Her research rests on the theory that early environmental enrichment in the form of intervention can protect and enhance the potentially vulnerable neurocognitive systems in children with or at risk for developmental deficits. Neville found that children from low socioeconomic status families were less likely to be able to sustain attention due to their difficulties with suppressing or ignoring distractions (Stevens et al. 2009). Children and parents of families whose children were enrolled in Head Start (a federally funded programme for preschoolers living below the poverty line) received attention-training exercises each week for 8 weeks (Neville et al. 2013). The activities target aspects of self-regulation, including vigilance, selective attention and task switching. For example, one selective attention exercise requires the child to focus their attention (e.g. colouring within the lines of detailed figures) whilst simultaneously suppressing distractions (e.g. ignoring other children balancing balloons in the air around them). Over 8 weeks, the activities became increasingly more challenging and similar to classroom situations. Positive changes were observed in the neural regions activated during selective attention tasks as well as in measures of cognition, language and behaviour and even positive changes in the parents themselves (Neville et al. 2013). Long-term benefits have still to be ascertained but are likely to emphasise the fundamental requirement to involve the parents in the child's training as a key component to enriching the environment of the child at risk of developmental deficits.

14.13 What Future for Neuroscience and Education?

Educational and neuroscience research shares the same purpose: to understand how the brain perceives, learns and adapts. Unsurprisingly, governments around the world are investing enormous sums of money in understanding the brain, its disorders and diseases. Out of concern for improving standards of achievement in schools, collaborative research between neuroscience and education is underway, and much has already been written about the applicability of neuroscience to the classroom. This chapter has identified some of the areas where cognitive neuroscience is influencing views on child development and learning.

The brain is fascinating and teachers are right to be excited about advances in neuroscience. For better or worse, teaching has long been dominated by political opinion and preferences that demand teachers to regularly implement new policy or curricula changes that they may have had little part in evaluating prior to implementation. Research among teachers has established a high level of enthusiasm for the role of neuroscience in education (Pickering and Howard-Jones 2007). This enthusiasm may result in the expeditious adoption of new teaching methods without thorough investigation of applicability in classrooms. In one illustrative example, many schools in the UK rapidly adopted Brain Gym®, a commercial package that

prescribes a series of simple body movements. These claim to enhance learning by accessing areas of the student's brain previously inaccessible or unavailable (Cohen and Goldsmith 2000). Suggestions that children can prepare the visual system for reading and writing by pressing 'brain buttons' located under the ribs are misleading, and scientists warn against overliteral or misinterpretation of scientific theory (Goswami 2006).

The role of the scientist is to test ideas and develop theory. For application of theory into effective, evidence-based intervention, educators are required to become critical consumers of cognitive neuroscience research (Ansari and Coch 2006). These educators in their capacity as professional practitioners are able to interrogate scientific research, interpret its relevance and application for their individual context and develop pragmatic strategies to promote learning according to the unique contextual environment in which they teach.

Perhaps one of the most significant contributions neuroscience is likely to have for education is in the early identification of learning difficulties. Schools provide the possibility for intervention via the creation of secure classroom environments in which children with difficulties can be identified and targeted (e.g. Wyman et al. 2010). This chapter has attempted to provide scientific explanations and understanding for teacher's observations of how individual children arrive in school in various states of readiness for the acquisition of new skills and knowledge. Some are easy to engage and motivate, are delightfully curious about a learning challenge and seem to effortlessly absorb facts and manage social conflict. Others in the extreme are oppositional, hard to motivate and for whom perseverance is fragile and conduct easily disrupted.

Parents may be unwilling or unable to provide much background detail for class teachers that might explain potential causes of learning difficulties or worrying behaviour. Without understanding the possible causes of such problems, or what they might suggest for potential outcomes in later life, classroom interventions to initiate positive change are often discovered through trial and error. In the future, we hope neuroscience will support educators in the early detection of adverse environmental inputs on young children's classroom behaviour and their potential effects on the development of self-regulated, socially competent individuals.

14.14 Implications for Early Years Education

This chapter has set out to emphasise the influence of the environment on developmental outcomes. At the molecular, genetic and neural levels, science has begun to show how and why young children do not simply follow fixed developmental trajectories. Neuroscience reveals how inputs from both genes and environment contribute progressively to development. Except in extreme cases of biological disorder, few genetic predispositions are static and without influence.

In the autumn of 2009, a team of researchers in the USA recruited 18 children all of whom were about to begin their first year of school. Collectively, these 5-year-olds

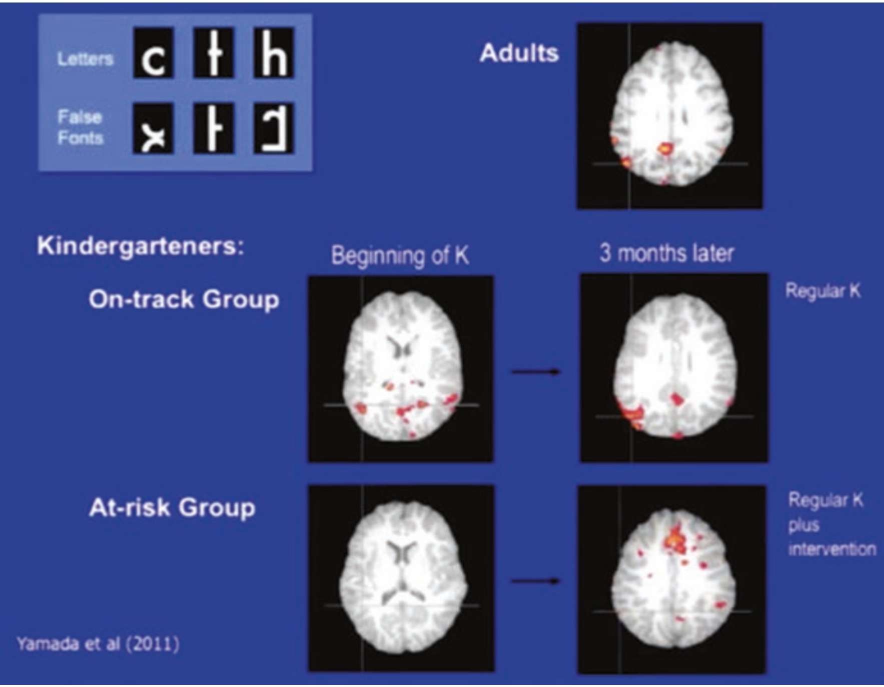

Fig. 14.2 Neural activations of on-track and at-risk children in kindergarten during literacy development (from Yamada et al. 2011)

represented a diverse range of preliteracy ability such as might typically be found in any early years classroom. The researchers wanted to compare the neural network in beginning readers to that of the mature, fluent adult (Turkeltaub et al. 2003). Whilst in the fMRI scanner, children were asked to press a button each time a letter was repeated twice in a row (Yamada et al. 2011). The children then began a regular half-day kindergarten curriculum, which included early literacy instruction.

After one semester of schooling, the children were invited back to the scanner to repeat the test. When asked to identify letter formations, just like adults, the on-track, typically developing children demonstrated activation in a region of the left angular gyrus. After just 3 months, these children's neural activations began to more closely resemble that of the mature literate adult. In other words, the instruction they were receiving from their school teachers had a direct impact on the specialisation of the neural networks required to support literacy.

By contrast, the individuals identified as less mature, less proficient and 'at risk' of reading difficulties were instead seen to recruit compensatory neural tissue in frontal regions, even after they had received supplementary reading intervention (see Fig. 14.2). On entry to kindergarten, these children were also seen to have more limited attention and self-regulatory skills (Yamada et al. 2011). Such prefrontal activation patterns during letter recognition tasks are explained by the necessary

additional neural workload involved for these children in recruiting effortful attention, motivation and cognitive resources for reading.

Children whose prenatal development proceeds without complication and who are raised into secure, loving and responsive families are most likely to be ready for school and able to respond positively to the early learning environment described in this study. However, not all children are physically and emotionally ready for school at the time they arrive in the early years classroom. The role and responsibility of the early years educator in a young child's life cannot therefore be overemphasised, not only to provide varied and stimulating opportunities to accelerate learning but also to mitigate the impact of adverse early experiences in order to prevent impairment (Shonkoff and Levitt 2010). In much the same way that we know that obstructions to hearing or vision need to be removed whilst neural networks are developing, how can we reduce the emotional and behavioural barriers that undermine the acquisition of early literacy or numeracy skills? Whilst an adverse environment may result in problem behaviours, the opposite is true of a warm, secure and supportive environment. Neuroscience provides every reason for teachers to believe that in the early years classroom, in which a child receives daily contact with warm and supportive adults and peers, the opportunity is for vulnerable children to draw upon these resources whilst the brains of these young people are still flexible and open to learning. Social and cognitive stimuli can be processed adaptively, and unhelpful behaviours can be extinguished through sensitive encouragement and contingent support.

References

Ansari, D., & Coch, D. (2006). Bridges over troubled waters: Education and cognitive neuroscience. *Trends in Cognitive Sciences, 10*(4), 146–151.

Ansari, D., & Karmiloff-Smith, A. (2002). Atypical trajectories of number development: A neuroconstructivist perspective. *Trends in Cognitive Sciences, 6*(12), 511–516.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes, 50*(2), 248–287.

Baron-Cohen, S. (2000). Theory of mind and autism: A fifteen year review. In S. Baron-Cohen, H. Tager Flusberg, & D. Cohen (Eds.), *Understanding other minds* (Vol. 2). Oxford: Oxford University Press.

Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a "theory of mind". *Cognition., 21*, 37–46902.

Baron-Cohen, S., Scott, F. J., Allison, C., Williams, J., Bolton, P., Matthews, F. E., & Brayne, C. (2009). Prevalence of autism-spectrum conditions: UK school-based population study. *The British Journal of Psychiatry, 194*(6), 500–509.

Barkley, R. A. (1997). *Defiant children: A clinician's manual for assessment and parent training*. New York: Guilford Press.

Barkley, R. A. (2002). Psychosocial treatments for attention-deficit/hyperactivity disorder in children. *Journal of Clinical Psychiatry, 63*, 36–43.

Barkley, R. A. (2013). *Taking charge of ADHD: The complete, authoritative guide for parents*. New York: Guilford Publications.

Beckett, C., Maughan, B., Rutter, M., Castle, J., Colvert, E., Groothues, C., & Sonuga-Barke, E. J. (2007). Scholastic attainment following severe early institutional deprivation: A study of children adopted from Romania. *Journal of Abnormal Child Psychology, 35*(6), 1063–1073.

Bennathan, M., & Boxall, M. (2000). *Effective intervention in primary schools: Nurture Groups* (2nd ed.). London: David Fulton.

Berger, H. (1929). Ueber das Elektrenkephalogramm des Menschen. *Archives fur Psychiatrie Nervenkrankheiten, 87*, 527–570.

Blakemore, S. J., Winston, J., & Frith, U. (2004). Social cognitive neuroscience: Where are we heading? *Trends in Cognitive Sciences, 8*(5), 216–222.

Blythe, S. G. (2011). Neuro-motor maturity – developmental readiness. *Team Around the Child Journal, 4*(12), 1–12.

Bodrova, E., & Leong, D. J. (2008). Developing self-regulation in kindergarten. *Young Children, 63*(2), 56–58.

Boeree, G. C. (2011). *The emotional nervous system*. General Psychology. Downloaded on 24th March, 2015, from: http://webspace.ship.edu/cgboer/genpsy.html

Branson, D. (2013). Brain differences in children with autism spectrum disorders and subsequent impact on learning. In L. H. Wasseman & D. Zambo (Eds.), *Early childhood and neuroscience – Links to development and learning* (pp. 121–139). Dordrecht: Springer.

Broca, P. (1861). Remarks on the seat of the faculty of articulated language, following an observation of aphemia (loss of speech). *Bulletin de la Société Anatomique, 6*, 330–357.

Brown, M., & Schoon, I. (2010). Child behaviour. In K. Hansen, E. Jones, H. Joshi, & D. Budge (Eds.), *Millennium Cohort Study Fourth Survey: A User's Guide To Initial Findings*. London: Centre For Longitudinal Studies.

Carlson, C. L., Pelham Jr., W. E., Milich, R., & Dixon, J. (1992). Single and combined effects of methylphenidate and behavior therapy on the classroom performance of children with attention-deficit hyperactivity disorder. *Journal of Abnormal Child Psychology, 20*(2), 213–232.

Carper, R. A., & Courchesne, E. (2005). Localized enlargement *o*f the frontal cortex in early autism. *Biological Psychiatry, 57*(2), 126–133.

Caspi, A., McClay, J., Moffitt, T. E., Mill, J., Martin, J., Craig, I. W., Taylor, A., & Poulton, R. (2002). Role of genotype in the cycle of violence in maltreated children. *Science, 297*, 851–854.

Castellanos, F. X., Lee, P. P., Sharp, W., Jeffries, N. O., Greenstein, D. K., Clasen, L. S., Blumenthal, J. D., James, R. S., Ebens, C. L., Walter, J. M., Zijdenbos, A., Evans, A. C., Giedd, J. N., & Rapoport, J. L. (2002). Developmental trajectories of brain volume abnormalities in children and adolescents with attention-deficit/hyperactivity disorder. *JAMA: The Journal of the American Medical Association, 288*(14), 1740–1748.

Chong, T. T. J., Cunnington, R., Williams, M. A., Kanwisher, N., & Mattingley, J. B. (2008). fMRI adaptation reveals mirror neurons in human inferior parietal cortex. *Current Biology, 18*(20), 1576–1580.

Cohen, I., & Goldsmith, M. (2000). *Hands on: How to use Brain Gym® in the classroom*. Sea Point: Hands On Books.

Comery, T. A., Shah, R., & Greenough, W. T. (1995). Differential rearing alters spine density on medium-sized spiny neurons in the rat corpus striatum: Evidence for association of morphological plasticity with early response gene expression. *Neurobiology of Learning and Memory, 63*(3), 217–219.

Cooper, P., & Whitebread, D. (2007). The effectiveness of nurture groups on student progress: Evidence from a national research study. *Emotional and Behavioural Difficulties, 12*(3), 171–190.

Corrigall, J., & Wilkinson, H. (Eds.). (2003). *Revolutionary connections: Psychotherapy and neuroscience*. London: Karnac Books.

Courchesne, E., Chisum, H., & Townsend, J. (1994). Neural activity-dependent brain changes in development: Implications for psychopathology. *Development and Psychopathology, 6*, 697–697.

Dehaene, S. (2009). *Reading in the brain*. New York: Penguin.

DeLoache, J. S., Chiong, C., Sherman, K., Islam, N., Vanderborght, M., Troseth, G. L., Strouse, G. A., & O'Doherty, K. (2010). Do babies learn from baby media? *Psychological Science, 21*(11), 1570–1574.

De Schotten, M. T., Cohen, L., Amemiya, E., Braga, L. W., & Dehaene, S. (2014). Learning to read improves the structure of the arcuate fasciculus. *Cerebral Cortex, 24*(4), 989–995.

Diamond, A., Barnett, W. S., Thomas, J., & Munro, S. (2007). Preschool program improves cognitive control. *Science, 318*(5855), 1387–1388.

Dinstein, I., Gardner, J. L., Jazayeri, M., & Heeger, D. J. (2008). Executed and observed movements have different distributed representations in human aIPS. *The Journal of Neuroscience, 28*(44), 11231–11239.

Draganski, B., Gaser, C., Busch, V., Schuierer, G., Bogdahn, U., & May, A. (2004). Neuroplasticity: Changes in grey matter induced by training. *Nature, 427*(6972), 311–312.

DuPaul, G. J., & Eckert, T. L. (1997). The effects of school-based interventions for attention deficit hyperactivity disorder: A meta-analysis. *School Psychology Review, 26*(1), 5–27.

Eimas, P. D., Siqueland, E. R., Jusczyk, P., & Vigorito, J. (1971). Speech perception in infants. *Science, 171*(3968), 303–306.

Elbert, T., Pantev, C., Wienbruch, C., Rockstroh, B., & Taub, E. (1996). Increased cortical representation of the fingers of the left hand in strong players. *Science, 270*, 305–307.

Eriksson, P. S., Perfilieva, E., Björk-Eriksson, T., Alborn, A. M., Nordborg, C., Peterson, D. A., & Gage, F. H. (1998). Neurogenesis in the adult human hippocampus. *Nature Medicine, 4*(11), 1313–1317.

Fiala, B. A., Joyce, J. N., & Greenough, W. T. (1978). Environmental complexity modulates growth of granule cell dendrites in developing but not adult hippocampus of rats. *Experimental Neurology, 59*(3), 372–383.

Fox, N. A., Henderson, H. A., Pérez-Edgar, K., & White, L. K. (2008). The biology of temperament: An integrative approach. In C. A. Nelson & M. Luciana (Eds.), *The handbook of developmental cognitive neuroscience*. Cambridge, MA: MIT Press.

Gabrieli, J. D. (2009). Dyslexia: A new synergy between education and cognitive neuroscience. *Science, 325*(5938), 280–283.

Galaburda, A. M., & Kemper, T. L. (1979). Cytoarchitectonic abnormalities in developmental dyslexia: A case study. *Annals of Neurology, 6*, 94–100.

Galaburda, A. M., Sherman, G. F., Rosen, G. D., Aboitiz, F., & Geschwind, N. (1985). Developmental dyslexia: Four consecutive patients with cortical anomalies. *Annals of Neurology, 18*, 222–233.

Garel, C., Fallet-Bianco, C., & Guibaud, L. (2011). The fetal cerebellum development and common malformations. *Journal of Child Neurology, 26*(12), 1483–1492.

Garrett, P. (2011). *Brain and behaviour: An introduction to biological psychology* (3rd ed.). Los Angeles: Sage Publications.

Geschwind, D. H., & Levitt, P. (2007). Autism spectrum disorders: Developmental disconnection syndromes. *Current Opinion in Neurobiology, 17*(1), 103–111.

Gordon, M. (Ed.). (2009). *The roots of empathy: Changing the world child by child*. Toronto: Thomas Allen Publishers.

Green, C. S., & Bavelier, D. (2008). Exercising your brain: A review of human brain plasticity and training-induced learning. *Psychology and Aging, 23*(4), 692.

Greenough, W. T., & Black, J. R. (1992). Induction of brain structure by experience: Substrates for cognitive development. In M. R. Gunnar & C. O. Nelson (Eds.), *Developmental behavioral neuroscience*, *Minnesota symposia on child psychology* (Vol. Vol. 24, pp. 155–200). Hillsdale: Erlbaum.

Greenough, W. T., Volkmar, F. R., & Juraska, J. M. (1973). Effects of rearing complexity on dendritic branching in frontolateral and temporal cortex of the rat. *Experimental Neurology, 41*(2), 371–378.

Glaser, D. (2000). Child abuse and neglect and the brain: A review. *Journal of Child Psychology and Psychiatry, 41*(1), 97–116.
Gurdon, J. (1999). Developmental biology and the redirection or replacement of cells. *Philosophical Transactions of the Royal Society of London Series B: Biological Sciences, 354*(1392), 1967–1976.
Goswami, U. (2004). Neuroscience and education. *British Journal of Educational Psychology, 74*(1), 1–14.
Goswami, U. (2006). Neuroscience and education: From research to practice? *Nature Reviews Neuroscience, 7*(5), 406–413.
Happe, F., & Frith, U. (1996). The neuropsychology of autism. *Brain., 119*, 1377–1400.
Habib, M. (2000). The neurological basis of developmental dyslexia. An overview and working hypothesis. *Brain, 123*(12), 2373–2399.
Hobson, R. P. (1993). *Autism and the development of mind*. Hove: Lawrence Erlbaum Associates Ltd..
Humphreys, P., Kaufmann, W. E., & Galaburda, A. M. (1990). Developmental dyslexia in women: Neuropathological findings in three patients. *Annals of Neurology, 28*(6), 727–738.
Hyson, M., Copple, C., & Jones, J. (2006). Early childhood development and education. In K. A. Renninger & I. Sigel (Eds.), *Handbook of child psychology*, *Child psychology in practice* (Vol. 4, pp. 3–47). New York: Wiley.
Iacoboni, M., Molnar-Szakacs, I., Gallese, V., Buccino, G., Mazziotta, J. C., & Rizzolatti, G. (2005). Grasping the intentions of others with one's own mirror neuron system. *PLoS biology, 3*(3), e79.
Isaacs, E. B., Edmonds, C. J., Lucas, A., & Gadian, D. G. (2001). Calculation difficulties in children of very low birthweight: A neural correlate. *Brain, 124*(9), 1701–1707.
Iwaniuk, A. N., Nelson, J. E., & Pellis, S. M. (2001). Do big-brained animals play more? Comparative analyses of play and relative brain size in mammals. *Journal of Comparative Psychology, 115*(1), 29.
Jerison, H. (1973). *Evolution of the brain and intelligence*. New York: Academic Press Inc..
Kerry, M., Kelk, G., Etkin, D., Burton, I., & Kalhok, S. (1999). Glazed over: Canada copes with the ice storm of 1998. *Environment: Science and Policy for Sustainable Development, 41*(1), 6–11.
Klingberg, T. (2013). *The learning brain: Memory and brain development in bhildren*. New York: Oxford University Press.
Kaufmann, W. E., & Galaburda, A. M. (1989). Cerebrocortical microdysgenesis in neurologically normal subjects: A histopathologic study. *Neurology, 39*(2), 238–238.
Kopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology, 18*(2), 199.
Kopp, C. B. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental Psychology, 25*(3), 343.
Kuhl, P., & Rivera-Gaxiola, M. (2008). Neural substrates of language acquisition. *Annual Review of Neuroscience, 31*, 511–534.
Kuhl, P. K., Tsao, F. M., & Liu, H. M. (2003). Foreign-language experience in infancy: Effects of short-term exposure and social interaction on phonetic learning. *Proceedings of the National Academy of Sciences., 100*(15), 9096–9101.
Kuhl, P. K. (2004). Early language acquisition: Cracking the speech code. *Nature Reviews Neuroscience, 5*, 831–843.
Kutzelnigg, A., Lucchinetti, C. F., Stadelmann, C., Brück, W., Rauschka, H., Bergmann, M., Schmidbauer, M., Parisi, J. E., & Lassmann, H. (2005). Cortical demyelination and diffuse white matter injury in multiple sclerosis. *Brain, 128*(11), 2705–2712.
Ladefoged, P. (2004). *Vowels and consonants: An introduction to the sounds of language* (2nd ed.). Oxford: Blackwell.
Laplante, D. P., Barr, R. G., Brunet, A., Du Fort, G. G., Meaney, M. L., Saucier, J. F., Zelazo, P. R., & King, S. (2004). Stress during pregnancy affects general intellectual and language functioning in human toddlers. *Pediatric Research, 56*(3), 400–410.

Leslie, A. M. (1991). The theory of mind impairment in autism: Evidence for a modular mechanism of development? In A. Whiten (Ed.), *Natural theories of mind: Evolution, development and simulation of everyday mindreading* (pp. 63–78). Oxford: Basil Blackwell.

Levy, F. (1991). The dopamine theory of attention deficit hyperactivity disorder (ADHD). *Australasian Psychiatry, 25*(2), 277–283.

Lingnau, A., Gesierich, B., & Caramazza, A. (2009). Asymmetric fMRI adaptation reveals no evidence for mirror neurons in humans. *Proceedings of the National Academy of Sciences, 106*(24), 9925–9930.

Maguire, E. A., Gadian, D. G., Johnsrude, I. S., Good, C. D., Ashburner, J., Frackowiak, R. S., & Frith, C. D. (2000). Navigation-related structural change in the hippocampi of taxi drivers. *Proceedings of the National Academy of Sciences, 97*(8), 4398–4403.

Marinova-todd, S. H., Marshall, D. B., & Snow, C. E. (2000). Three misconceptions about age and L2 learning. *TESOL Quarterly, 34*(1), 9–34.

Markham, J. A., & Greenough, W. T. (2004). Experience-driven brain plasticity: Beyond the synapse. *Neuron Glia Biology, 1*(4), 351.

Mathews, A., Mackintosh, B., & Fulcher, E. P. (1997). Cognitive biases in anxiety and attention to threat. *Trends in Cognitive Sciences, 1*(9), 340–345.

Maxwell, K., Ritchie, S., Bredekamp, S., & Zimmerman, T. (2009). *Issues in pre-k-3rd education: Using developmental science to transform children's early school experiences (#4)*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, First School.

McCrory, E., De Brito, S. A., & Viding, E. (2010). Research review: The neurobiology and genetics of maltreatment and adversity. *Journal of Child Psychology and Psychiatry, 51*(10), 1079–1095.

McPhillips, M., & Jordan-Black, J. A. (2007). Primary reflex persistence in children with reading difficulties (dyslexia): A cross-sectional study. *Neuropsychologia, 45*(4), 748–754.

Meltzer, L. (Ed.). (2011). *Executive function in education: From theory to practice*. New York: Guilford przess.

Moyles, J. R. (1989). *Just playing?: The role and status of play in early childhood education*. Milton Keynes: Open University Press.

Muhle, R., Trentacoste, S. V., & Rapin, I. (2004). The genetics of autism. *Pediatrics, 113*(5), e472–e486.

National Research Council. (2001). *Educating children with autism*. Washington DC: National Academy Press.

Neville, H. J., Stevens, C., Pakulak, E., Bell, T. A., Fanning, J., Klein, S., & Isbell, E. (2013). Family-based training program improves brain function, cognition, and behavior in lower socioeconomic status pre-schoolers. *Proceedings of the National Academy of Sciences, 110*(29), 12138–12143.

National Institute for Health and Clinical Excellence. Autism: Recognition, referral and diagnosis of children and young people on the autism spectrum. (Clinical guideline 128.) 2011. http://guidance.nice.org.uk/CG128.

Nikolaev, E., Kaczmarek, L., Zhu, S. W., Winblad, B., & Mohammed, A. H. (2002). Environmental manipulation differentially alters c-Fos expression in amygdaloid nuclei following aversive conditioning. *Brain Research, 957*(1), 91–98.

Northrup, H., & Volcik, K. A. (2000). Spina bifida and other neural tube defects. *Current Problems in Pediatrics, 30*(10), 317–332.

Palmer, E. D., & Finger, S. (2001). An early description of ADHD (Inattentive Subtype): Dr Alexander Crichton and 'Mental Restlessness' (1798). *Child and Adolescent Mental Health, 6*, 66–73.

Pantev, C., Ross, B., Fujioka, T., Trainor, L. J., Schulte, M., & Schulz, M. (2003). Music and learning-induced cortical plasticity. *Annals of the New York Academy of Sciences, 999*(1), 438–450.

Pellis, S. M., Pellis, V. C., & Bell, H. C. (2010). The function of play in the development of the social brain. *American Journal of Play, 2*(3), 278–298.

Pellis, S., & Pellis, V. (2009). *The playful brain: Venturing to the limits of neuroscience*. Oxford: Oneworld.

Perry, B. D., & Pollard, R. (1998). Homeostasis, stress, trauma, and adaptation: A neurodevelopmental view of childhood trauma. *Child and adolescent psychiatric clinics of North America, 7*(1), 33–51.

Pickering, S. J., & Howard-Jones, P. (2007). Educators' views on the role of neuroscience in education: Findings from a study of UK and international perspectives. *Mind, Brain, and Education, 1*(3), 109–113.

Polanczyk, G., de Lima, M. S., Horta, B. H., Biederman, J., & Rohde, L. A. (2007). The worldwide prevalence of ADHD: A systematic review and metaregression analysis. *American Journal of Psychiatry, 164*, 942–948.

Price, G. R., Holloway, I., Räsänen, P., Vesterinen, M., & Ansari, D. (2007). Impaired parietal magnitude processing in developmental dyscalculia. *Current Biology, 17*(24), R1042–R1043.

Reynolds, S., MacKay, T., & Kearney, M. (2009). Nurture groups: A large-scale, controlled study of effects on development and academic attainment. *British Journal of Special Education, 36*(4), 204–212.

Rizzolatti, G., & Craighero, L. (2004). The mirror-neuron system. *Annual Review of Neuroscience, 27*, 169–192.

Roberts, J. E., Rosenfeld, R. M., & Zeisel, S. A. (2004). Otitis media and speech and language: A meta-analysis of prospective studies. *Pediatrics, 113*(3), e238–e248.

Rosenzweig, M. R., Krech, D., Bennett, E. L., & Diamond, M. C. (1962). Effects of environmental complexity and training on brain chemistry and anatomy: A replication and extension. *Journal of Comparative and Physiological Psychology, 55*(4), 429.

Rotzer, S., Loenneker, T., Kucian, K., Martin, E., Klaver, P., & Von Aster, M. (2009). Dysfunctional neural network of spatial working memory contributes to developmental dyscalculia. *Neuropsychologia, 47*(13), 2859–2865.

Rubinsten, O., & Henik, A. (2009). Developmental dyscalculia: Heterogeneity might not mean different mechanisms. *Trends in Cognitive Sciences, 13*(2), 92–99.

Rueda, M. R., Rothbart, M. K., McCandliss, B. D., Saccomanno, L., & Posner, M. I. (2005). Training, maturation, and genetic influences on the development of executive attention. *Proceedings of the National Academy of Sciences of the United States of America, 102*(41), 14931–14936.

Rutter, M. (2005). Genetic influences and autism. In F. R. Volkmar, R. Paul, A. Klin, & D. J. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders* (Vol. 1, pp. 425–452). Hoboken: Wiley.

Rutter, M., Kreppner, J., Croft, C., Murin, M., Colvert, E., Beckett, C., Castle, J., & Sonuga-Barke, E. (2007). Early adolescent outcomes of institutionally deprived and non-deprived adoptees. III. Quasi-autism. *Journal of Child Psychology and Psychiatry, 48*(12), 1200–1207.

Saxe, R., & Wexler, A. (2005). Making sense of another mind: The role of the right temporo-parietal junction. *Neuropsychologia, 43*(10), 1391–1399.

Scerri, T. S., & Schulte-Körne, G. (2010). Genetics of developmental dyslexia. *European Child & Adolescent Psychiatry, 19*(3), 179–197.

Sciutto, M. J., Terjesen, M. D., & Frank, A. S. B. (2000). Teachers' knowledge and misperceptions of attention-deficit/hyperactivity disorder. *Psychology in the Schools, 37*(2), 115–122.

Shalev, R. S., Manor, O., Kerem, B., Ayali, M., Badichi, N., Friedlander, Y., & Gross-Tsur, V. (2001). Developmental dyscalculia is a familial learning disability. *Journal of Learning Disabilities, 34*(1), 59–65.

Shaywitz, B. A., Shaywitz, S. E., Pugh, K. R., Mencl, W. E., Fulbright, R. K., Skudlarski, P., Constable, R. T., Marchione, K. E., Fletcher, J. M., Lyon, G. R., & Gore, J. C. (2002). Disruption of posterior brain systems for reading in children with developmental dyslexia. *Biological Psychiatry, 52*(2), 101–110.

Shonkoff, J. P. (2003). From neurons to neighborhoods: Old and new challenges for developmental and behavioral pediatrics. *Journal of Developmental & Behavioral Pediatrics, 24*(1), 70–76.

Shonkoff, J. P., & Levitt, P. (2010). Neuroscience and the future of early childhood policy: Moving from why to what and how. *Neuron, 67*(5), 689–691.

Shonkoff, J. P. (2011). Protecting brains, not simply stimulating minds. *Science, 333*(6045), 982–983.

Singleton, C. (2009). *Intervention for Dyslexia*. Bracknell: The Dyslexia-SpLD Trust.

Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years*. New York: Cambridge University Press.

Stevens, C., Lauinger, B., & Neville, H. (2009). Differences in the neural mechanisms of selective attention in children from different socioeconomic backgrounds: An event-related brain potential study. *Developmental Science, 12*(4), 634–646.

Streeter, L. A. (1976). Language perception of 2-mo-old infants shows effects of both innate mechanisms and experience. *Nature, 259*(5538), 39–41.

Stiles, J. (2008). *The fundamentals of brain development: Integrating nature and nurture*. Cambridge, MA: Harvard University Press.

Stoodley, C. J., & Stein, J. F. (2013). Cerebellar function in developmental dyslexia. *The Cerebellum, 12*(2), 267–276.

Sun, Y. F., Lee, J. S., & Kirby, R. (2010). Brain imaging findings in dyslexia. *Pediatrics & Neonatology, 51*(2), 89–96.

Swanson, J. M., Flodman, P., Kennedy, J., Spence, M. A., Moyzis, R., Schuck, S., & Posner, M. (2000). Dopamine genes and ADHD. *Neuroscience & Biobehavioral Reviews, 24*(1), 21–25.

Sylva, K., Bruner, J. S., & Genova, P. (1976). The role of play in the problem-solving of children 3-5 years old. In J. S. Bruner, A. Jolly, & K. Sylva (Eds.), *Play: Its role in development and evolution* (pp. 55–67). London: Penguin.

Talge, N. M., Neal, C., & Glover, V. (2007). Antenatal maternal stress and long-term effects on child neurodevelopment: How and why? *Journal of Child Psychology and Psychiatry, 48*(3-4), 245–261.

Thompson, R. A. (2001). Development in the first years of life. *The Future of Children, 11*(1), 21–33.

Tønnessen, F. E. (1997). Testosterone and dyslexia. *Developmental Neurorehabilitation, 1*(1), 51–58.

Turkeltaub, P. E., Gareau, L., Flowers, D. L., Zeffiro, T. A., & Eden, G. F. (2003). Development of neural mechanisms for reading. *Nature Neuroscience, 6*(7), 767–773.

Welsh, J. P., & Harvey, J. A. (1992). The role of the cerebellum in voluntary and reflexive movements: History and current status. In R. Llinás & C. Sotelo (Eds.), *The cerebellum revisited* (pp. 301–334). New York: Springer-Verlag.

Whitebread, D. (2012). *Developmental psychology and early childhood education: A guide for students and practitioners*. London: Sage.

Wilson, A. J. & Dehaene, S. (2007). Number sense and developmental dyscalculia. In D. Coch et al. (Eds.), *Human behavior, learning and the developing brain: Atypical Development* (pp. 212–238). Guilford Publications.

Williams, J. H., Whiten, A., Suddendorf, T., & Perrett, D. I. (2001). Imitation, mirror neurons and autism. *Neuroscience & Biobehavioral Reviews, 25*(4), 287–295.

Wyman, P. A., Cross, W., Brown, C. H., Yu, Q., Tu, X., & Eberly, S. (2010). Intervention to strengthen emotional self-regulation in children with emerging mental health problems: Proximal impact on school behavior. *Journal of Abnormal Child Psychology, 38*(5), 707–720.

Yamada, Y., Stevens, C., Dow, M., Harn, B. A., Chard, D. J., & Neville, H. J. (2011). Emergence of the neural network for reading in five-year-old beginning readers of different levels of pre-literacy abilities: An fMRI study. *NeuroImage, 57*(3), 704–713.

Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist, 25*(1), 3–17.

Chapter 15
School Readiness in Europe: Issues and Evidence

Sue Bingham and David Whitebread

Abstract The issue of 'school readiness' has become a topic of considerable debate and controversy within Western Europe over the last few years. This is interpreted in widely different ways and includes debates on what capabilities a young child needs in order to successfully commence their schooling; what type of institutional and pedagogical provision constitutes 'schooling', as opposed to pre-school, kindergarten or nursery; and what is the appropriate age at which children should be expected to make the transition from home and pre-school into their primary school?

Keywords 'School readiness' • Teaching-learning methodologies • Primary education • 'Schoolifying' • Early childhood education

15.1 Introduction

This chapter examines the influence of schools upon children as their 'schooling' commences within a range of countries in Western Europe. In the main, no child is considered to require 'schooling' until they are at least 6 (and in some cases 7) years of age, and all member countries offer some form of early publicly financed programmes for children before the start of compulsory schooling. However, the diversity of children's home environments and early learning experiences, the age at which children may access early childhood education and care (ECEC) programmes, the length of time they attend and the nature of the provision are subject to significant cross national differences. Such diversity naturally has a huge impact upon the

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development of the child, shaping their transition to 'school', a period during which children are required to respond to significant pedagogical changes, to changes in identity, roles and relationships as they become a 'pupil', with new or different expectations placed on them to learn the social rules and values associated with being in a formal 'institution'. Within this chapter we examine the ways in which the transition to school is handled in a range of key countries within Western Europe, with a particular focus on the consequences for children who are relatively disadvantaged due to their socio-economic home environments and others who are relatively young upon entry into school.

The chapter includes as follows:

An examination of the main characteristics of the structural and organisational frameworks set by the various statutory and advisory bodies in Western European countries in relation to education and care provision for children in the pre-primary phase and up until the age of 7 years.

An investigation of the objectives, curricula and teaching-learning methodologies of the different approaches employed within ECEC and the first years of primary education across these countries. We examine the objectives of the 'socio-constructivist' pedagogical systems, as well as the 'pre-primary' systems in other countries where governments intervene directly into the early years phase, with the aim of raising primary school test results. We investigate the reasons for other early educational interventions in some countries for children as young as 2.5 years considered to be 'at risk' and assess their long-term outcomes.

A brief overview of the psychological evidence of recent decades, illustrating that as the long-term consequences for children's development as learners are increasingly understood within these scientific domains, the importance of the ways in which children learn – and therefore the ways in which they need to be taught – come to the foreground. We go on to argue that the 'schoolifying' of the early childhood years is not supported by the research evidence and that it is very likely to be damaging, particularly for the most deprived and youngest children.

Hence, in the final section, we conclude that the real issue is not the age at which children 'start school' but how smoothly the transition is handled in terms of children's socio-emotional needs and – more importantly – that there exist high degrees of consistency in teaching methodologies employed 'across the divide' between pre-school and primary school – until at least the age of 7 years.

15.2 School Starting Age

Summarising the findings reported in 'Tackling Social and Cultural Inequalities through Early Childhood Education and Care (ECEC) in Europe' (Eurydice 2009), the author states that:

> ECEC programmes for 3–6 year olds exist in all European countries and at this level, the mission to educate is clear and overrides the child-minding function related to parental employment. The aim everywhere is to stimulate cognitive, social and cultural development

> and to prepare children for early learning activities in reading, writing and maths …altogether these trends are rather encouraging….. In the majority of European countries, educational provision for 4–5 year olds is increasingly becoming the first rung on the educational ladder. (p. 131)

This summarises well the highly significant changes in educational provision for young children across Europe and raises very clearly the vexed question of school starting age. Over the last one or two decades, in many countries across Western Europe and, indeed, across the world, governments have made a huge investment in early childhood pre-school provision, at least from the age of 3 years and often younger. In some countries there has been a long-standing tradition of early years provision, often building on the seminal work and theories of Froebel, Montessori and Steiner, and consequently founded on very particular views about the needs of the young child [for a more extended description of these views, see the Pedagogies-section, this volume]. This has always been in tension, however, with the more didactic and instructional approaches of traditional primary schooling, which has focused on the teaching of the basic skills of literacy and numeracy. With the recent expansion of pre-school provision, and the massively increased involvement of governments in this, applying models of economic efficiency involving 'targets' and 'standards', these tensions have become dramatically more marked. As Eurydice indicates, one outcome of these new developments has been the effective lowering of the age at which children begin formal schooling. In some cases this has been marked by an actual lowering of the legal school entry age, and in others has been a 'de facto' lowering, while the official age of school entry has remained unchanged.

The rationale that lies behind the 'starting age' of schooling is an important consideration. It is reasonable to suggest that any policy decision in this area should be based on what is beneficial for the child, but there have certainly been indications in some countries that other political agendas, such as encouraging young mothers to return to the workforce, have been part of the thinking. Nevertheless, there can be no doubt that the wide range of initiatives that have been implemented across Europe in recent decades attest, at least in part, to a political will to promote the participation in 'educare' programmes of children between 3 and 6 years of age, and in some cases younger, especially from families at risk. This demonstrates, at least to some extent, an awareness among policymakers of the importance of education in countering social inequality and poor educational outcomes. As we shall see, however, whether the policies that have been implemented are likely to have this desired effect is very much open to question.

As initial background to this debate, Table 15.1 provides an overview of compulsory school starting ages in Europe. The most common starting age is 6 years; however, it should be noted that this is often the latest age at which children must start school, and in some European countries, most children enter school below the compulsory school age. Further, in many of the countries with a later school starting age, there is a structured pre-primary school provision available for a period before the compulsory school starting age (usually one or 2 years). For example, Finland provides early years education and care for every child under compulsory school age.

Table 15.1 Compulsory school starting ages in selected countries

Age	Country
Four	Northern Ireland
Five	Cyprus, England, Malta, Netherlands, Scotland, Wales
Six	Austria, Belgium, Croatia, Czech Republic, Denmark, France, Germany, Greece, Hungary, Iceland, Republic of Ireland, Italy, Liechtenstein, Luxembourg, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland, Turkey
Seven	Bulgaria, Estonia, Finland, Latvia, Lithuania, Poland, Serbia, Sweden

Source: European Commission (Eurydice 2013)

The table shows that over half of the European countries listed have 6 as the official school starting age. The latest school starting age is 7 (including two in Scandinavian countries). Three UK countries (England, Wales and Scotland), as well as Malta and the Netherlands, start school at 5. Northern Ireland, with a starting age of 4, has the earliest compulsory school starting age in Europe.

The compulsory school starting age, however, only reflects part of the picture. Primary education programmes (defined as being for 6-year-olds onwards; UNESCO 2007) are designed to give a basic education in reading, writing and mathematics along with a basic understanding of other subjects. Pre-primary education is intended to meet the educational and development needs of children of at least 3 years of age (UNESCO 2007). As illustrated below, in a number of countries, pre-primary education is compulsory, and in others, pre-school systems exist which the majority of children attend. Several countries allow individual children to enter school before compulsory school age or to delay entry, in accordance with parents' wishes, teachers' views and/or the results of pre-school assessments. So, in several cases, the 'compulsory school age' represents the maximum age by which children start school – in reality, the majority of children are in school before reaching the compulsory age.

Furthermore, there is evidence of a clear trend across Western Europe towards requiring children to start schooling at an increasingly early age. Increasingly structured ECEC programmes for 3- to 6-year-olds now exist in all Western European countries, and attendance in these programmes is becoming either compulsory or, at least, very much expected. Indeed, in real terms, over the period 2000–2009, on average in Europe, the participation rate of 3-year-old, 4-year-old and 5-year-old children in pre-primary or primary education increased, reaching around 77%, 90% and 94%, respectively, in 2009 (Eurydice 2012).

A number of countries lowered their school starting ages over the period 2000–2009 – for example, Denmark and Romania reduced their school starting ages from 7 to 6 years, and others have made pre-school attendance compulsory; in Bulgaria, Greece, Cyprus, Latvia, Luxembourg, Hungary and Poland, for example, compulsory education was extended to pre-primary level and children (aged 4, 5 or 6 years) now take part in pre-primary education programmes designed, primarily, to introduce very young children to a school-type environment. In Poland the age of starting primary education has been gradually lowered from 7 to 6 years between 2009 and 2014 in order to increase participation in pre-primary education, which had

been offered to children between the ages of 3 and 6 years but had declined in terms of actual take-up over the previous decades; in 2002, just 52% of 3- to 6-year-olds attended a pre-primary setting. The government also made the kindergarten year, the year prior to starting primary school, compulsory for 5-year-olds from 2011.

Northern Ireland, England, Scotland, Wales, Cyprus and Malta have the lowest compulsory school starting ages in Europe, compulsory education starts at the age of 4 or 5 years and children are usually integrated directly into primary education programmes. The compulsory school starting age in Northern Ireland was lowered from 5 to 4 years almost 25 years ago because it was thought beneficial for the children to spend 12 full years in education. In England and Wales, children reach compulsory school age at the start of the school term following their fifth birthday, but most enter primary school before this point, usually in the September following their fourth birthday, thereby spending a full year in the reception class. In Scotland compulsory education starts at age 5, although many children start at 4 because schools have a single intake at the beginning of the school year. In Cyprus, pre-primary education is compulsory for 5- to 6-year-olds for 1 year, and children who reach 5 years and 8 months before the beginning of September must go to school. In Luxembourg, although primary school does not start until age 6, pre-primary education is compulsory from age 4. In the Netherlands, although early education is not compulsory until age 5, almost all children start school at 4. In the Republic of Ireland, although schooling is not compulsory until age 6, approximately 40% of 4-year-olds and almost all 5-year-olds are in publicly funded provision in the infant classes of primary schools.

While this drive across Western Europe to lower the school starting age might to some extent be influenced by the increasing acknowledgement of the impact of high-quality early education, there is clear evidence of a number of significant economic drivers. On the one hand, governments largely view the public funding of early years provision as an investment to strengthen the country's economic competitiveness, and, at the same time, particularly during a period of relative economic austerity, the parents of young children need to be in employment, if at all possible.

Almost certainly as a result of these economic drivers, in approximately half of the countries in Europe, education-oriented pre-primary public institutions are free of charge (Eurydice 2012). This universality evidently eases access to pre-primary education for children from poorer socio-economic backgrounds, as well as the adjustment of fees for non-compulsory pre-primary education that takes into account family income and other criteria (Eurydice 2012). In addition to broader policies designed to tackle social exclusion, in all countries where fees are payable for non-compulsory pre-primary education provision, some form of means testing occurs by which parental contributions are adjusted. This fundamental issue of finance may be one of the reasons for the trend for children to start pre-school or school before the statutory age. In some countries daycare and other early years services represent a significant expense, while pre-school or school is free. It is clear that some parents simply cannot afford to delay pre-school or school entry beyond the minimum allowable age.

15.3 Earlier Is Better?

It has become clear in recent years, then, that, for whatever reason, be it economic considerations or ill-founded misunderstandings about early childhood learning, policymakers in certain European countries have specifically held to the perspective that 'earlier is better' in terms of pre-primary educational models. These policymakers tend to support a school starting age of 4 or 5 years and tend towards a 'formal' approach in the recommended teaching methodologies, believing that:

> An early start provides an opportunity for children from disadvantaged backgrounds to make up the deficit in their academic skills;
> Early school starting age is thought to be popular among parents
> Children can get a 'head start' in learning;
> Young children are able to acquire the more cognitive skills inherent in the formal curriculum

> Thus, in Denmark, following the 2000 and 2003 PISA results showing a reduction in achievement levels (Artelt et al. 2003), government concerns arose surrounding the 'effectiveness' of the child-oriented pre-schools. A perception arose that the freedom being afforded to these young children was compromising their learning and development in some way. In the law of 1964, no guidelines had existed for the pedagogical content of the work of the 'pedagogue' and only some general aims and educational principles were described (Broström 2006; Peeters 2008). But in 2004, a curriculum was introduced for young children (Broström 2006); even though the curriculum is very open and still reflects the Nordic 'social pedagogical model', the majority of Danish pedagogues and researchers viewed the Curriculum Act as a step towards more bureaucratic state regulation and the 'schoolification' of early years learning. (Ellegaard and Stanek 2004)

Perhaps it seems counter-intuitive to policymakers and commentators who propose specific curricula and an earlier start to formal instruction that delaying the formal teaching of literacy, numeracy, etc. will enhance children's development as learners. Nevertheless, there is no serious evidence to support the 'earlier is better' position and a very significant body of evidence to support the alternative view that a later start at school might be advantageous in the long run.

On the initial narrow point about the impact of any particular school starting age, a range of different studies have been carried out which have either found no consistent outcome of children starting formal schooling at particular ages or have suggested that an earlier start might have some disadvantages.

Thus, research carried out on behalf of the UK's National Foundation for Educational Research (NFER) into school starting age in Europe did not find evidence for an optimum age for children starting school (Sharp 2002). A further study in the USA by the NICHD supports this, finding that age of entry effects were small in size and negligible as major determinants of children's school achievement.

In the specific area of literacy, studies by Suggate and colleagues (Suggate 2009a) in New Zealand have demonstrated that the early introduction of formal learning approaches to literacy does not improve children's reading development in the long run and may be damaging. Their study was made possible as children in New Zealand's regular state system start formal schooling at age 5, while those

attending the many Steiner schools do not start formal instruction in reading until they are 7. They found that by the age of 11, there was no difference in reading ability level between these two groups. Further, their study revealed some evidence that children who started formal instruction in reading earlier developed less positive attitudes to reading and, by the age of 11, showed poorer text comprehension than those children who had started later.

Finally, in Suggate's (2009b) more recent international study, data from the reading portion of the 2006 Programme for International Student Assessment (PISA) study were re-analysed. The relative reading achievement, as a function of school entry age, of 15-year-old students across 55 countries was investigated, controlling for social and economic differences. Results suggested no significant association between reading achievement and school entry age. In other words, an earlier beginning in formal reading instruction did not appear to result in higher reading achievement by the age of 15.

At the same time, a number of studies have directly addressed the length of time children spend in pre-school, play-based educational settings, arising from the age at which they start formal schooling. For example, in a longitudinal study of 3000 children funded by the Department of Education in the UK, Sylva et al. (2004) showed that high-quality, play-based pre-school education made a significant difference to academic learning and well-being through the primary school years, and an extended period (i.e. 3 years) of such provision was particularly beneficial for children from disadvantaged households.

This range of evidence appears to confirm the view that the specific age of starting school might not, in itself, be significant but that what is key is the style of pedagogy to which children are exposed at particular ages. Whether in school or pre-school, the evidence suggests that a too early introduction of formal instruction, and the consequent curtailing of play-based learning, can be damaging.

15.4 The 'Schoolification' of Early Childhood Education

Thus, although the intentions of policymakers are no doubt honourable, there is increasing evidence that in certain countries around Europe, specific groups of children are being disadvantaged by the teaching approaches taken in educational settings at early points in a child's life. Starting formal schooling involves children responding to changes in identity, roles and relationships as they become a 'pupil', with new or different expectations placed on them (Griebel and Niesel 2000) and learning the social rules and values associated with being in an 'organisation' or an 'institution'. Transitions between pre-primary systems into primary school pose difficulties for young children when they encounter contrasting or widely differing expectations, approaches and values in the new environment. An increasing number of commentators suggest that children aged 4 and 5 may not be ready for the more 'formal' teaching methodologies they encounter in some European primary schools

and that being compelled to participate in such approaches at an early age may cause stress and even long-term harm among young children (Sykes et al. 2009).

Four elements in the move towards earlier 'schooling' lead to various kinds of inappropriate formality and unhelpfully challenging difficulties for young children. These relate to the vexed question of adult-child ratios, to the introduction of set and highly structured curricula, to the 'accountability' agenda which leads to national testing regimes and a consequent narrowing of the curriculum and to the need for children to make early and abrupt transitions between very different institutional regimes.

First, as regards adult-child ratios, limits are set across the vast majority of European countries, and these are, of course, larger in primary school than in pre-school. In the general European context, primary class size limits have been set at between 25 and 33 children. The highest upper class size limits are found in the UK (Scotland) for primary education, with a maximum number of 33 pupils. In England and Wales, a maximum class size of 30 applies to pupils aged 5–7 years or 4–8 years in Northern Ireland.

The vast majority of European countries also have regulations establishing the maximum number of children per qualified adult in pre-primary education institutions. In about two thirds of the countries that have such regulations, the upper limit for a group is generally set between 20 and 25 children per adult. The remaining countries envisage groups of less than 15 children, with the smallest group size (seven) found in Finland and Croatia (for 3-yearolds). In several countries (Czech Republic, Estonia, Italy, Poland, Portugal, Slovenia and Slovakia) the maximum number of children per adult is reduced where one or more children have special needs. In Ireland, where pre-primary education stops before the age of 5, at which age children are generally enrolled in infant classes within mainstream primary schools, for children up to 4 years of age, the maximum number of children per adult is set at eight (in full-time pre-primary education), and where children attend part-time, the maximum number of children per adult is ten.

A consequence of an earlier start to school, therefore, is often that children have less access to an adult at an earlier age than might be developmentally appropriate. To begin with, of course, the structural limitations such as the size of class and the number of available adults have direct physical repercussions upon the feasibility of teaching and learning methodologies to be implemented in pre-primary settings. To maintain order and an environment conducive to safe learning, adults often require children to be less physically active and spend more time sitting still rather than developing their oral and social skills naturally through free play methodologies. Several commentators in the UK (e.g. Sharp et al. 2009) have highlighted the negative implications for a 4-year-old of being placed in a primary classroom where the access to an adult is restricted due to the size of the class and number of other young children competing for attention. In pre-school settings, the adult-child ratios are arguably more conducive to the socio-emotional needs of a 4 year old who is still adjusting to spending extended periods of time with unfamiliar children, forming relationships with unfamiliar adults, finding their place in a new hierarchy and assimilating and adhering to new rules.

Second, as regards the introduction of set and highly structured curricula, it is clear that part of the major policy change that has taken place in early childhood in Europe over the past 20 years has been a general acceptance of some 'structuring and orientation of children's learning' (OECD 2006, p. 146) and 'most OECD countries now use a curriculum in early childhood services'.

Countries with an integrated early childhood education system for the whole age range from birth to age 6 tend to develop pedagogical frameworks or curricula (e.g. Denmark 2004, Finland 1995/2003, Sweden 1998). While pedagogical frameworks generally identify the key goals of early childhood services at national and regional level, they vary in length and scope and in the values and attitudes towards children that are considered of significance in shaping early childhood education. For example, the Danish interpretation of curriculum is closely connected to the concept of the 'competent child' characterised by a focus on relational pedagogy in which interaction is more important than content (Broström 2005, 2006). Within this framework, teaching, based on the philosophy of Pestalozzi and the kindergarten model of Froebel, is not seen as a specific activity: it is rather conceived of as a by-product (Jensen and Langsted 2004). 'Pedagogues' make no distinction between care, upbringing and teaching (Broström 2006; Peeters 2008) in this holistic pedagogical approach. The Swedish curriculum emphasises democratic values: "All preschool activity should be carried out in accordance with fundamental democratic values". Policymakers in Norway set out in their policy documents a strong moral purpose for education, based on core Christian and humanistic values such as equality, compassion and solidarity. Teaching is explicitly defined as a caring profession, care being understood as creating an enabling environment for all children (Shakespeare 2000).

However, most European countries have chosen to introduce more formal curricula guidance for the stage closer to primary school, i.e. for children from the age of 3. Curriculum guidance such as that in N. Ireland puts an emphasis on learning areas and outcomes that are seen as important or, as in the case of France and increasingly England, even set standards for literacy and numeracy (OECD 2006, p. 134). As a consequence, children in primary school spend less time on tasks of their own choosing, instead being required to follow teacher-directed curricula that are more subject-related and place more emphasis on the formal skills of number, reading and writing. The danger here is that these formal skills require representational abilities that have not often sufficiently matured in children at the age of 4–5 years, with damaging consequences for the children's early formal learning experiences.

Third, as a consequence of the 'accountability' agenda which inevitably follows from governmental intervention in early childhood services, there has been a rapid increase in national testing regimes and a consequent narrowing of the curriculum [for more information about the accountability agenda, see also section on Curriculum and Assessment in this volume]. Such national testing systems, ostensibly positioned as instruments for assessing pupils during or at the end of compulsory education, have been increasingly used across Europe to monitor the performance of schools and education systems. From the 1990s onwards, the policy

frameworks underlying the national testing of pupils in Europe have increasingly focused on the systematic use of pupil assessment in schools to monitor the education system as a whole (Eurydice 2009, p. 9). Among the commonly reported aims are the comparison of performance across schools, the provision of input into measures for school accountability and performance evaluation of the entire system. Used thus, the results of tests serve as indicators of the quality of schools (and, less commonly, the performance of individual teachers) and of the overall effectiveness of education policies and practices, including whether or not improvements have occurred at a particular school or at system level.

Overall, the dominant model of academic testing in the majority of European countries is to administer national tests in two or three specific school years across the whole of compulsory education. The number of school years at which national tests are organised varies considerably across countries in Europe, however. For example, Denmark and Malta have developed national tests for almost every year of compulsory education. England and France are also regarded as countries in which national testing is widely practised, with seven and six national tests, respectively.

The most widespread practice is to carry out nationally standardised tests for the first time in school year 4 (as in Bulgaria, Spain, Lithuania, Hungary, Malta, Austria, Portugal, Romania and Iceland), or in a later year corresponding to the end of primary education (as in Belgium, France, the Netherlands, Poland and Slovenia). A small number of countries hold tests in the very first year of primary education, usually aiming to identify children's individual learning needs. For example, in England, the Early Years Foundation Stage Profile (EYFSP) is a statutory assessment for children in the final year of the Foundation Stage, based on teachers' classroom observations when the children are aged 4, but which the government is currently proposing to replace with a more formal 'baseline assessment' at the start of the reception year. A 'phonics screening test' is also mandatory at the end of Year 1 (when the children are aged 6). Belgium (French Community), Denmark, Italy, England and Norway hold standardised testing in the second year of school (when the children are aged 6–8). The stated aims for such testing have been variously cited as introducing standards and objectives which are serving to raise the expectation levels of schools and teachers regarding pupil performance; serving to allow for a 'value-added' assessment of individual schools; serving as instruments of social equality, in the sense that most pupils who receive additional support on the basis of their test results predominantly come from poor backgrounds; and, lastly, serving to identify the most gifted pupils.

One of the limitations of many national tests is that they assess pupil attainment with respect to just a small proportion of the curriculum. National testing is often concerned with just the two core subjects of the language of instruction and mathematics, supplemented in some countries by science or a humanities subject or foreign language. A real concern, therefore, is how to curb some potentially undesirable effects of testing, such as the tendency to adapt or restrict teaching to those aspects of the curriculum that are tested, or to place excessive emphasis on test-taking skills. Such effects may be especially marked not only where high stakes for pupils or students are involved but also for teachers and schools. There are very real concerns

being voiced by educationalists at the contradictions evident within policymakers' stances towards an appropriate educational approach for children aged 4 or 5 and some prescribed curricula. In England, for example, on the one hand, early years classes are places where play methodologies are often overtly emphasised by policymakers in curriculum guidance (e.g. DfE 2012a). On the other hand, however, learning outcomes of an academic nature are defined by the same policymakers, and their achievement advocated and determined through standard-based assessment. In other words, the curriculum recognises the 'informality of the learning experience' in the pre-school classes yet calls for learning outcomes that can only arise from the formal teaching of basic literacy and numeracy skills (e.g. DfE 2012b). The requirement for formal learning outcomes to be achieved is rigidly enforced via a draconian inspection system carried out by the Office for Standards in Education (Ofsted). This precise situation can also be found in the Netherlands, where there is no mandatory national testing until grade 8 but where in practice, under pressure from the school inspection system, most schools test children annually from grade 3 (at the age of 6) (van Oers 2013). Such approaches diminish the importance of the teacher's judgement of their pupils because of the great importance that the public attaches to the results of the national tests. As a consequence of these various pressures, it is often reported anecdotally that early years teachers are pressured by parents, school headteachers and the teachers of classes above them to introduce formal learning, even when it goes against their own judgement of how best to work with young children (Angus 2011). Opponents of national tests believe that they can demotivate pupils and increase their anxiety levels, that they are not in the interests of parents and pupils and that they lead to the teaching effort being focused on 'drilling' pupils to pass the tests.

Fourth, as regards the problem of early transitions, it is clear that the educational philosophy, teaching style and structure of learning in a primary school may vary considerably from any pre-school experience. In some countries the imposition of 'school' and curriculum into the lives of young children can be seen as marking an artificial boundary which demands that development has reached specific 'standards'. Not being 'ready' to make the transition to school at a particular time can and does have detrimental effects on future learning and self-esteem (Margetts 2003). Children are at risk of not adjusting easily to school when there is a disparity between the personal and cultural skills, attitudes and knowledge they bring to school and the expectations of the school itself (Fabian 2002). An unsuccessful transition can cause anxiety and stress leading to anti-social behaviour, fatigue and distraction, all of which potentially compromise the child's capacity to learn (Featherstone 2004).

> Adjustment is influenced by the level of comfort, familiarity and predictability the child experiences. Ensuring that each transition is smooth is important for children's emotional well-being and to their continuing cognitive engagement; settling well in their first year at school 'sets them up for later' (Laurent 2000). Transition practices are widely used to support school entrance, and across Europe there seems to be theoretical and practical consensus on the importance of these activities (e.g. Clark and Zygmunt-Fillwalk 2008; Einarsdottir et al. 2008). Activities that support learning across the transition aim to develop a child's

understanding about the ways of learning in school, helping them to anticipate change and difference between philosophical learning 'boundaries' (e.g. from play to 'formal' learning) in order to embrace change confidently and to enjoy what the new setting offers. Such methods include mentoring by children already at the new setting to demonstrate ways of learning, using play-based activities that start in one setting and are completed in the next (Fabian and Dunlop 2005) and using social stories that provide an insight into the next place of learning (Briody and McGarry 2005). In a Danish case study, Broström (2003) outlined the importance of child-ready schools whereby schools work closely with the 'feeder' preschools to develop curriculum continuity to meet the child's needs. Through meetings between pre-school and school staff in which the pre-school provide photographs, drawings, favourite stories and so on, teachers gain an insight into the interests of individual children and can plan transition activities accordingly. There is also recognition that children's dispositions towards school are generally associated with making friends. Margetts (2002) found that children who started at school with a friend in the same class had 'higher levels of social skills and academic competence and less problem behaviours than other children' (p. 112). This highlights the need for teachers to prioritise opportunities and processes for friend-making, thereby engendering children's emotional well-being and confidence in approaching new challenges.

Furthermore, there has been a recent growth in research drawing attention to the need for practitioners and teachers to take account of the psychological aspects of transition from the perspectives of parents and families, in strong recognition within the educational community and in policy statements that family engagement with schools facilitates educational success. Work from Scotland (Dunlop 2005), Germany (Griebel and Niesel 2000, 2002) and Denmark (Broström 2003), for example, focuses on the parental experience as parents anticipate, and then experience, their child's transition from the stage prior to school into school settings, part of which involves a change of identity within each family. Co-construction of the transition, readiness to be a schoolchild and becoming parents of a schoolchild require effective communication and participation by parents and teacher, enabling families to make sense of school with its often 'institutionalised' ways, bewildering new vocabulary and unfamiliar culture (Fabian 2002).

In some European countries, where the systems of education across the preprimary to primary divide have been thought through and 'joined up', and teaching and learning methodologies are applied appropriately and consistently, the question of a starting age at school almost becomes an irrelevance. However, in those countries where the approaches to early years teaching and learning are not 'joined up', and perhaps a more traditional or 'formal' teaching approach is imposed upon young children, there is evidence that this abrupt transition experience can be highly damaging. It is also clear that for some specific groups of children, such an early and abrupt transition leads to them being particularly disadvantaged. We return to this issue in the final section of the chapter.

Accompanying the lack of evidence of any clear advantage for children's development as learners of an earlier start to formal schooling, and concerns regarding the negative educational consequences discussed above, there is a wealth of evidence of the consequential dangers of this approach from developmental psychology. This evidence essentially addresses two key developmental processes, which

relate to the negative emotional and motivational consequences of requiring young children to learn in ways for which they are not yet equipped, and the positive benefits of learning through play.

A range of studies have pointed to the generally disturbing consequences of early and inappropriate formal instruction. In the USA, the longitudinal results of the High/Scope Perry Pre-School project (Schweinhart et al. 2005), for example, revealed disturbing long-term effects of early direct instruction upon individuals' social and psychological frames of mind. Although direct instruction methods of teaching seemed to bring some children initial advantages in terms of their early reading and numeracy competencies, the High/Scope children who had been in 'child-initiated' learning environments showed significantly more positive results over the long term. By the age of 23 years, children who had attended pre-schools where direct instruction prevailed were eight times more likely to need treatment for psychological or emotional disturbances and three times more likely to be arrested for committing a crime than those who went to play-based pre-schools. As Schweinhart et al. conclude, it seems that social problems arise when policy and curriculum directives fail to recognise that early education should be about the whole child; direct instruction does not cause social problems, but it seems that depriving children of the opportunity to develop socially is the unintended side effect.

Several researchers (e.g. Blaustein 2005) have highlighted the risks to developmental growth which occur through implementing early childhood programmes based on a directed academic curriculum, often replacing essential hands-on learning activities with skill-based performance and rote-learning tasks. It is argued (Blaustein 2005, p. 3) that in emphasising rote-learning tasks within an early years classroom, a child is conditioned to concentrate on a very specific skill and use 'lower' parts of the brain such as the limbic system, and the insufficiently developed cerebral cortex, to learn that skill. During this type of activity, it is argued, the child is forced to use parts of the brain that are immature, and although the child may be able to practise and acquire the skill, experts believe that the normal growth and development of the brain may be distorted by such practice (Healy 2004, p. 64) since the child will continue to use the lower part of the brain trained to perform the task even when the frontal cortex becomes more developed and suited to the task. Other research (e.g. Polizzi et al. 2007) suggests that the less mature central nervous system of younger children has a particular effect in terms of self-regulation of attention, emotion and other functions. This has implications for their ability to adapt to school life, for example, remaining seated for extended periods. There is also evidence to suggest that 4-year-old children are likely to be much less mature than 5-year-olds in terms of fine motor control, which is manifested in poorer writing ability (Sykes et al. 2009).

Other researchers highlight suggestions that an early introduction to a formal curriculum may have a negative impact on children's self-esteem and motivation to learn (e.g. Sharp 2002), and a report by Sykes et al. (2009) cites developmental psychology studies indicating that children as young as 4 or 5 may not be ready for

formal education particularly with regard to their 'social and emotional readiness'. Many children aged 4 years may not be ready or 'skilled' to face many aspects of starting school, including:

Being separated from carers each day for long periods of time and having to get to know 'strangers'
Being placed in unfamiliar surroundings with different equipment and resources
Having to develop new strategies and learn new skills within new routines
Finding out who can be trusted and liked and how to behave in a different 'hierarchy'

Within early years provision that is not attuned to the 'natural', informal and experiential ways in which young children learn, it is often the case that teachers believe that it is their role to make sure that children do things correctly, to convey to the children that they should do as they are told and to use controls in an attempt to make sure that they do. Such controlling contexts, often arising when teaching methodologies do not match the young children's learning capabilities, tend to pressure children to think, act or feel in particular ways. The teacher may resort to coercive strategies such as the promise of rewards or threat of sanctions and overtly controlling language (e.g. the use of 'you have to' and 'you must'). Such strategies place children under pressure to engage in the learning by inducing externally controlled regulation. However, children may also easily place themselves under stress to engage in a particular activity through a social pressure induced by the teacher in the child.

The second strand of evidence in relation to the dangers of the 'earlier is better' model concerns the loss, through an earlier start to formal schooling, of important play-based learning experiences. There are several strands of evidence which all point towards the importance of play in young children's emotional well-being and intellectual development and the value of an extended period of playful learning before the start of formal schooling. These arise from anthropological, psychological, neuroscientific and educational studies.

As regards the development of emotional well-being, Gray (2011) has documented the decline in free play opportunities for children in recent decades and the associated worrying increase in stress and mental health problems among children in the USA, including increases in anxiety, depression, suicide, feelings of helplessness and narcissism. He contends that:

> Play functions as the major means by which children (1) develop intrinsic interests and competencies; (2) learn how to make decisions, solve problems, exert self-control, and follow rules; (3) learn to regulate their emotions; (4) make friends and learn to get along with others as equals; and (5) experience joy. Through all of these effects, play promotes mental health. (p. 443)

Other work has identified specific links between lack of playfulness and identified behavioural problems or disabilities. In a series of neuroscientific studies, for example, Panksepp (2007) has demonstrated that ADHD is associated with frontal lobe deficits and can be ameliorated by access to social (particularly

rough-and-tumble) play. He argues that the increasing incidence of ADHD may be a consequence of 'the diminishing availability of opportunities for pre-school children to engage in natural self-generated social play (2007, p. 57).

In a classic paper entitled the 'Nature and uses of immaturity', Jerome Bruner (1972) argued that the relative immaturity of the human brain at birth, and the long period of biological and psychological immaturity that comprises human childhood, was an adaptation which evolved in early human social groups that enabled humans to become powerful learners and problem-solvers, through the mechanism of play. His evolutionary analysis of the importance of play in human development has subsequently been supported by extensive anthropological studies of hunter-gatherer societies (Gray 2009) and other work in evolutionary psychology (Smith 2006). Neuroscientific studies have supported this view of play as a central mechanism in learning. Pellis and Pellis (2009), for example, have reviewed many studies showing that playful activity leads to synaptic growth, particularly in the frontal cortex – the part of the brain responsible for all the uniquely human higher mental functions. A range of experimental psychology studies have consistently demonstrated the superior learning and motivation arising from playful as opposed to instructional approaches to learning in children (Sylva et al. 1976; Pellegrini and Gustafson 2005; Whitebread and Jameson 2010).

Within educational research, a longitudinal study by Marcon (2002) demonstrated that, by the end of their sixth year in school, children whose pre-school model had been academically directed achieved significantly lower marks in comparison to children who had attended child-initiated, play-based pre-school programmes. Marcon (2002) comments that 'their long-term progress may be slowed by overly academic pre-school experiences that introduce formalized learning experiences too early for most children's developmental status' (p. 12). Moreover, she comments 'Children with academically-directed pre-school experiences may have missed out on the more integrative experiences of peers in other pre-school models' (p. 13).

Individual differences in playfulness are associated with measures of cognitive development (Tamis-LeMonda and Bornstein 1989) and of emotional well-being (Berk et al. 2006), and work in developmental psychology is beginning to identify the two crucial processes which underpin this relationship. First, pretence play involves children in increasingly sophisticated processes of symbolic representation, which are fundamental to language, literacy, numeracy, artistic expression, visual media and the many other ways in which humans represent meaning. In symbolic play, each of these semiotic systems are themselves also the object of playful activity. Christie and Roskos (2006), for example, have reviewed evidence that a playful approach to language learning, as opposed to formal instruction, offers the most powerful support for the early development of phonological and literacy skills. The positive outcomes for vocabulary growth of a play-based curriculum, as opposed to a more teacher-led instructional programme, in grades 1–4 of Dutch primary schools, have also been recorded by van Oers and Duijkers (2013).

Second, through all kinds of physical, constructional and social play, children develop their skills of intellectual and emotional 'self-regulation', i.e. they learn to be aware of and control their own physical, mental and behavioural activity (Whitebread et al. 2005, 2007; Whitebread 2010). In a series of comprehensive studies of educational factors impacting on learning, these abilities have been shown to be significantly stronger predictors of academic achievement and emotional well-being than any other developing abilities, including general intelligence (Veenman and Spaans 2005), and educational interventions supporting children's self-regulation have clearly emerged as the most effective in supporting children's learning (Wang et al. 1990; Hattie 2009). In a major longitudinal study in the USA, McClelland et al. (2013) showed that a key element of self-regulation, attention span or persistence, in 4-year-olds significantly predicted maths and reading achievement at age 21 and the odds of completing college by age 25. The majority of this relationship was direct and was not significantly mediated by maths or reading skills at age 7. This is a clearly significant indication that an early emphasis on the teaching of literacy and numeracy is likely to be far less effective than a focus on supporting children to become self-regulating learners during their early childhood education.

A growing number of empirical educational studies suggest that early play experiences enhance young children's self-regulation and that self-regulation is related to academic achievement (Ponitz et al. 2009). Children who attend pre-schools based predominantly upon models emphasising play rather than academic outcomes have been found to achieve higher scores on measures of self-regulation (Hyson et al. 2007). A number of randomised controlled trials have shown that the Tools of the Mind play-based curriculum developed in the USA by Bodrova and Leong (2001), when effectively implemented, results in individual children's executive functions being enhanced and overall classroom quality being improved as a result of this enhanced self-regulation by the participating children (Barnett et al. 2008) [for more information about 'Tools of the Mind', see chapter on this programme in the section on Innovative and Longstanding Programmes, this volume].

15.5 Specific Groups of Children Disadvantaged by the 'Earlier Is Better' Educational Approach

A particular and arguably tragic consequence of the 'earlier is better' approach to early childhood education is that the consequent practices and arrangements we have discussed significantly disadvantage particular groups of children. And the irony is that these are often precisely the groups whose needs are cited as justification for the earlier introduction of formal instruction.

15.6 Disadvantage Due to Birth Date

There is significant evidence internationally to indicate that the youngest children in their year group at school tend to perform at a lower level than their older classmates, particularly in reading, writing and mathematics (e.g. Sharp et al. 2009). The research suggests that this 'birthdate effect' is most pronounced during pre-school and primary school and that the effect gradually and continually decreases throughout post-primary school. Nonetheless, it is thought to remain significant at later testing levels in secondary school and possibly during higher education. In a major review by Sykes et al. (2009), it is suggested that summer-born children may be an unacknowledged cohort facing disadvantage upon entry into school, in that they are both young (possibly just having had their fourth birthday in some countries) and the youngest in their class when they start school. They may be disadvantaged by being young because they may not have reached the level of cognitive competence required to tackle a curriculum designed for older children and, moreover, they may also experience other types of social and emotional difficulties when beginning education in an increasingly formal environment employing traditional teaching methodologies.

Research by the Institute of Fiscal Studies (Crawford et al. 2007) into attainment in English primary schools at Key Stage 1 (i.e. at the end of Primary Year 2) found that only 53% of the youngest in the year group (August-born girls) reached the expected level, compared to 80% of the oldest in the year group (September-born girls). At Key Stage 2 (i.e. at the end of Primary Year 6), the gap in attainment had narrowed, but remained significant, with 63% of August-born girls reaching the expected level compared to 76% of their counterparts born in September. It has been suggested that the age-related disadvantages of young-for-year children can lead to lower self-esteem, which may in turn have further impacts on behaviour and achievement (Sharp et al. 2009). For example, younger children may compare themselves with older classmates, leading to feelings of inadequacy, whereas older, more mature pupils may receive more positive feedback and assume a 'leadership position'.

The evidence also suggests that a disproportionately high percentage of relatively young children in the school year are referred for special educational needs, and many of them appear to be misdiagnosed. Concerns about 'teacher expectancy effects' have been raised (Sykes et al. 2009), where children are possibly being unfairly viewed as 'falling behind' and insufficient allowances for their level of attainment being made. These concerns have been expressed, in particular relating to summer-born children in England who do not achieve the writing goals by Year 1 and, on average, perform at a lower level than older children in their year group. As revealed in the English EYFS Profile scores for 2009, for example (DfE 2010), writing goals or 'standards' were generally more challenging than other goals, especially for boys, with 62% able to hold a pencil and use it to write letters by the end of the EYFS, compared to 79% of girls. A key hypothesis for this effect relates to the relative age of children, with the gap between the youngest and oldest pupils in

a class being almost a year in many cases. There is evidence to suggest that 'birth date' effects may be the result of lower levels of maturity in the physical, cognitive, social and emotional domains in the summer-born children, relative to those who are as much as a year older at the start of school (Sykes et al. 2009).

A particularly informative study in this area is that of Bedard and Dhuey (2006), who made comparisons across the educational systems of up to 19 OECD countries on performances on the TIMSS study (Trends in International Mathematics and Science Study), finding robust relative age effects for maths and science in the majority of the countries examined, except in the cases of children in Finland and Denmark, where no significant relative age effects were found at eighth grade (children aged 13). One possible explanation for this absence, Bedard and Dhuey suggest, is that children do not begin compulsory education until age 7 in Finland, and 6 in Denmark, where the early primary classes do not focus on a formal curriculum but employ play as a teaching methodology.

The evidence from developmental psychological research reviewed above would certainly support this hypothesis, as it also suggests that children's abilities to learn through direct instructional approaches, typical of formal schooling, are not clearly secured until around the age of 7 years. During the 3- to 7-year-old period, the rapid development of children's executive functioning (working memory, inhibitory control and control of their attention) (Garon et al. 2008) and 'Theory of Mind' (Klein 1998) support their crucially significant transition from being dependent on the guidance of adults, or 'other-regulated', to achieving independent cognitive control, or 'self-regulation'. In a number of recent publications, as we have reviewed, Whitebread (2012, 2013, 2014) has provided comprehensive reviews of research indicating the fundamental significance of early self-regulation for long-term educational achievement and emotional well-being and the role of informal adult-child interactions and playful learning experiences in supporting its early development. This evidence clearly supports the view that children are best supported to become confident and powerful learners by the provision of informal, play-based educational experiences up to the age of 7. At that point, they are then equipped, irrespective of the month of their birth, to be able to benefit from formal schooling.

15.7 Children from Economically and Socially Disadvantaged Backgrounds

Healthy child development may be supported by a variety of factors during the early years, or, conversely, the desired outcomes for a child may be compromised whether temporarily or on a more long-lasting basis. Such factors include, for example, the nature of early relationships with parents and other caregivers, the extent of cognitive stimulation and the access to adequate nutrition, health care and other resources such as a safe home and a safe and well-resourced neighbourhood environment (Shonkoff and Phillips 2000). The empirical evidence from a wide range of studies

indicates that children brought up in conditions of economic and social disadvantage do relatively poorly in relation to their physical, behavioural and cognitive development and do significantly less well in school than their more affluent peers. While poverty of itself does not cause children to have difficulties in their schooling conditions of unemployment, ill health, homelessness and illiteracy all reveal negative effects upon the well-being of families and the experiences of individual children.

This situation, and the response of governments and state education systems to it, is made increasingly critical given the currently rising levels of poverty in many European countries. A recent report by the United Nations Children's Fund (Handa and Natali 2014) revealed that 2.6 million children have sunk below the poverty line in the world's most affluent countries since the financial crisis first broke in 2008, bringing the total number of children in the developed world living in poverty to an estimated 76.5 million. Some of the most extreme increases have occurred in Europe. In Ireland, Croatia, Latvia, Greece and Iceland, for example, the numbers of children living in poverty rose since 2008 by over 50%.

As regards physical development, studies have shown that children born to economically disadvantaged mothers are more likely to be born early and have low birth weight (Bradshaw 2002; Duncan and Brooks-Gunn 2000; Treasury 2004), to experience a higher rate of accidents and accidental death (Bradshaw 2001, 2002; London Child Poverty Commission 2008), and are at greater risk of physical abuse or neglect from family members (Huston 2001). They are also less likely to be breastfed (Prince et al. 2006; Nelson 2000). The association identified between poverty and postnatal depression may, in turn, affect a new mother's relationship with her child and her ability to manage the demands of her new role as a mother (Mayhew and Bradshaw 2005) which, in turn, can impact on the quality of attachment between mother and child. A large number of studies connect growing up in a low-income household to poor mental health (Bradshaw 2001; DCSF 2007; Fabian Society 2005; Treasury 2008). One such study by Meltzer et al. (2000) highlights that children living in low-income households are nearly three times as likely to suffer mental health problems than their more affluent peers.

Children from low-income households are more likely to experience problems with nutrition, being more likely to follow an inadequate, 'unhealthy' (high sugar, high sodium) diet (Bamfield 2007; Bradshaw 2002; Gill and Sharma 2004; Nelson 2000). This can have a negative influence on the mental well-being of children (Gill and Sharma 2004) and over the longer term can lead to childhood obesity (Bradshaw 2002). Indeed the relationship between poverty and childhood obesity is well established; children living in disadvantaged neighbourhoods being significantly more likely to be obese than peers living in more affluent areas. Poverty is also associated with anaemia and diabetes (Duncan and Brooks-Gunn 2000) and neurodevelopmental problems (Singer 2003). Poor dental health is also more prevalent among children in low-income groups (Bradshaw 2002; Hirsch 2006). The 2003 Survey of Children's Dental Health showed that 'children in deprived schools have about 50% more tooth decay than children in non-deprived schools' (Hirsch 2006, p. 14).

Being born into certain geographical areas where high percentages of the population have income below the poverty line limits healthy development for many children. Such neighbourhoods offer limited opportunities in terms of resources important for early child development, including health facilities, parks and playgrounds (Leventhal and Brooks-Gunn 2000). Children living in disadvantaged communities are more likely to be exposed to environmental dangers, such as crime, violence and drug misuse which have been shown to have a negative effect upon child development (Aber et al. 1997). The dearth of safe places for children to play outdoors in turn promotes inactivity and contributes to problems of physical unfitness and obesity, as well as reducing the opportunity to build peer relationships. Overcrowding and living in a noisy environment have been associated with poor sleep patterns and homelessness, frequent moves and inadequate housing also contribute to poor mental health (Treasury 2004). Part of the reason accidents are higher among children from low-income families is that they are more likely to live in poor housing and have fewer safe places to play (Treasury 2004, 2008). However, accidents are not the only negative outcome associated with deprived housing and overcrowding. Inadequate housing is also connected to a multitude of childhood health problems including reduced resistance to respiratory infection, asthma (Bamfield 2007), hypothermia (HM Treasury 2004, 2008), developmental delay, skin conditions, immune system problems, depression and stress (Dowling et al. 2003; Spencer 2000). Children living in poverty are more likely to be absent from school due to illness, to be hospitalised, to suffer long-term illness and to spend more days ill in bed (Dowling et al. 2003).

Extensive research evidence has linked economic disadvantage to parental stress and inadequate responsiveness in parent-child interactions. In general, living on a low income can impair appropriate family functioning and can affect the quality of parent-child relationships (Russell et al. 2008), and the associations between poverty, mental health and stress, as well as the impact of these problems on parenting, have been the focus of many studies (e.g. see Duncan and Brooks-Gunn 2000; Russell et al. 2008).

Economic disadvantage is linked to a range of poor cognitive outcomes in young children, including adequate language acquisition. Research focussing upon family background has consistently shown it to be the most influential predictor of later academic success (Ansalone 2001). Differences in educational outcomes by income and background are apparent from a young age; these inequalities start early and increase (Treasury 2008). Analyses such as those of the 1970 cohort study, for example, and other longitudinal studies, reveal the negative picture that poorer children systematically achieve lower cognitive and behavioural outcomes at both age 3 and age 5 (Waldfogel and Washbrook 2008; Hobcraft and Kiernan 2010).

Early oral language development has been a strong focus of research in this area, particularly as it has been shown to be a strong predictor of cognitive development and school achievement. A number of studies have directly linked early language development with later emerging aspects of self-regulation. An American study of 120 toddlers in New England by Vallotton and Ayoub (2011), for example, showed strong relationships between vocabulary size at 14, 24 and 36 months and a range of

observed self-regulatory behaviours (e.g. the ability to maintain attention on tasks; the ability to adapt to changes in tasks and procedures) which, as we have reviewed above, are known to be strong predictors of academic achievement.

Bercow (2008, p. 13) produced a report on speech and language development in the UK and found that up to 50% of children from some socio-economically disadvantaged populations within the UK had less developed speech, language and communication skills than their peers on entry to mainstream education. One clear explanation of this is provided by Wolf (2008), who showed that by the age of 5 a middle class child in England had heard 32 million words more than a child from a deprived background. The potential negative impact of this difference upon later academic achievement is clear, given the widely accepted link between language abilities in the early years and later literacy development; Snow and Paez (2004) conclude that:

> Literacy development and school success are most effectively promoted during the preschool period by the development of oral language skills. (p. 14)

Policymakers' alarm about the growing achievement gap between children of low-income and higher-income families is understandable. However, the policymakers' assumption, to compensate those children who are not being given opportunities to learn at home through direct and sequential teaching in schools, although apparently logical, is, as we have argued, most likely to be counter-productive, further disadvantaging children from low-income families.

By contrast, the evidence from a range of intervention studies suggests that a much more productive approach is to support families living in poverty in ways which enable them to provide enhanced early experiences for the children within them. Recent evidence from the UK and internationally has shown that it is not poverty or its associated factors per se that adversely affect children's early development – indeed, it has become clear that it is not who parents 'are' but what they do to support their child that makes the difference to their development. There is now a clear consensus among professionals and academics that specific factors in the home environment – positive parenting, home learning environment and parents' attitude towards education – are highly significant (e.g. Gregg and Goodman 2010). Moreover, the evidence shows that what children of higher-income families actually receive at home is authentic, relational, spontaneous, conversational and play-based interaction (Pungello et al. 2009; Tudge et al. 2000), none of which is crucially dependent on family income.

Recent international research has also shown that early intervention contributes significantly to putting children from low-income families on the route to development and achievement in life through support for the whole family. Evidence from programmes such as the Family Nurse Partnership (Barnes et al. 2010), Parent-Child Interaction Therapy (Zisser and Eyberg 2010) and Community Mothers (McGuire-Schwartz 2007) has revealed that if appropriately related to health, employment and social services, early childhood services can effectively enhance parenting skills, community building and maternal employment and thereby decrease family poverty (Lynch 2004; Brooks-Gunn 2003).

Detailed analyses from the UK 'Effective Provision of Pre-School Education' (EPPE) study (Sylva et al. 2004) confirm that parental involvement in activities, such as reading to children, visiting places of interest, drawing and painting together, singing songs and nursery rhymes together, playing with letters and numbers and so on, influence young children's social and behavioural achievements over the pre-school period and are significant in accounting for differences in their social and behavioural development at the start of primary school. Duncan and Brooks-Gunn (2000) also showed that educational development and attainment are mediated by the home environment and the level of parental interest in their child's education, the latter factor proving to be a powerful influence on children's later educational success (Blanden 2006). Factors such as levels of parental interest in the current and future direction of a child's education have been seen to increase the child's chances of moving out of poverty as an adult by 25 percentage points (Blanden 2006). Evaluations of family literacy projects in the UK endorse this finding – revealing that children make greater progress when their parents participate in learning activities (e.g. Sabates 2008).

Research findings such as those of the 'Impact of the Home Learning Environment' (Melhuish 2010) suggest that policies which encourage these kinds of active parenting strategies for all SES groups can help to promote children's cognitive development and educational achievement. The evaluation of the Early Head Start programme, which provided combinations of home visits and centre-based interventions for the families of 0- to 3-year-olds, found that the intervention increased both the quantity and the quality of parental interactions with children, as well as children's social and cognitive development (Love et al. 2005). The extensive review by Barnes and Freude-Lagevardi (2003) concluded that to be optimal, interventions should include both parent and child together and the focus should be on improving interactions. These conclusions – which parenting behaviours are learnable and that enhanced skills can bring about improved developmental outcomes – have been echoed in the findings of Nutbrown et al. (2005) in relation to literacy during the pre-school period. There is, then, a considerable body of research on effective early interventions, and this provides clear guidelines of positive approaches to increasing the educational and life chances of children from disadvantaged backgrounds.

15.8 Conclusions

This chapter has examined the influence of schools upon children as their 'schooling' commences within a range of countries in Western Europe. This entailed an examination of the main characteristics of the structural and organisational frameworks set by the various statutory and advisory bodies in key Western European countries in relation to early childhood education and care provision for children in the pre-primary phase and up until the age of 7 years. A diverse range of national social and educational policies were briefly examined.

It is clear that the diversity of European children's home environments and early experiences, the age at which children may access early childhood education and care (ECEC) programmes, the length of time they attend and the nature of the provision are subject to significant cross national differences. Such diversity has a huge impact upon the development of the child, shaping their transition to 'school', a period during which children are required to respond to changes in identity, roles and relationships as they become a 'pupil', with new or different expectations placed on them (Griebel and Niesel 2000) and learning the social rules and values associated with being in an 'institution'.

Some of the ways in which transition to school is handled in countries within Western Europe have been compared, including the particular consequences for specific cohorts of children who are relatively disadvantaged due to their age or their family circumstances. We also saw that some governments in Western Europe have prescribed direct educational interventions into the early years phase of schooling, often with the aim of raising primary school test results. In some countries the age of entry to schooling has either been lowered by legislation or has effectively been lowered through various cultural, policy and economic pressures on schools and on families. In these countries, an 'earlier the better' model to starting school has been implemented, based on the belief that an earlier start to formal instruction and an emphasis upon cognitive processes will enhance children's development as learners. Hence in some countries, schools' curriculum and testing systems are focussed on a prescribed and narrow range of cognitive skills.

We have also reviewed the now very considerable body of evidence which suggests that this current direction of travel of school starting age policies across Europe, and internationally, is misguided and likely to be counter-productive. By contrast, the provision of extended informal, play-based educational and care provision for young children, up to the age of 7 years, has been shown to be a much more effective approach to enhancing the educational and life chances of all children, irrespective of their month of birth or the socio-economic status of their families. Approaches which also manage the transition of young children from their home environments to school by working sensitively with parents, and engaging parents actively in their young children's entry into the world of education, have also been shown to be the most effective in narrowing the gap of academic and life opportunities between the children of affluent parents and those born into conditions of poverty.

Many governments aspire to provide evidence-based approaches to educational provision, rightly believing that this will enhance the basic skills, creativity, problem-solving abilities and social and emotional competencies of their citizens. Given the known, crucial and powerful impact of early educational experiences on children's development as learners and on their emotional and social development, and thus their potential contributions to their communities and countries, the evidence presented in this chapter comprises a body of research to which national governments across Europe and the world would do well to attend.

References

Aber, J. L., Bennett, N., Conley, D., & Li, J. (1997). The effects of poverty on child health and development. *Annual Review of Public Health, 18*, 463–483.

Angus, J. (2011). *Steiner Waldorf education and the Irish primary curriculum: A time of opportunity*. MA thesis, IT Sligo, Sligo.

Ansalone, G. (2001). Schooling, tracking and inequality. *Journal of Children and Poverty, 7*(1), 33–47.

Artelt, C., Baumert, J., Julius-McElvany, N., & Peschar, J. (2003). *Learners for life: Student approaches to learning*. Results from PISA 2000, Paris.

Bamfield, L. (2007). *Born unequal: Why we need a progressive pre-birth agenda*. London: Fabian Society/Barnardo's.

Barnes, J., & Freude–Lagevardi, A. (2003). *From pregnancy to early childhood; early interventions to enhance the mental health of children and families*. London: Mental Health Foundation.

Barnes, J., Ball, M., Meadows, B., Howden, B., Jackson, A., Henderson, J., & Niven, L. (2010). The Family-Nurse Partnership Programme in England. Institute for the Study of Children, Families and Social Issues. Crown Copyright.

Barnett, W. S., Jung, K., Yarosz, D. J., Thomas, J., Hornbeck, A., Stechuk, R., & Burns, S. (2008). Educational effects of the tools of the mind curriculum: A randomized trial. *Early Childhood Research Quarterly, 23*(3), 299–313.

Bedard, K., & Dhuey, E. (2006). The persistence of early childhood maturity: International evidence of long-run age effects. *The Quarterly Journal of Economics, 121*(4), 1437–1472.

Bercow, J. (2008). *The Bercow report: A review of services for children and young people with speech, language and communication needs*. Nottingham: DCSF Publications.

Berk, L. E., Mann, T. D., & Ogan, A. T. (2006). Make-believe play: Wellspring for development of self-regulation. In D. G. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play=learning: How play motivates and enhances children's cognitive and social-emotional growth* (pp. 74–100). Oxford: Oxford University Press.

Blanden, J. (2006). 'Bucking the trend': What enables those who are disadvantaged in childhood to succeed later in life? DWP Working Paper No.31.

Blaustein, M. (2005). See! Hear! Touch! The basics of learning readiness. Journal of the National Association for the Education of Young Children, downloaded from http://www.journal.naeyc.org/btj/200507/01Blaustein.asp

Bodrova, E., & Leong, D. J. (2001). *Tools of the mind: A case study of implementing the Vygotskian approach in American early childhood and primary classrooms*. (UNESCO Innodata Monographs: Educational Innovations in Action No. 7) Geneva: International Bureau of Education, UNESCO.

Bradshaw, J. (Ed.). (2001). *Poverty: The outcomes for children*. London: Family Policy Studies Centre.

Bradshaw, J. (2002). Child poverty and child outcomes. *Children and Society, 16*, 131–140.

Briody, J., & McGarry, K. (2005). Using social stories to ease transitions. *Young Children, 60*(5), 38–42.

Brooks-Gunn, J. (2003). Do you believe in magic? What we can expect from early childhood intervention programs. *Social Policy Report, XVII, 1*, 3–7.

Broström, S. (2003). Transition from kindergarten to school in Denmark: Building bridges. In S. Broström & J. T. Wagner (Eds.), *Early childhood education in five Nordic countries. Perspectives on the transition from preschool to school* (pp. 39–74). Gylling: Academic.

Broström, S. (2005). *Care and education: Towards a new paradigm in early childhood education*. Paper presented at the EECERA conference, Dublin.

Broström, S. (2006). Curriculum in preschool. *International Journal of Early Childhood, 38*(1), 65–76.

Bruner, J. S. (1972). Nature & uses of immaturity. *American Psychologist, 27*, 687–708.

Christie, J. F., & Roskos, K. A. (2006). Standards, science and the role of play in early literacy education. In D. G. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play = learning*. Oxford: Oxford University Press.

Clark, P., & Zygmunt-Fillwalk, E. (2008). Ensuring school readiness through a successful transition to kindergarten. *Childhood Education, 84*, 287–293.

Crawford, C., Dearden, L., & Meghir, C. (2007). When you are born matters: The impact of date of birth on child cognitive outcomes in England. Centre for the Economics of Education (CEE) Report to the Department for Children, Schools and Families. http://www.ifs.org.uk/publications/4073.

DCSF. (2007). *Children and young people today: Evidence to support the development of the Children's Plan*. London: Department for Children, Schools and Families Crown Copyright.

DfE. (2010). *Achievement of children in the EYFSP, DfE RR-034*. London: Department for Education Crown Copyright.

DfE. (2012a). *Statutory framework for the early years foundation stage*. London: Department for Education Crown Copyright http://www.education.gov.uk/aboutdfe/statutory/g00213120/eyfs-statutory-framework.

DfE. (2012b). *National curriculum assessments at key stage 2 in England*. London: Department for Education Crown Copyright http://www.education.gov.uk/rsgateway/DB/SFR/s001087/index.shtml.

Dowling, S., Joughin, C., Logan, S., Laing, G., & Roberts, H. (2003). *Financial benefits and child health*. London: City University.

Duncan, G., & Brooks-Gunn, J. (2000). Family poverty, welfare reform, and child development. *Child Development, 71*(1), 188–196.

Dunlop, A-W. (2005). *Educational transitions: The key challenges*. Paper presented at the BERA Annual Conference, Glamorgan.

Einarsdottir, J., Perry, B., & Dockett, S. (2008). Transition to school practices: Comparisons from Iceland and Australia. *Early Years: Journal of International Research & Development, 28*, 47–60.

Ellegaard, T. & Stanek, H.A. (2004). Læreplaner i børnehaven: Baggrund og Perspektiver. (Learning Plans in kindergarten: Rationale and perspectives). Krogs forlag. Vejle, (pp. 112–140).

Eurydice. (2009). *Early childhood education and care in Europe: Tackling social and cultural inequalities*. Brussels: Education, Audiovisual and Culture Executive Agency, European Commission.

Eurydice (2012). Key data on education in Europe. EACEA P9 Eurydice. Luxembourg: Office for Official Publications of the European Communities. Retrieved online at http://eacea.ec.europa.eu/education/eurydice

Eurydice. (2013). *Compulsory education in Europe 2012/2013. Eurydice*. Luxembourg: Publications office of the European Union.

Fabian, H. (2002). *Children starting school*. London: David Fulton Publishers.

Fabian, H., & Dunlop, A.-W. (2005). The importance of play in the transition to school. In J. R. Moyles (Ed.), *The excellence of play* (2nd ed.). Berkshire: Open University Press/McGraw-Hill.

Fabian Society. (2005). *Why life chances matter: The interim report of the Fabian Commission on Life Chances and Child Poverty*. London: Fabian Society.

Featherstone, S. (2004), Smooth transitions. Nursery World, 27 May 2004.

Garon, N., Bryson, S. E., & Smith, I. M. (2008). Executive function in preschoolers: A review using an integrative framework. *Psychological Bulletin, 134*(1), 31–60.

Gill, O., & Sharma, N. (2004). *Food poverty in the school holidays*. London: Barnardo's.

Gray, P. (2009). Play as a foundation for hunter-gatherer social existence. *American Journal of Play, 1*(4), 476–522.

Gray, P. (2011). The decline of play and the rise of psychopathology. *American Journal of Play, 3*(4), 443–463.

Gregg, P. & Goodman, A. (2010). *Children's educational outcomes: The role of attitudes and behaviours, from early childhood to late adolescence*. CMPO, University of Bristol and Institute for Fiscal Studies.

Griebel, W. and Niesel, R. (2000). *The children's voice in the complex transition into kindergarten and school*. Paper presented at the 10th Annual Conference of the European Educational Research Association, London.

Griebel, W., & Niesel, R. (2002). Co-constructing transition into kindergarten and school. In H. Fabian & A. W. A. Dunlop (Eds.), *Transitions in the early years. Debating continuity and progression for children in early education*. London: Routledge Falmer.

Handa, S. & Natali, L (2014). *Changes in child poverty in the OECD/EU during the great recession: An initial view.* Innocenti Working Papers 2014-16, UNICEF.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.

Healy, J. M. (2004). *Your child's growing mind*. New York: Broadway Books.

Hirsch, D. (2006). *The cost of not ending child poverty: How we can think about it, how it might be measured, and some evidence*. York: JRF.

HM Treasury. (2004). *Child poverty review*. London: The Stationery Office.

HM Treasury. (2008). *Ending child poverty: Everybody's business*. London: Crown.

Hobcraft, J., & Kiernan, K. (2010). *Predictive factors from age 3 and infancy for poor childhood outcomes at age 5: Evidence from the Millennium Cohort Study*. York: University of York.

Huston, A. (Ed.). (2001). *Children in poverty: Child development and public policy*. Cambridge: Cambridge University Press.

Hyson, M., Copple, C. & Jones, J. (2007). Early childhood development and education. In *Handbook of child psychology*. New York: Wiley.

Jensen, J., & Langsted, O. (2004). Dänemark: Pädagogische Qualität ohne nationales Curriculum [Denmark: Quality in pedagogy without a national curriculum]. In W. Fthenakis & P. Oberhuemer (Eds.), *Frühpädagogik international, Bildungsqualität im Blickpunkt* (pp. 119–208). Wiesbaden: Verlag für Sozialwissenschaften.

Klein, P. D. (1998). The role of children's theory of mind in science experimentation. *The Journal of Experimental Education, 66*, 101–124.

Laurent, C. (2000)."The Real Life Class" Guardian Education Tuesday 11 April pp. 6–7.

Leventhal, T., & Brooks-Gunn, J. (2000). The Neighbourhoods they live in; the effects of neighbourhood and residence on child and adolescent outcomes. *Psychological Bulletin, 126*, 309–333.

London Child Poverty Commission. (2008). *Capital gains: London child poverty commission final report*. London: London Child Poverty Commission.

Love, J. M., Kisker, E. E., Ross, C., Constantine, J., Boller, K., Chazan-Cohen, et al. (2005). The effectiveness of the early head start for 3 year old children and their parents. Lessons for policy and programs. *Developmental Psychology, 41*, 885–901.

Lynch, R. (2004). *Exceptional returns. Economic, fiscal, and social benefits of investment in early childhood development*. Washington, DC: Economic Policy Institute.

Marcon, R. A. (2002). Moving up the grades; relationship between pre-school model and later school success. *Early Childhood Research and Practice, 4*(1), 517–530.

Margetts, K. (2002). Planning transition programs. In H. Fabian & A-W Dunlop (Eds.), *Transitions in the early years: Debating continuity and progression for children in early education* (pp. 156–179). London: RoutledgeFalmer, Chapter 9.

Margetts, K. (2003). Children bring more to school than their backpacks: Starting school down under. *Journal of European Early Childhood Education Research Monograph, 1*, 5–14.

Mayhew, E., & Bradshaw, J. (2005). Mothers. *Babies and the Risks of Poverty, Poverty, 121*, 13–16.

McClelland, M. M., Acock, A. C., Piccinin, A., Rhea, S. A., & Stallings, M. C. (2013). Relations between preschool attention span-persistence and age 25 educational outcomes. *Early Childhood Research Quarterly, 28*(2), 314–324.

McGuire-Schwartz, M. (2007). Community mothers: Relationships between family and social support and mother-child bonds. Multicultural perspectives in Ireland and the United States. *Journal of Poverty and Children, 13*(2), 133–156.

Melhuish, E. C. (2010). *Impact of the home learning environment; the secondary analysis of data from 'Growing up in Scotland'*. Edinburgh: Copyright Scottish Government.

Meltzer, H., Gatward, R., Goodman, R., & Ford, T. (2000). *The mental health of children and adolescents in Great Britain*. London: The Stationery Office.

Nelson, M. (2000). Childhood nutrition and poverty. *Proceedings of the Nutrition Society, 59*, 307–315.

Nutbrown, C., Hannon, P., & Morgan, A. (2005). *Early literacy work with families: Policy, practice and research*. London: Sage Publications.

OECD. (2006). *Starting strong II: Early childhood education and care*. Paris: OECD Publishing.

Panksepp, J. (2007). Can PLAY diminish ADHD and facilitate the construction of the social brain? *Journal of the Canadian Academy of Child & Adolescent Psychiatry, 16*(2), 57–66.

Peeters, J. (2008). *The vonstruction of a new profession. A European perspective on professionalism in Early Childhood Education and Care*. Amsterdam: SWP Publishers.

Pellegrini, A. D., & Gustafson, K. (2005). Boys' and girls' uses of objects for exploration, play and tools in early childhood. In A. D. Pellegrini & P. K. Smith (Eds.), *The nature of play: Great apes & humans* (pp. 113–135). New York: Guilford Press.

Pellis, S., & Pellis, V. (2009). *The playful brain: Venturing to the limits of neuroscience*. Oxford: Oneworld Publications.

Polizzi, N., Martin, R., & Dombrowski, S. (2007). Season of birth of students receiving special education services under a diagnosis of emotional and behavioural disorder. *School Psychology Quarterly, 22*(1), 44–57.

Ponitz, C. C., McClelland, M. M., Matthews, J. S., & Morrison, F. J. (2009). A structured observation of behavioral self-regulation and its contribution to kindergarten outcomes. *Developmental Psychology, 45*(3), 605.

Prince, D., Pepper, K., & Brocato, K. (2006). The importance of making the well- being of children in poverty a priority. *Early Childhood Education Journal, 34*(1), 21–28.

Pungello, E. P., Iruka, I. U., Dotterer, A. M., Mills-Koonce, R., & Reznick, J. S. (2009). The effects of socioeconomic status, race, and parenting on language development in early childhood. *Developmental Psychology, 45*(2), 544–557.

Russell, M., Harris, B., & Gockel, A. (2008). Parenting in poverty: Perspectives of high-risk parents. *Journal of Children and Poverty, 14*(1), 83–98.

Sabates, R. (2008). The impact of lifelong learning on poverty reduction. IFLL Public Value Paper. National Institute of Continuing Adult Education.

Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. (2005). *Lifetime effects: The high scope Perry Preschool study through age 40*, *Monographs of the High Scope Educational Research Foundation* (Vol. 14). Ypsilanti: HighScope Press.

Shakespeare, T. (2000). The social relations of case. In G. Lewis, S. Gerwitz, & J. Clarke (Eds.), *Rethinking social policy* (pp. 52–65). London: Open University/Sage.

Sharp, C. (2002). *School starting age: European policy and recent research*. Paper presented at the LGA Seminar, November 2002. London: NFER and Local Government Association.

Sharp, C., George, N., Sargent, C., O'Donnell, S., & Heron, M. (2009). International thematic probe: The influence of relative age on learner attainment and development, NfER. http://files.eric.ed.gov/fulltext/ED508563.pdf.

Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). *From neurons to neighbourhoods: The science of early childhood development*. Washington, DC: National Academy Press.

Singer, R. (2003). *The impact of poverty on the health of children and youth*. Toronto: Campaign 2000.

Smith, P. K. (2006). Evolutionary foundations and functions of play: An overview. In A. Göncü & S. Gaskins (Eds.), *Play & Development: Evolutionary, Sociocultural and Functional Perspectives* (pp. 21–49). Mahwah: Lawrence Erlbaum.

Snow, C. E., & Paez, M. M. (2004). The Head Start classroom as an oral language environment: What should performance standards be? In E. Zigler & S. J. Styfco (Eds.), *The head start debates*. Brookes: Baltimore.
Spencer, N. (2000). *Poverty and child health* (2nd ed.). Oxford: Radcliffe Medical Press.
Suggate, S. (2009a). Research into early reading instruction and Luke effects in the development of reading. *Journal for Waldorf/R Steiner Education, 11*(2), 17–20.
Suggate, S. P. (2009b). School entry age and reading achievement in the 2006 Pro-gramme for International Student Assessment (PISA). *International Journal of Educational Research, 48*, 151–161.
Sykes, E., Bell, J. and Rodeiro, C. (2009). Birthdate effects: A review of the literature from 1990-on. University of Cambridge: Cambridge Assessment.
Sylva, K., Bruner, J. S., & Genova, P. (1976). The role of play in the problem-solving of children 3–5 years old. In J. S. Bruner, A. Jolly, & K. Sylva (Eds.), *Play: Its role in development and evolution* (pp. 55–67). Harmondsworth: Penguin.
Sylva, K., Melhuish, E. C., Sammonds, P., Siraj-Blatchford, I., & Taggart, B. (2004). *The Effective Provision of Pre-School Education (EPPE) project: Final report findings from pre-school to end of key stage1*. London: DfE/Institute of Education, University of London.
Tamis-LeMonda, C. S., & Bornstein, M. H. (1989). Habituation and maternal encouragement of attention in infancy as predictors of toddler language, play and representational competence. *Child Development, 60*, 738–751.
Tudge, J., Hogan, D., Snezhkova, I., Kulakova, N., & Etz, K. (2000). Parents' child-rearing values and beliefs in the United States and Russia: The impact of culture and social class. *Infant and Child Development, 9*, 105–121.
UNESCO. (2007). *Strong foundations. Early childhood care and education. Education for all global monitoring report*. Paris: UNESCO.
Vallotton, C. D., & Ayoub, C. (2011). Use your words: The role of language in the development of toddlers' self-regulation. *Early Childhood Research Quarterly, 26*(2), 169–181.
van Oers, B. (2013). Educational innovation between freedom and fixation: The cultural-political construction of innovations in early childhood education in the Netherlands. *International Journal of Early Years Education, 21*(2–3), 178–191.
van Oers, B., & Duijkers, D. (2013). Teaching in a play-based curriculum: Theory, practice and evidence of developmental education for young children. *Journal of Curriculum Studies, 45*(4), 511–534.
Veenman, M. V. J., & Spaans, M. A. (2005). Relation between intellectual and metacognitive skills: Age and task differences. *Learning and Individual Differences, 15*, 159–176.
Waldfogel, J., & Washbrook, E. (2008). *Early years policy*. London: The Sutton Trust.
Wang, M. C., Haertel, G. D., & Walberg, H. J. (1990). What influences learning? A content analysis of review literature. *Journal of Educational Research, 84*, 30–43.
Whitebread, D. (2010). Play, metacognition and self-regulation. In P. Broadhead, J. Howard, & E. Wood (Eds.), *Play and learning in the early years*. London: Sage.
Whitebread, D. (2012). *Developmental psychology and early childhood education*. London: Sage.
Whitebread, D. (2013). Self-regulation in young children: Its characteristics and the role of communication and language in its early development. In D. Whitebread, N. Mercer, C. Howe, & A. Tolmie (Eds.), *Self-regulation and dialogue in primary classrooms. British Journal of Educational Psychology Monograph Series II: Psychological Aspects of Education – Current Trends, No. 10* (pp. 25–44). BPS: Leicester.
Whitebread, D. (2014). The importance of self-regulation for learning from birth. In H. Moylett (Ed.), *Characteristics of effective learning: Helping young children become learners for life* (pp. 15–35). Maidenhead: Open University Press.
Whitebread, D., & Jameson, H. (2010). Play beyond the foundation stage: Story-telling, creative writing and self-regulation in able 6–7 year olds. In J. Moyles (Ed.), *The excellence of play* (3rd ed., pp. 95–107). Maidenhead: Open University Press.

Whitebread, D., Anderson, H., Coltman, P., Page, C., Pino Pasternak, D., & Mehta, S. (2005). Developing independent learning in the early years. *Education, 3-13*(33), 40–50.

Whitebread, D., Bingham, S., Grau, V., Pino Pasternak, D., & Sangster, C. (2007). Development of metacognition and self-regulated learning in young children: The role of collaborative and peer-assisted learning. *Journal of Cognitive Education and Psychology, 3*, 433–455.

Wolf, M. (2008). *Proust and the squid: The story of science and the reading brain*. London: Icon Books.

Zisser, A., & Eyberg, S. M. (2010). Treating oppositional behavior in children using parent-child interaction therapy. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidence-based psychotherapies for children and adolescents* (2nd ed., pp. 179–193). New York: Guilford.

Chapter 16
Early Childhood Education with Disadvantaged Children: Actions for Success

Marta Soler-Gallart and Ainhoa Flecha

Abstract Early childhood education has become central to achieve the objectives planned for Europe in 2020. Pre-primary education is considered to be a crucial factor to break the closed circle of intergenerational transmission of poverty and, to this respect, the investment with highest returns. In this chapter we present the concept of successful educational action (SEA) and its particular application to the case of early childhood education and care in diverse European countries and among vulnerable populations. Drawing from studies funded under the Framework Programme for Research of the European Commission, we analyze some of the SEAs such as dialogic literary gatherings, interactive groups, or family education. These SEAs have provided evidence of being effective on improving outcomes in cognitive, social, and emotional development of children; in this chapter we will focus on children from ethnic minorities and immigrant background and how SEAs in ECEC contribute to prevent their future disadvantage.

Keywords Educational exclusion • Disadvantage children • Successful educational actions

16.1 Taking the Challenge to Reverse Educational Exclusion

When the 25-year results on Head Start began coming in, they showed that it had made an astonishing difference, even if it hadn't produced a mass miracle. Kids who had been through the program were, by comparison to "controls," more likely to stay longer and do better in school, to get and to hold jobs longer, to stay out of jail,

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to commit fewer crimes, and the rest. Only a "starting" subculture counteracts the subsequent social alienation of poor, black, and Hispanic kids and their families. Even under the least favorable conditions – psychologically, fiscally, and educationally – we still succeed in giving some children a sense of their own possibilities. We do it by getting them (and sometimes their parents) to collaborate in an enabling community. Perhaps successful school cultures should be considered as "countercultures" that serve to raise the consciousness and metacognition of their participants as well as enhancing their self-esteem (Bruner 1996, 74–78).

Jerome Bruner, considered to be the major architect of the Head Start program in the United States in the 1960s, has always studied and argued that children, from a very young age, are able to learn complex ideas and skills as long as instruction is organized appropriately, opposing Piagetian, constructivist approaches. His theory of scaffolding or providing the instructional formats to facilitate learning is close to Vygotsky's dual perspective of learning, in which social interaction is prior to the development of higher-order processes. These research perspectives and theories have made possible the development of high-quality early childhood education and care (hereinafter ECEC), in which early learning interactions are crucial for children's learning process throughout their lives. Particularly, children at risk of social exclusion need further efforts in the creation of stimulating educational environments, rich in learning interactions, from the very first years of their lives. High-quality ECEC, based on these premises, has therefore been an influence on future educational developments which guarantee equal opportunities of successful learning and subsequent social inclusion for all children.

In a context of crisis and deep concern about increasing social inequalities, the European Commission's recommendations on ECEC stress the need to provide effective early educational responses, as a way for lessening the risk of early school leaving and increasing the equity of educational outcomes. As reflected in the communication on early childhood education and care, providing all our children with the best start for the world of tomorrow (European Commission 2011a), the future benefits of effective early education are specially prominent for disadvantaged children and families, including those from migrant, minority, and low-income backgrounds. It is important to notice that the share of early school leavers among people with a migrant background was 29 %, reaching 32 % among people from less developed countries (Eurostat/Labour Force Survey 2011). One of the most alarming situations in this regard is experienced by Roma children, who have suffered different discriminations in schools and the subsequent social and educational inequalities (Gómez and Vargas 2003). As shown by a recent survey developed by the European Union Agency for Fundamental Rights (2012), in nine of the 11 EU Member States surveyed, there is a considerable gap between Roma and non-Roma children's attendance at preschool and kindergarten, as well as strong differences in later school performance.

High-quality ECEC is crucial in addressing these pressing challenges and particularly to "break the cycle of low achievement and disengagement that often leads to school drop-out and so to the transmission of poverty from one generation to the next" (European Commission 2011a, p. 15). It is stressed that universal access to

quality ECEC may be far more beneficial than educational initiatives exclusively targeted to disadvantaged children. The Council of the European Union also concludes that ECEC has a high impact in preventing this cycle of disadvantage by promoting enhanced cognitive, linguistic, social, and emotional development for all the children (Council of the European Union 2011). Alongside, the European flagship initiative platform against poverty and social exclusion highlights the role of pre-primary education, which is considered "the most crucial factor for breaking the vicious circle of intergenerational transmission of poverty, and it is the investment with the highest returns" (European Commission 2010: 8). Research on effective education suggests that the early childhood period gives the best opportunity for investment in human capital, particularly for the most disadvantaged families, leading to higher economic returns: social efficiency is enhanced, and inequality is reduced (Cunha et al. 2005; Heckman 2011). Therefore education, including ECEC, becomes essential for social inclusion in particular and economic improvements and growth in broader terms.

International research in the field supports the benefits of effective ECEC programs for disadvantaged children and families (Sordé 2010; Cullen et al. 2009; Stein et al. 2013). Evidence collected regarding the outcomes of different consolidated ECEC programs in the United States confirms this statement. For instance, the Harlem Children's Zone is oriented to improve the situation of marginalized families through early educational intervention. This project started in 1970 and mainly serves African-American families in Harlem, New York, who are at high risk of social exclusion and face difficulties associated with drug dealing and consumption. Their specific program addressing early childhood is called Baby College, and its main objective is to provide support to families with children aged 0–3 years in order to guarantee a happy and healthy start for their children. Families involved in this program receive different free services like breakfast, lunch, and child care which includes brain development programs and parent-child bonding. Similarly, the US federal program Early Head Start mentioned above gives attention to disadvantaged pregnant mothers and children up to age 3. A recent evaluation shows that participation in the program had a positive impact on different potential outcomes, such as child cognitive skills, child aggressive behavior, maternal supportiveness, and home language and learning environment (Vogel et al. 2013). For instance, regarding children's cognitive skills in ages 2 and 3, the evaluation evidences higher scores in the Bayley mental developmental index (BMDI), which assesses relevant abilities such as sensory acuities, memory learning and problem solving, verbal communication, mental mapping, complex language, and mathematical concept formation. Children attending the program reached good results, especially in vocabulary.

Evidences in relation to the middle- and long-term benefits of ECEC are consistent with the results of different international assessment studies. For instance, in OECD's PISA 2009, 15-year-old children from OECD countries who attended some years of pre-primary education scored 54 points higher in reading assessment than children who did not attend preschool (OECD 2010). Furthermore, PIRLS 2011 (Mullins et al. 2012) and PIRLS 2006 (Mullis et al. 2007) show that children

who have acquired early literacy skills during childhood achieve better reading outcomes at fourth grade.

The benefits of ECEC depend on the implementation of ECEC actions and programs which are contributing to children's cognitive, social, and emotional development, especially with those groups at risk of poverty or social exclusion. In this regard, recent scientific findings stress the importance that these programs and actions respond to quality standards which are positively related to child outcomes (Sylva et al. 2011). Drawing from the NICHD Study of Early Child Care in the United States and other similar large-scale studies in the United Kingdom and Ireland, Belsky (2009) points out that the quality of care (in terms of caregiver attentiveness, warmth, and stimulation) has a strong impact on children's development, especially on their cognitive-linguistic development. Sylva et al. (2011) discuss the relevance of stimulation, interactions, and environment in relation to ECEC quality. These three elements are interrelated and, when having specific qualities such as effective adult guidance of children's participation in cultural activities (Radziszewska and Rogoff 1991), may have a decisive influence on the children's cognitive and linguistic development (Vygotsky 1978; Bruner 1983; Fram et al. 2012) as well as on emotional development (Whitebread 2012). For example, dialogues which promote the inquiry of knowledge about diversity of problems and facts can enrich the learning environment of children, increasing stimulation opportunities and maximizing the developmental power of interactions among children and adults (Mercer 2000; Wells 2007). Additionally, research has also highlighted early family and community involvement in educational activities, which has a critical impact on children's developmental outcomes, especially among the most disadvantaged groups (Díez et al. 2011).

European ECEC interventions need to consider these elements in order to implement measures that will achieve successful outcomes among children, leading them to achieve a cognitive, social, and emotional development in the early years and a solid basis for further more effective learning. In this chapter we present "successful educational actions" (hereinafter, SEAs) (6th FP INCLUD-ED project, 2006–2011), identified and recognized by the international scientific community in the field of early childhood education, and how they have been implemented with children from vulnerable groups.

16.2 Successful Educational Actions in ECEC

Scientific research has already studied actions that are successful in improving children's development in different aspects: cognitive and instrumental as well as social and emotional. The INCLUD-ED project is the only research in the social sciences and humanities selected by the European Commission among the ten success stories in the Framework Program for Research for its added value. Its research results have been included in communications and resolutions by the European Commission, the

Council of Europe, and the European Parliament.[1] INCLUD-ED analyzed SEAs that led to better academic performance and improved living together at different levels of education (including pre-primary, primary, and secondary education) with a particular focus on five socially vulnerable groups: women, youth, migrants, cultural groups such as Roma, and people with disabilities. Thus, these five people groups were selected by the project as being considered in at-risk situation for facing socioeconomic disadvantages and, therefore, vulnerable to fall in poverty or social exclusion. SEAs were identified after a study of successful schools in Europe, schools that, while serving at-risk children, achieved very good outcomes in terms of high academic performance in comparison to schools with similar characteristics. Consequently, SEAs are not best practices, but rather practices that obtain the best results in all the contexts in which they are implemented. Therefore, the concept of "successful educational action" involves evidence of improvements and transferability to diverse contexts. Although SEAs have been identified at all levels of education, for the purpose of this chapter, however, we will focus on the findings which relate only to preschool and early childhood education.

INCLUD-ED conducted case studies of schools in four European countries (Finland, Spain, Cyprus, and Latvia) which responded to three important criteria: (a) they had demonstrated a contribution to educational improvements in relation to their context, (b) they served families and children from low socioeconomic status and minority background, and (c) they had strong community involvement. As a result of these analyses, three SEAs were identified: interactive groups, dialogic literary gatherings, and family education. This chapter mainly reports data from the Spanish case studies, in which the authors were involved. Children, family and community members, teachers, administrative staff, and policy makers from four different schools also participated in this research, which was carried out by using a communicative methodological approach (Gómez et al. 2011).

16.3 The Power of Interactions for Learning and Development: Interactive Groups

Interactions are key in cognitive and noncognitive development. According to Vygotsky (1978), human learning and development are results of our social nature. Consistently, he considers the "level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (p. 86). Along these lines, the more interactions – and more diverse – children have with peers and adults, the more learning opportunities emerge. There is a wide body of literature with evidences about the effects of peer cooperation (Johnson and

[1] For instance, INCLUD-ED results have been considered in several European official documents on tackling early school leaving (Official Journal of the European Union 2010; European Commission 2011b; European Parliament 2009, 2011).

Johnson 1981; Stainback and Stainback 1996; Slavin 1991) and family interaction (Goodall and Vorhaus 2011).

This dialogic conception of learning is the basis of the "interactive groups" approach (Valls and Kyriakides 2013). Interactive groups involve organizing the classroom into small heterogeneous groups with more adult guidance. In one class there can be four groups and four adult volunteers, one in each group, who are usually family and community members, in addition to the class teacher. In each group there is a different activity (curricular tasks, such as pre-reading and writing, mathematics, logic, etc.) which lasts between 15 and 20 min. The children rotate in their groups, in order to fulfill all the activities, using language and dialogue to help each other to solve the required activities. The role of the adult volunteers is to guide, encourage, and monitor these dialogues. This dynamics multiplies interactions between peers, and between them and the volunteers, and therefore increases learning opportunities (Elboj and Niemelä 2010).

The analysis of the implementation of interactive groups in pre-primary schools shows that, at this education level, special emphasis is placed on language acquisition and emerging literacy. Teachers perceived improvements in the learning process within the interactive groups, as shown in the following quote:

> If they're doing language, for instance, learning how some letters sound …there are games with different levels of difficulty, and since some of them are more advanced than others, it's good for them all, because they can help each other (…) Then if I'm there helping someone and another one comes along, I say "Toni, come and see if we're doing this right", so they help each other.

Interactions among diverse children are a main component for instrumental learning in interactive groups (De Mello 2012). Teachers observe that peer interactions strengthen learning in a different way, and they associate these interactions with increased motivation and enthusiasm for learning:

> Sometimes I think it's better than when I just explain something to them, they get it differently (…) and they get more enthusiastic about reading.(…)

The interaction with volunteers makes a notable difference, which is crucial for the interactive groups' dynamics. Each volunteer takes care of a reduced group of children and promotes supportive interaction among them, ensuring that everyone participates in the activity and helps other classmates. In addition, this organization of learning increases the work completed in the same amount of time, as well as the quality of learning, and the children' enthusiasm:

> Three volunteers came along, and in one hour, we did so much! They had to do three different activities (…) it was done in such a calm and peaceful way, and the children finished the whole thing… everything went well, since there were three people (…) I remember that day as being amazing, (…)a great pleasure, (…) I think the children really enjoyed it, which is very positive, right? (…).Without any doubt, a lot more work can be done, work which is of higher, not less quality!

Community members' involvement is perceived by the teacher as being particularly beneficial for children of minority backgrounds, who relate to volunteers with different religions, cultures, or social backgrounds, increasing their motivation for

learning. The teacher in this quote highlights the fact that the participation of immigrant family members makes learning of "high, not less quality," emphasizing with her words and tone the stereotype about immigrant families of poor neighborhoods in the field of education. In fact, children feel a close connection with adults who are part of their everyday life and share their same culture and language, which supports a close connection between school and family life (Sordé 2010). Thus, adult participation also enhances the knowledge of other cultures and the consolidation of a positive coexistence.

The positive results of interactive groups on children's cognitive and social development are also related to the emphasis of interactive groups on the instrumental dimension of learning, that is, on the abilities that children will be required to use for future success at school. This implies intensive work on the emerging literacy and mathematics, among other competences. As shown in the following quote, teachers confirm clear advancements through interactive groups' work:

> It makes me so happy to see the children learning, to be honest, and I compliment their learning a lot I tell them they are the cleverest children in the world (…) and if someone comes to our classroom they would say to that person "we are the cleverest in the world" (…) And I can clearly see the results this year …in the area of language, in mathematics, in everything! it is a delightful class! and I am convinced they have future.

These efforts addressed to accelerate instrumental learning are contributing to improve all children's outcomes, including those from disadvantaged backgrounds. Rather than lowering down learning expectations and standards (due to the many difficulties they face in other contexts), learning interactions are multiplied in the school context, thus accelerating learning instead of compensating deficits. In one of the case studies analyzed, where most of the families were Roma, the progress in reading skills in the preschool years radically changed. While many children finished sixth grade (11–12 years old) and could barely read, after some years implementing interactive groups since the first year of preschool (3-year-olds), they all were able to read at 5 (Díez et al. 2013). The father of Fatima, a 3-year-old Moroccan girl from another school analyzed in our research, emphasizes the progress of his daughter in language learning:

> Thank God, yes, yes she has! It's not just because she's my daughter, but to tell you the truth her level is quite…she's very smart, she's involved in everything and I can see that she's doing well every day (…) She speaks Spanish better than I do.

INCLUD-ED has analyzed how interactive groups in childhood education not only accelerate the cognitive development but also the social and emotional development at the same time. Children learn to help each other as a usual attitude in their daily lives at ages in which individualism is common. Drawing from a sociocultural perspective, Cooper and Whitebread (2007) argue that in order to progress from egocentrism, from normal young children's behavior to a level of social competence, it is vital to promote the interactions of mutual help from early childhood education, on the basis of the social and psychological foundations of learning. In interactive groups children learn through mutual help, within a learning environment that promotes solidarity among children. Importantly, this solidarity supports

all children's improvements, not only those who have more learning of behavioral difficulties. Through interactions, all children are exposed to questions and are often asked to explain better or justify their words, thus strengthening meaning making. When a group of children from one of our case studies were asked what they liked about the interactive groups, they answered "that we become better friends." Through increased solidarity through the learning process, these friendships strengthen children's emotional development.

16.4 Dialogic Reading Development Through Literary Gatherings

Different authors have argued that high-quality early childhood education can prepare children from early ages for the development of literacy competences, especially the children from underprivileged contexts (Bruner 1983; Whitebread 2012). Emerging literacy approaches have been useful to recognize the development of literacy skills from children's natural interactions with the print sources available in the written world around them, without purposeful instruction. But the dialogic gatherings go beyond these approaches by introducing complex book reading through dialogue with adult guidance. The books read in these gatherings are from the universal classical literature such as *Odyssey The Adventures of Odysseus*, or the struggles of the *Pied Piper of Hamelin*, or the tales from *One Thousand and One Nights*, or Phileas Fogg's difficulties in going *Around the World in Eighty Days*. Therefore, children from vulnerable groups are brought in contact with high culture and its socially recognized literature, which usually has been withdrawn from them and their families belonging to low socioeconomic backgrounds. In her book *Other People's Children*, Lisa Delpit (1995) argued that unstructured teaching strategies such as open classrooms or those focused on process rather than product have put minority children from low socioeconomic background at greater disadvantage. Children from nonacademic families tend to have less school-based vocabulary and emergent literacy skills. For this reason, she argued for teachers to decode middle-class culture for poor kids and to close the achievement gap through skills building. According to this analysis, the dialogic gatherings provide learning opportunities for children to access classic universal culture, including literature, music, and art, especially in disadvantaged contexts when this type of cultural resources do not exist within the families and are often not promoted by schools (Serrano et al. 2010). The dialogic gatherings are a successful educational action which consists in reading little by little a classic work of literature and opening up, periodically, a dialogue from there. All children must reference a page (or passage) from the book in order to speak and share with others his or her thoughts. This dialogue is egalitarian (Flecha 2000) as what matters are the arguments each of them share. Interpretation is thus dialogic and collective rather than individually constructed. Dialogic literary gatherings can be also applied with children's parents and other adult relatives. In

this case, men and women without a higher education background, who had never read a book before, start reading, discussing, and enjoying books by writers such as Dostoevsky, García Lorca, Cervantes, or Joyce. They not only become readers and improve their own literacy skills but also transform their home interactions in the way described in the next section.

The implementation of dialogic literary gatherings in ECEC has shown successful results in terms of language and literacy development as well as building common bonds and shared values. One of the schools analyzed and implemented the gathering at preschool level. Once a week a group of learners meet in the library, and the teacher reads one chapter of Odyssey (an adapted version). After that, helped by a puppet, she tells through argumentation one part of the book she liked and why. The children then follow this model and share their ideas by raising their hands in order to speak and listening to each other. The different parts of the story are reread in the process. Children become strongly engaged in the story and the whole dialogic reading process. At the age of 5, when they were able to read, they read Jules Verne's book by themselves, weekly, in little bits, choosing paragraphs to share with their classmates and writing on their notebooks a few words and ideas to be shared. Because they had participated in these gatherings since they were 3, as soon as they could read, they rapidly got engaged in the dialogic reading process. Additionally, those who could not read well got support from the teacher, family, or volunteers, thus increasing their motivation and interactions to accelerate the reading process.

In only few years, some relevant results were reached. First, children's vocabulary increased and enriched. Children not only learned new words but they also used the language more appropriately. Second, kids were more interested in reading. Third, children learned about referents of recognized high culture, such as who Ulysses and Penelope were, what Ithaca means, how powerful Zeus is, why Mr. Fogg arrived 1 day earlier to London, etc. These referents from the universal literature will help them in their future learning developments. A teacher explained:

> Because each week I read a story, the children want to know what will happen in the next story, and as they also learn words that they didn't know before… for instance they did not know what "mayor" meant, now they know who the mayor is, that he rules in the city; they learn a lot…

The gatherings have also helped to develop sociability strategies, awareness about the other, and mutual respect, especially through taking turns to speak. A learner explains this in his own words:

> We must raise hands, when we finish the story we line up, listen to other boys and girls, and listen to friends, when they talk, and also when the teacher talks. We have to be quiet and listen

Emergence of solidarity values have been also identified, for instance, when a child spontaneously decided to help his friend in reading the paragraph, by pointing the text with his finger. In the same group, a girl who does not actively participate in the gatherings started to talk when the topic of mourning appeared and was discussed. Her uncle died a short time before and decided to raise her hand and share her feelings about him with peers and teacher. The group listened and supported her

feelings. Through these dialogues a new meaning about school and learning emerges, more closely connected to their lives.

Similar to dialogic literary gatherings, some schools bring these children closer to classical music or art. They listen to Beethoven's symphonies or watch Mozart's The Magic Flute and then talk about images and feelings through dialogue, thus proving that they are highly motivated to engage with classic works and are able to make very complex and creative interpretations.

16.5 Family Education and the Transformation of Interactions in Children's Environments

Family education, especially programs focused on family literacy, have been highlighted as important to transform the learning context of children, especially those from disadvantaged backgrounds (Paratore et al. 1999; Ponzetti and Dullin 1997; Tett 2001). Children do not only learn in child care centers or in schools; they also learn at home, in the street, and in diverse informal environments. Hence, children's development increases when there is continuity between what is developed in the center and at home in terms of socialization, daily routines, and learning. A teacher was explaining this relationship:

> It is beneficial to the children to see that their family is somehow so close to them in this way, I mean, so close to their school… and the way in which they [mothers] are involved in school and they also come here to learn, and they also learn at home. I mean, I see that it is very good, because it establishes more links between the family and pupils and us.

Different sets of statistical data have shown a correlation between parents' educational level and their children's school performance and attainment. The INCLUD-ED research however demonstrates that particular successful actions in family education contribute to transform present cultural capital and counter this tendency. Many ECEC initiatives have included family education and literacy actions that have already had a great effect on young children. In fact, according to Eurydice (2009), the most effective ECEC intervention programs provide both intensive early education and strong involvement in family training. Family-related ECEC actions can therefore contribute to break the aforementioned vicious circle of poverty.

There is a wide body of research about cultural activities in which parents participate and make a difference in the interactions they have with their children at home both in supporting school learning activities (i.e., homework) and also in transforming home interactions (i.e., reading the newspaper or listening to classical music, going to museums, or watching less TV). These studies have found that the effects from these interactions occur from very early age, as they are related to the presence of books and other print sources, home literacy practices, increase of cultural inputs, and among other relevant interactions (Hidalgo et al. 2002; Rogoff et al. 2001).

INCLUD-ED also found strong relationships between family education programs and children's improvements in successful schools in deprived areas. This research project found different types of family participation in schools, but not all the types were related to the improvement of children's outcomes (Díez et al. 2011). Among all the different types – informative, consultative, decisive, and educative – participation in learning activities had the strongest impact. Family education is most successful when it is designed in response to demand from families rather than a top-down program based on professional's beliefs. For instance, language classes for families were introduced in schools in response to demand from migrant families who identified the need to be more proficient in the language of the host country to understand what their children were taught in school and thus be able to help them to continue their learning at home more effectively. In the same way, IT courses and English as a foreign language were strongly demanded with the goal of helping their children in the near future, but also to improve their own education and possibilities in society as adults. In one of the schools studied, in a deprived area, teachers had organized a series of talks about health, habits, and emotional education. Few parents attended and participation dropped rapidly. After talking to families they started an IT course, with a volunteer from the neighborhood, and family participation increased. Time flexibility was also an important feature in family education: while some mothers needed their children to be taken care of while they were in the courses, others asked for evening classes so they would be able to attend after work.

One of the most successful actions in family education is the dialogic literary gathering that, as we mentioned above, can also be conducted with adults. In one of the schools studied, with a high percentage of Moroccan immigrant families and children, the mother of one of these families started to participate in these dialogic gatherings. She was low literate and could not speak Spanish and did not dare to leave her home because she could not communicate. With the support of another mother from the school, she decided to go to literacy classes and soon started in the gathering. They were reading Lorca's *Blood Wedding*, and she made strong efforts to read the agreed pages (with help of relatives and her older daughter). In this family, the mother was reading Lorca, the father Kafka's *The Metamorphosis*, and the children Homer's *The Odyssey*. Home interactions were clearly transformed, through new literacy practices and new conversations and new educational expectations, which influenced the child developmental environment. The dialogic literary gatherings dismantle reproductionist analyses, which assume that educational level and cultural interests and taste are strongly connected, according to the theory of habitus (Bourdieu 1984). Pierre Bourdieu argued that people with low educational level cannot appreciate classic universal culture and did not consider the possible transformation of cultural capital. The participation of mothers and fathers from cultural minority groups and low socioeconomic background, however, breaks down the closed circle of cultural inequality, tearing down elitist walls.

Family education programs have been demonstrated to contribute to different benefits. First, new opportunities are created in which children and their relatives can share learning spaces both at school and at home. These spaces transform home

discourses and promote later learning interactions within families closer to those in schools. This contributes not only to improve children's cognitive development but also their motivation while enriching family relations. Besides, providing that there are more women attending these family education programs, their active participation also influences the transformation of gender roles at home, which in turn influences children's imitation models and emotional development from an early age. The Moroccan mother mentioned above, who was reading *Blood Wedding* at the school and at home, was now perceived as both a mother and an intellectual by her daughters, and home conversations were also transformed in this way.

Second, besides transforming the relationship between family members, the relationship between families and the school is also transformed. New bonds are created between the school and the home context, transforming the overall learning context of the children. Children are aware of that connection and the shared purpose of both the school and their family toward improving their learning and their future achievements.

Third, and in relation to an increased perception of greater connection between the family and the school, research identifies improved attitudes and behavior developing among the children. This is what a teacher explained regarding a migrant child whose mother attended family literacy classes:

> In the case of Joshua, whose mother came to literacy classes the first year and the second year, and I think his sister did as well, and I can tell this really motivated him… seeing his mother coming one day a week… and actually the fact that she was also learning, and that she was starting to read letters, and that she was so happy… well he started to behave better, to like the school more. It made a whole difference, I think…

Fourth, participation in family education increases their participation in other activities in the school, as a result of being more familiarized with the school context and the diverse activities taking place there. INCLUD-ED found that family participation in children's learning activities – such as volunteering in the interactive groups – also contributes to improving children's cognitive and social development. Teachers explain how family education leads to further involvement in the school:

> Well it gets them closer and to understand how things work at school. This means that more parents start to collaborate then… once they see how it works, because they are already here through the course, parents become more involved, because sometimes people do not collaborate because they are unaware of how things work and they just don't dare or don't know.

Finally, both teachers and family members asserted that parents' expectations of their children's academic possibilities increased as a result of participating in family education activities. A Moroccan father of a 2-year-old girl explained:

> She will talk, and I'm sure she'll learn to speak great Spanish… I'm convinced she won't have any problems in her group, quite the opposite! There are children and babies who are at home and all day speaking Arabic, and later they speak very good Spanish. She'll be great and we'll help her, if we can.

Teachers, based on their experience, see the evolution of these expectations as a result of parental involvement in family education activities:

> Since we have the family education classes, we see that parents open up their expectations for their children a little bit, perhaps they used to say that well, maybe secondary school was as far as their children could go and now they talk about university.

16.6 Conclusions

The case studies conducted in INCLUD-ED on early childhood education have demonstrated that when SEAs are implemented, children's cognitive, social, and emotional development improves. Through interactive groups or dialogic literary gatherings, all children, but especially the ones belonging to low socioeconomic families, immigrants, and minority groups, accelerate their learning processes from very early years, achieving a solid ground for successful future learning and achievements. Through family education, learning interactions are transformed within the family, thus enriching the context in which children are raised, as well as the expectations toward them and their educational futures. Therefore, in the schools studied, potential inequalities among children's school performance were diminished from the early years in which children at risk are particularly supported through the transformation of the learning culture. This way the SEAs contribute to prevent school failure, early school leaving, and transmission of poverty from one generation to the other.

INCLUD-ED studied schools in low socioeconomic environments that served children from vulnerable groups which were successful in preventing early school leaving and promoting social inclusion. Success was measured by the standard evaluations already existing at national or regional level in each European country (at primary school level). In this way, the research was able to identify the educational actions that when implemented led to successful outcomes in different cultural and historical contexts across the European region. The commonalities across the different schools analyzed pointed to the implementation of educational actions that both multiplied and enriched learning interactions from a very early age, thus transforming these children's developmental context. The qualitative evidences presented in this chapter show how both teachers and parents perceived the SEAs as crucial for their children's cognitive and emotional development and a key for building and strengthening their potential capacities.

The SEAs and their impact on children's development were analyzed from a sociocultural perspective, focusing on the effects of social interaction on children's capacities. Previous research and theories of learning have emphasized the relevance of the introduction of scaffolding strategies, early stimulation, adult participative guidance, or interactions with high culture, among others, to set the basis and accelerate the learning process (Bruner 1983; Radziszewska and Rogoff 1991; Vygotsky 1978; Flecha 2000). Following this perspective, in the SEAs presented in this chapter, instrumental learning is a priority. So, far from reducing the level of

cognitive demand, in contexts of socioeconomic disadvantage, they emphasize the instrumental dimension and the inclusion of high culture, to help them acquire the skills that are necessary to succeed at later educational stages.

Interactive groups multiply cognitive interactions at the classroom level, by involving more adult guidance and enhancing peer interactions. They also impact on emotional development through the promotion of mutual help and dialogic-based child autonomy. Dialogic literary gatherings open up a window of high culture through introducing children to classic literature while building up literacy skills through dialogic interactions. Family education transforms the context of learning interactions and improves continuity between educational school and home discourses and practices. With these SEAs children can learn and develop successfully by sharing learning spaces and experiences with their peers and diverse adults (teachers and also family and community members). They accelerate children's development of cognitive skills, especially language and literacy (use of letters and rare words, motivation for reading and writing, oral expression), produce gains in autonomy (increased independence through dialogue), and enhance social skills (respect toward their peers, listening to them, and integrate solidarity as a key value). Finally, they escape any assumption about early childhood education that reduces educational expectations of children from vulnerable groups and lowers the challenges of their curriculum (Sektan et al. 2010). The future educational success and later social inclusion of these children depend widely on providing them and their families with SEAs from the very beginning of their educational experiences.

References

Belsky, J. (2009). Quality, quantity and type of child care: Effects on child development in the US. In G.Bentley & R.Mace (Eds.), *Substitute parents: Biological and social perspectives on alloparenting in human societies* (pp. 304–324). New York: Berghahn Books.

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Boston: Harvard Universty Press.

Bruner, J. (1983). *Child's talk: Learning to use language*. New York: W. W. Norton & Company.

Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

Cooper, P., & Whitebread, D. (2007). The effectiveness of nurture groups on student progress: Evidence from a national research study. *Emotional and Behavioural Difficulties, 12*(3), 171–190.

Council of the European Union. (2011). Council conclusions on early childhood education and care. 6264/11 EDUC 25 SOC 106 SAN 26.

CREA. 2006–2011. *INCLUD-ED: Strategies for inclusion and social cohesion in Europe from Education. 6th Framework Programme. Citizens and Governance in a Knowledge-Based Society*. CIT4-CT-2006-028603. Directorate-General for Research, European Commission.

Cullen, J. L., Haworth, P. A., Simmons, H., Schimanski, L., McGarva, P., & Kennedy, E. (2009). Teacher-researchers promoting cultural learning in an intercultural kindergarten in Aotearoa New Zealand. *Language Culture and Curriculum, 22*(1), 43–56.

Cunha, F. J., Heckman, J., Lochner, L., & Masterov, D. V. (2005). *Interpreting the evidence of life-cycle skills formation*, *IZA discussion papers, No. 1575*. Bonn: Institute for the Study of Labour.

De Mello, R. (2012). From constructivism to dialogism in the classroom. Theory and learning environments. *International Journal of Educational Psychology, 1*(2), 127–152. doi:10.4471/ijep.1012 08.
Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: The New Press.
Díez, J., Gatt, S., & Racionero, S. (2011). Placing immigrant and minority family and community members at the school's centre: The role of community participation. *European Journal of Education, 46*(2), 184–196.
Díez, J., Santos, T., & Álvarez, P. (2013). La Paz School. From a Ghetto to a Magnet School. *International Review of Qualitative Research, 6*(2), 198–209.
Elboj, C., & Niemelä, R. (2010). Sub-communities of mutual learners in the classroom: The case of interactive groups. *Revista de Psicodidáctica, 15*(2), 177–189.
European Commission. (2010). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. The European platform against poverty and social exclusion: A European framework for social and territorial cohesion*. COM(2010) 758 final.
European Commission. (2011a). *Communication from the Commission. Early childhood education and care: Providing all our children with the best start for the world of tomorrow.* COM(2011) 66 final.
European Commission. (2011b). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Tackling early school leaving: A key contribution to the Europe 2020* (COM(2011) 18 final).
European Parliament. (2009). European Parliament resolution of 2 April 2009 on educating the children of migrants (2008/2328(INI)).
European Parliament. (2011). European Parliament resolution of 9 March 2011 on the EU strategy on Roma inclusion (2010/2276 (INI)). European Union Agency for Fundamental Rights- FRA. (2012). The situation of Roma in 11 EU Member States – Survey results at a glance.
European Union Agency for Fundamental Rights. (2012). The situation of Roma in 11 EU Member States. Survey results at a glance. Report published by FRA.
Eurostat/Labour Force Survey (LFS). (2011). *Share of early leavers from education and training (persons aged 18–24) by sex and groups of country of citizenship, 2011 (%)*. Retrieved from: http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_social_policy_equality/migrant_integration/indicators
Eurydice. (2009). *Tackling social and cultural inequalities through early childhood education and care in Europe*. Brussels: Education, Audiovisual and Culture Executive Agency. European Commission.
Flecha, R. (2000). *Sharing words*. Lanham: Rowman & Littlefield.
Fram, M. S., Kim, J., & Sinha, S. (2012). Early care and Prekindergarten care as influences on school readiness. *Journal of Family Issues, 33*(4), 478–505.
Gómez, J., & Vargas, J. (2003). Why Romà do not like mainstream schools: Voices of a people without territory. *Harvard Educational Review, 73*(4), 559–590.
Gómez, A., Puigvert, L., & Flecha, R. (2011). Critical communicative methodology: Informing real social transformation through research. *Qualitative Inquiry, 17*(3), 235–245.
Goodall, J., & Vorhaus, J. (2011). *Review of best practice in parental engagement*. London: Department for Education.
Harlem Children's Zone. (2002). A look inside. The Baby College [Report], 1(1), 1–8. Available online at: http://hcz.org/documents-and-publications/. Accessed 5 May 2014.
Heckman, J. J. (2011). The economics of inequality: The value of early childhood education. *American Educator, 35*(1), 31–47.
Hidalgo, N. M., Epstein, J. K., & Siu, S. (2002). Research on families, schools, and communities. A multicultural perspective. In J. A. Banks & C. A. Banks (Eds.), *Handbook of research on multicultural education*. New York: Macmillan.
INCLUD-ED Consortium. (2009). *Actions for success in schools in Europe*. Brussels: European Commission.

Johnson, D. W., & Johnson, R. T. (1981). Effects of cooperative and individualistic learning experiences on interethnic interaction. *Journal of Educational Psychology, 73*(3), 444–449.

Mullis, I. V. S., Martin, M. O., Kennedy, A. M., & Foy, P. (2007). *PIRLS 2006 international report*. Boston: International Association for the Evaluation of Educational Achievement (IEA).

Mullis, I. V. S., Martin, M. O., Foy, P., & Drucker, K. T. (2012). *PIRLS 2011 international results in reading*. Chestnut Hill: TIMSS & PIRLS International Study Center, Boston College.

Mercer, N. (2000). *Words and minds: How we use language to think together*. London: Routledge.

OECD. (2006). *Starting strong II. Early childhood education and care, N. 18*. Paris: OECD.

OECD. (2010). *PISA 2009 results: Overcoming social background – equity in learning opportunities and outcomes* (Vol. II). Paris

Official Journal of the European Union. (2010). Notices from European Union institutions, bodies, offices and agencies. Council conclusions of 11 May 2010 on the social dimension of education and training (2010/C 135/02).

Paratore, J. R., Hindin, A., Krol-Sinclair, B., & P., D. (1999). Discourse between teachers and latino parents during conferences based on home literacy portfolios. *Education and Urban Society, 32*, 58–82.

Ponzetti, J. J., & Dullin, W. (1997). Parent education in Washington State even family literacy programs. *Early Childhood Education Journal, 25*(1), 23–29.

Radziszewska, B., & Rogoff, B. (1991). Children's guided participation in planning imaginary errands with skilled adult or peer partners. *Developmental Psychology, 27*, 381–389.

Rogoff, B., Goodman Turkanis, C., & Bartlett, L. (2001). *Children and adults in a school community*. Oxford: Oxford University Press.

Sektan, M., McClelland, M. M., Acock, A., & Morrison, F. J. (2010). Relations between early family risk, children's behavioral regulation, and academic achievement. *Early Childhood Research Quarterly, 25*(4), 464–479.

Serrano, M. A., Mirceva, J., & Larena, R. (2010). Dialogic imagination in literacy development. *Revista de Psicodidáctica, 15*(2), 191–205.

Slavin, R. E. (1991). Are cooperative learning and untracking harmful to the gifted? *Educational Leadership, 48*(6), 68–71.

Sordé, T. (2010). *Romani immigrants in Spain. Knocking down the walls*. Barcelona: Hipatia.

Stainback, S., & Stainback, W. (1996). *Inclusion: A guide for educators*. Baltimore: Brookes Publishing.

Stein, A., Freel, K., Hanson, A., Pacchiano, D., & Eiland-Williford, B. (2013). The educare Chicago research- program partnership and follow-up study: Using data on program graduates to enhance quality improvement efforts. *Early Education and Development, 24*(1), 19–41.

Sylva, K., Stein, A., Leach, P., Barnes, J., & Malmberg, L. E. (2011). Effects of early child-care on cognition, language, and task- related behaviours at 18 months: An English study. *British Journal of Developmental Psychology, 29*(1), 18–45.

Tett, L. (2001). Parents as problems or parents as people? Parental involvement programmes, schools and adult educators. *International Journal of Lifelong Education, 20*(3), 188–198.

Valls, R., & Kyriakides, L. (2013). The power of Interactive Groups: How diversity of adults volunteering in classroom groups can promote inclusion and success for children of vulnerable minority ethnic populations. *Cambridge Journal of Education, 43*(1), 17–33.

Vogel, C., Brooks-Gunn, J., Martin, A., & Klute, M. M. (2013). Impacts of early head start participation on child and parent outcomes at ages 2, 3, and 5. *Monographs of the Society for Research in Child Development, 78*(1), 36–63.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wells, G. (2007). Semiotic mediation, dialogue and the construction of knowledge. *Human Development, 50*(5), 244–274.

Whitebread, D. (2012). *Developmental psychology and early childhood education*. London: Sage.

Chapter 17
Professional Development in a Competent System: An Emergent Culture of Professionalization

Florence Pirard, Pascale Camus, and Jean-Marie Barbier

Abstract Workforce quality and professionalization in the field of early childhood education are widely considered to be a powerful lever in improving the quality of childcare services. This emphasis demonstrates the necessity of increasing the level of practitioner qualification across the sector and to revise both professional profiles and training curriculum in response to the complex demands of professional activity. Nowadays workspace is recognized as a potential learning space where individual, institutional, inter-institutional and political actions interact. This approach to professionalization is grounded in a theoretical and systemic view that recognizes different levels of responsibility in the development of professional and quality services. This paper presents different educational cultures observed today in the variety of training and professional actions in the Western World. It shows that changes in early childhood education could be understood as a signifier of the emergence of a new culture of professionalization where actions, actors, and environment undergo change simultaneously.

Keywords Professionalization • Competent system • Action cultures • Accompaniment • Quality

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17.1 Introduction

Improving the quality of childcare services remains a challenge in many European countries. Recent special issues (Johansson 2010; Rayna and Laevers 2011; Oberhuemer et al. 2012) show the extent of this challenge (especially in childcare services for children under three) in most countries where the structure of service supply is divided.

Among many different factors, workforce quality in early childhood education and care plays a major role, as underlined by the existence of current thematic working groups within the Organisation for Economic Cooperation and Development (OECD) and Eurydice Network institutions and by the increase of professional and scientific publications on this topic. However, the qualifications and professional training opportunities available often fail to reach agreed professional standards, and work conditions still need to be improved in most Western countries (OECD 2001, 2006, 2012; EACEA 2009; Penn 2009; Bennett 2010).

A review of relevant literature related to developments in Western Europe reveals the results of some innovations and reforms made to training systems, such as the "educateurs jeunes enfants" in France, early years professional in the UK, pedagogue or social pedagogue in Sweden or Denmark, pedagogista in Italy (Peeters 2008; Rayna 2010; Urban et al. 2011) and the pedagogical coach in Flanders (Peeters and Vandenbroeck 2010), and some new directions in curriculum for children under 3 years and its effects on teaching, training and accompaniment (Rayna et al. 2009; Pirard 2011). The challenge here consists not only in improving the standard of qualifications (European Commission Childcare Network 1996; Children in Europe 2008; UNICEF 2008; Leseman 2009) but also in creating a more holistic approach that takes into account the social, economic and psycho-educational dimensions of childcare services (Vandenbroeck et al. 2009b).

More widely, the research literature underlines the importance of professionalization in the sector. Unlike professionalism, a "slippery concept that alters over time and in different contexts" (Osgood 2011, 109), professionalization is a scientific concept that can cover and integrate different dimensions including individual professional development, professionalization of activity and professionalization within organizations (Wittorski 2008). For the purposes of this chapter, professionalization is defined as the "intention of an on-going transformation of competences, in relation to an on-going transformation of activities" (Barbier 2011, 106).

According to the theoretical perspective recently developed by the "International Network Observatory about professionalization in relational professions and human interaction"1, professionalization sets up new questions by referring to "professions that relate to the other, where organizational and institutional prescriptions are always subordinated to the complexity of the work" (Maubant and Piot 2011, 8). Professionalization requires a broad, multilevel and contextualized perspective that has been chosen by the European CoRe study (Urban et al. 2012). In a 15-country survey involving 7 case studies, this research proposes systemic approaches to professionalization. In the study, the concept of a "competent system" refers to

"reciprocal relationships between individuals, teams, institutions and wider political context" that contribute to develop a quality process in a country. "The professionalization process needs to be considered as a social practice and as a result of complex interactions between social evolution (…), policy measures (…) and new scientific insights (…) interacting in turn with researchers or pedagogic counsellors, staff members and users (parents as well as children)" (Peeters and Vandenbroek 2011, 72). Competent systems in the early childhood sector are linked to initial training, continuing professional development and all other forms of professional development of early years educators, their staff managers or leaders and their coordinators (in countries where this function exists).

International reports and research interpret the concept of professionalization variously and highlight the risks incurred by the standardization of training systems (Cameron and Moss 2007; Peeters 2008; Bennett 2010; Oberhuemer et al. 2010; Urban et al. 2012). Urban and Dalli (2008, 132) define professionalization "as a discourse as much as a phenomenon: as something that is constantly under reconstruction". These approaches to professionalization are considered to be plural, evolutionary and contextualized despite common major changes in educational modes of thought.

Grounded in adult training research theory, the concept of "action cultures" (Barbier 2005, 2009) developed in the French literature could be defined as constructed meanings sustained and shared by actors. This concept allows to apprehend some observable regularities in considering educational approaches and their evolution over time. The most recent of action cultures is called "professionalization culture". It is characterized by specific ways of considering educational work, the various actors involved and their connection with the environment and considered as distinct from those observed in the more traditional teaching or training worlds. This new action culture will be the central issue of this chapter, approached through the analysis of activity in ECEC field and the conditions of their transformation. The concept could also be useful on the international research ground as it connects theoretical questions on professionalization that have emerged in ECEC field to adult training research theory.

17.2 Professionalization of Childcare Activity

Professional activity in childcare services for children under three is now widely viewed as a complex field grounded on values, pluridisciplinary knowledge and evolutionary knowledge. All this must be interpreted in the context of a sector with a predominantly female workforce, where women have traditionally been viewed as "naturally" gifted to do the job, limiting the development of any real emphasis on training and competencies for many years (Miller and Cable 2008; Roberts-Holmes and Brownhill 2011; Bosse-Platière et al. 2011).

Various new trends can be observed in literature regarding current professional development practice and theory in the early childhood field (Urban and Dalli 2008; Lazzari 2011; Urban et al. 2012; Van Laere et al. 2012). These new

trends at times question, or even contradict, some existing professional guidelines and practice. Professional activity has until now been viewed as predefined and certain (i.e. the attitude that professionals know the right and best thing to do), but major changes in society have reinforced the complexity of a body of work that is partly uncertain and invisible. "Indeed, studies that shed light on on-going activities from the standpoint of the actors and that look at competences and resources of the professionals in action are scarce. As this work is seldom unfolded to make understandable what it includes, it keeps on being considered as relational and feminine in nature and therefore bound to relational competencies" (Ulmann 2013, 194).

The complexity of activity and the tensions inherent within this are present in different spheres of early childhood education: work with children, work with families and teamwork are all approached differently in terms of initial training requirements in Europe (Urban et al. 2012) and involve on-going debate in the field.

Working with children is the central dimension in formal competence profiles in Europe (Urban et al. 2012), even if there is no consensus on what is meant by "working with children". This lack of mutually defined terminology can lead to considerable variations in the field and potentially create tensions. For example, practitioners developing a profile of "a rich child" (Rinaldi 2006) while acting as that child's advocate could recognize that the care of babies requires particular competencies, accompanied by an appropriate social environment. At the same time, such practitioners could overprotect the same child because of his/her perceived psychological immaturity. These tensions are particularly vivid in inclusive experiences of children with special needs, increasingly promoted across several European countries. Professionals who take care of these children in what they consider the most adequate way could try to tackle deficiencies through a compensatory approach; others could adopt another perspective by considering the characteristics of the child as an expression of diversity within the group.

Working with parents and communities appears to be a less central dimension in formal competence profiles despite research theory emphasizing its importance. Tackling this issue can also involve questioning existing modes of practice (Urban et al. 2012). In examining differentiation between professional and parental positions (Bosse-Platière et al. 2011), there is an argument to be made that, for some, this distinction can cause a hierarchical relationship to develop (Vandenbroeck 2009; Brougère 2010), in turn, potentially altering the view of parental competencies in a European context characterized by policies on parenting support (Vandenbroeck and Humblet 2007; Sellenet 2007; Crepaldi et al. 2013). Indeed, new approaches foster the standing of individual or collective collaboration and explicitly involve parents in childcare services (Sharmahd 2009; Musatti and Rayna 2011; Kammenou and Agnostopoulos 2011; Lazzari 2012). In such a vision of coeducation, parents and professionals share their educational expectancies and goals. Nonetheless, practitioners have to deal with contradictions in childcare ser-

vices without imposing their own ideas and professional knowledge (Vandenbroeck et al. 2009a). Relationships between practitioners and parents can be viewed as a tool for professionalization (Peeters and Vandenbroek 2011), interpretable in several ways.

Team working is often overlooked in formal competence profiles, even if activity in the field requires the development of this competence (Urban et al. 2012). The recent introduction of a social and educational project elaborated by early childhood professional teams is evidence of this trend in European countries. This project was realized on the basis of both daily professional observations and knowledge of a variety of disciplines and also on the sharing of perspectives with other professionals, children, families and communities on physical, psychological, cognitive, emotional and social development areas in their childcare services. In some countries, professionals have to develop a coherent work team following official guidelines (curriculum, "charte", "réferentiel", etc.). Often viewed as a shared process of professionalization, the elaboration and use of such projects could also be subjected to standardization (Pirard 2011, 2013). In some cases, educational practice formalized in a childcare service project could be viewed as the application of predefined knowledge, of a specific model (e.g. Loczy, Montessori, Steiner, etc.) or of other official guidelines without a contextualized approach. In other cases, an educational project could be used to normalize parents rather than to listen and respond to their hopes and expectations regarding the daily life of their children in childcare services (Camus et al. 2012).

All these changes produce a picture of a "critically reflective emotional professional" (Osgood 2011) and childcare activity embedded in several relationships that involve developing relationships with children, their families, colleagues and the wider community (Dalhberg and Moss 2005; Peeters 2008; Urban 2008). However, the professional position also traditionally holds an expectation to maintain professional distance. As concluded by Dalli (2008, 173), "the structural components of a professionalised sector were beginning to bed down but raised questions about the criteria of 'autonomy' and 'optimal distance' between teacher and child in a sector where staff are expected to work collaboratively with parents, the community and other professionals (…)".

Consequently, professionalization of the sector appears to be a multidimensional process where tensions could exist between quality, equity and diversity goals (Rayna 2010): taking care of and educating children (children with specific needs included) in a holistic perspective, both involving and supporting parents in daily life with their children and working collaboratively in the context of both an interdisciplinary team and wider networks. Professionalization requires that practitioners develop practice linked to knowledge and values but also to "make meaning" about these tensions (Dalhberg and Moss 2005).

In response to this complexity in the sphere of childcare activity, new profiles should be defined with a more open approach where the "democratic professional" model increasingly prevails over that of the "technical expert". "It envisages a

worker who is a co-constructor of knowledge, a critical thinker, and a reflective and democratic practitioner, rather than one who is viewed primarily as a technician trained to apply pre-determined processes in a way that conforms to established norms (…)" (Cameron and Moss 2007, 143). These new profiles should concern not only early years educators but also their managers (Miller and Cable 2011) and coordinators (Baudelot and Rayna 2000; Baudelot et al. 2002; Musatti and Mayer 2003). These actors could be considered reflective practitioners (Schön 1983) who document, analyse, evaluate and regulate their practice together, without referring to predefined outcomes (Rinaldi 2006; EADAP 2011; Picchio et al. 2012). They can also co-construct a contextualized meaning of general guidance in the countries where a curriculum or official guidelines have been published (Pirard 2011). These practitioners are co-constructers of new strategic knowledge (Van Der Maren 1996), as well as other educational practice, "in situ", while taking into account the varying perspectives of other professionals, children, families and communities (Oberhuemer 2005; Pirard 2011).

17.3 Accompaniment in a Competent System

At a point in time when the complexity of childcare activity is widely recognized, new functions of "accompaniment" have emerged (Pirard and Barbier 2012). For the purposes of this chapter, it is necessary to outline a clear definition of the term "accompaniment" ("accompagnement" in French), a concept often referred to in French literature (Paul 2005; Pirard 2007; Beauvais 2008; Pirard and Barbier 2012). "Accompaniment" can be associated either with "coaching", "mentoring" or "counselling" functions on both an individual and collective level. Accompaniment considers the process in which the activity of one person (the accompanier, "accompagnateur" in French) is combined with the activity of the other (the accompanied practitioner(s)) in order to simultaneously develop the professional competencies of both practitioners, while also transforming their daily educational practice. Accompaniment is a continuous, interactive and open process that can produce unforeseen outcomes. The accompanier is seen as a resource person and the accompanied practitioner as an actor working in the same activity domain but generally without the same specialization as a teacher and trainer.

Current literature gives some examples citing the development of accompaniment functions in European childcare services. In some regions (i.e. Emilia-Romagna) and cities of Italy (i.e. Pistoïa, San Miniato), pedagogical coordinators combine professional accompaniment, administration and coordination functions "in improving children's educational experiences in early childhood services [that] has been acknowledged by regional legislation since 1979" (Lazzari 2012, 561). Lazzari shows that high levels of professionalization are embedded in coherent public policies, themselves, built on consultations with key stakeholders (particularly at a local level), thanks to the work of pedagogical coordinators, among others. In

Ghent (a city of the Flemish community of Belgium) pedagogical counsellors seek to initiate, sustain and guide "a mutual dialogue between the centres and encourage professionals' on-going reflection on their approach and beliefs [… They have] to assist the early childhood workers in "discovering what is possible" (Dalli 2008, 17) (Peeters and Vandenbroek 2011, 70). In other countries, new functions were created as advisors in education in the Wallonia-Brussels Federation in 2002; these practitioners aim to sustain professional development and socio-educational practice improvement (Pirard and Barbier 2012).

Accompaniment functions can be seen as a key factor in the professionalization of childcare activity when considered in the context of a "competent system" (Urban et al. 2012) that seeks to go beyond dominant discourses on lifelong learning, with their focus on individual professional development (Vandenbroeck et al. 2013). The competent system refers to the interactions between various levels of responsibility: individual (initial training, continuing professional development), institutional (time for teamwork and in-service training, accompaniment), inter-institutional (peer groups, training for staff managers or practitioners of new childcare services, professional networks, close collaborations between childcare services and research agencies) and finally political (curriculum, public funds and regulation governing continuing professional development and work conditions). In their daily practice, accompaniers carry out a major role in a competent system, along with other actors who share competencies at different levels inscribed in an adequate public policy.

17.4 Professionalization: A Culture of Education

Changes in childcare activity and the development of accompaniment have given rise to new challenges for research. These challenges provide some practical and theoretical prompts, useful in understanding the diversity of educational approaches. As suggested by Oberhuemer et al. (2010), this diversity can refer to "cultural scripts" (Rosenthal 2003) that permeate images of workers in childcare education and training. The three action cultures of education (culture of teaching, culture of training and culture of professionalization, see below) identified by Barbier (2005, 2009) as successively appearing in the world of Western education over the last few decades can be viewed as an "intelligibility" device helpful in understanding different approaches to professionalization in the field of early childhood education when viewed from a systemic perspective. They underline diverse representations of educational approaches, of practitioners, and of their relationships with the wider environment.

In the wider field of education and adult training, the action cultures of education and training correspond to the "culture de l'enseignement" ("culture of teaching"), the "culture de la formation ("culture of training") and the "culture de la professionalization" ("culture of professionalization").

In the teaching culture ("culture de l'enseignement"), knowledge is a central reference for educational work, based on the hypothesis that the learner's identity can be transformed through the appropriation of predefined knowledge. Education can be seen as producing a hierarchy between the person who holds, and is able to transmit, knowledge ("the teacher") and the ones needing to gain new knowledge ("the students"). The relationship between theory and practice is conceptualized as a process of application, and new knowledge or new subjects are seen as the primary drivers of change. Teaching culture – the most traditional cultural framework in the field of education and training – views educational action as a communication process, achieved through courses, didactical activities, educational programmes, e-learning, thematic seminars, etc.

In contrast, training culture ("culture de la formation"), developed in parallel to teaching culture (and sometimes in opposition to it), holds ability and skill as the central reference for educational work, based on the hypothesis of identity transformation through a new skills transfer process. Education can, in this way, be seen as specialized, producing a hierarchy between the person organizing specific learning situations and conceptualizing the "decontextualization-recontextualization" process ("the trainer") and those who have to acquire new skills and abilities ("the learners"), in order to apply them to other contexts and situations (e.g. for work). In this model, new practice is seen as the primary driver of change. Training culture views educational action as a space and a time to transform abilities and skills (the educational space and time), which can then be transferred to other contexts (both labour and social space/time). This culture can be found predominantly in training programmes focused on technical goals but also in general skills training promoting empathy, listening skills, etc.

In the 1990s, the dialectical relationship between these two educational cultures contributed to the emergence of a third culture: the culture of professionalization ("culture de la professionnalisation") which views the notion of competence as the central theme for educational work, based on the hypothesis that action and actors can be jointly and simultaneously transformed. Education is thus seen as developing competencies in context, in an evolutionary process of activity. This model emphasizes the importance of the person who "accompanies" the professional development of practitioners and the transformation of practice and the environment. The primary driver of change is a new management practice combining a number of previously disjoined actions. Professionalization culture involves viewing and organizing the wider context of service and product production as a context where individual and collective competencies are also developed. This culture is present in activities such as action research, mentoring and "accompaniment".

Existing research illustrates the way in which these three action cultures coexist in early childhood education and in care training action systems (Pirard 2007; Pirard and Barbier 2012), although many initiatives grounded in the culture of professionalization have developed more recently.

17.5 "Culture of Professionalization" in Early Childhood Education

As shown by the CORE research (Urban et al. 2012), competencies have become a central theme for early childhood educational work. Indeed, they can be viewed as a conceptual construct assigned to a person (an early years educator, a staff manager, a coordinator, etc.) or to a group (collective, team, network, etc.).

People who accompany professional and service quality development are, for the most part, neither trainers, teachers nor specialists (Pirard and Barbier 2012); rather they tend to be workers able to sustain a process of co-constructing and regulating daily practice on the basis of shared observation, discussion and argumentation. These practitioners increasingly refer to analysis of practice using various tools of professionalization such as writing (Cros et al. 2009) and videoscoping (EADAP 2011). Through their work, accompaniers are expected to develop actions aiming to jointly transform competencies (both their own and those of other practitioners) and daily educational practice, as well as improving conditions within a local dynamic (Baudelot and Rayna 2000; Baudelot et al. 2002; Musatti and Mayer 2003; Lazzari 2012; Pirard 2011). Their accompaniment is grounded in a global and systemic transformation process for key stakeholders (i.e. children, families, practitioners, elected post-holders, the local community), with associated transformation of actions (social and educational practice) and local environment.

17.6 Emergence of a Culture of Professionalization in Childcare Services: A Case Study

The following case study presents a cross-sectional analysis of responsibility levels in a competent system (Urban et al. 2012) and reveals the main characteristics of the culture of professionalization. This case study is not presented as a model in its own right but rather aims to shed light on the evolution of educational cultures and highlight trends in the emergence of a culture of professionalization. The case study was developed in a rural setting in the province of Luxembourg, situated in the Wallonia-Brussels Federation of Belgium. In this particular context, the qualifications and professional training opportunities available had failed to reach agreed professional standards (Pirard et al. 2012).

In this country, a curriculum for childcare services under 3 years ("Welcoming early years; taking up the challenge of quality") was published in 2002 (ONE 2002). This curriculum was produced via a participatory process and implemented by agents of the public institution in charge of authorizing, financing, evaluating and

accompanying childcare services (Office de la Naissance et de l'Enfance (ONE)). Implementation was developed for practitioners of childcare services through accompaniment processes, led by ONE coordinators and advisors in education (Pirard 2011). Trainers authorized and financed by ONE (working in line with a governmental guidance) also played a major role.

The new curriculum was published as a book and could be viewed as primarily belonging to the teaching culture, where knowledge and the role of specialists are viewed as paramount. The curriculum makes explicit a number of criteria to monitor during professional practice, forming a benchmark for childcare quality. These criteria are not presented as checklists but instead were formulated in an open way, allowing professionals to reflect on their practice and to co-construct contextualized meaning on the basis of these predefined criteria such as "freedom of movement" in everyday situations (activity, change of nappy, sleeping time, ect.), for instance.

The process of implementation and the effective use of the curriculum must also be analysed. More than 10 years on, the training culture can be observed in the field, where the curriculum has become a reference resource for subsidized trainers who have developed the organization of some specific learning spaces (generally based on childcare services) to cater for training needs for specific topics and new skills. The training process is viewed as a specialized space, where new skills and abilities can be acquired in a restricted time (generally 1–6 days), with the intention that this new knowledge is then applied to childcare services.

Professionalization culture can also be examined, thanks to participatory observation of a ONE process designed to implement the curriculum, conducted over a 10-year period in Luxembourg Province. From 2004 to 2013, an accompaniment process has been conceptualized, conducted and regulated both by ONE agents (coordinators and advisors in education) and their local partners and sometimes involving the intervention of specialists or advice to participate at further training sessions. This process combines accompaniment of each childcare service and the development of professional networks. The topics on which practitioners would like to be accompanied were first negotiated in project groups: freedom of movement (2004–2009), continuity of relationships in childcare services organized into defined age groups (2007–2010), managing mixed age groups (2007–2010) and relationships between professional and parents in childcare services (2011–2013). Meetings were organized every 1 or 2 months over several years, both within each service and between services coordinated by ONE agents. The aim was to develop, implement and adjust action projects that would improve service quality (freedom of movement, continuity and relationships with parents). Practitioners defined their goals and their action hypothesis to improve practice, experimented with some action in the field and then documented, analysed and evaluated the subsequent effects for children, families and themselves. This self-regulating participatory evaluation (Ballion et al. 1989), inspired by the work of "Centre de Recherche de l'Education Spécialisée et de l'Adaptation Scolaire" (CRESAS 1988, 2000; Hardy et al. 2011), allowed practitioners to adjust their actions and to understand the impact they were having. At regular, scheduled times in this process, the teams shared – through vid-

eos, posters and pictures – the results of their research/action with other professionals and with the families of service users at a local level.

The work performed in these different project groups is viewed as interdependent, creating opportunities to discuss the meaning of the curriculum criteria and to co-construct shared and contextualized meanings. They can generate a logic of framing ("référentialisation" – Figari 1994), that is, "a continual search for relevant markers (...) to explain and justify the design and evaluation of educational provision" (p. 48), which, not being content with results alone, continually raises new questions. This approach is grounded in local consultation with all stakeholders to jointly define and co-construct a quality service based on their own values, the analysis of their own experience and the knowledge they have collectively acquired (Pirard 2009, 2011).

Since the setup of these project groups in 2008, an inter-institutional change can be observed, primarily facilitated via the creation of a community of practice (Wenger 2005). Practitioners have proposed their own relevant topics and documented practice experience to share and reflect with other professionals. Professional experiences realized in one specific context have been analysed, with the help of accompaniers, through shared debate. The purpose is not to generalize or transfer practice but rather to explore new possibilities in different contexts in order to inspire other practitioners. The shared analysis of a singular experience can produce unforeseen learning and outcomes. For example, in 2008 a team presented a film of their project, showing babies autonomously exploring modelling clay on the floor, with tools, over an extended period of play; the children played quietly while the professionals carefully observed their exploration. Two years later, this experience inspired another team to experiment with a similar creative process in collaboration with a local artist, this time exploring painting. Over the next few years, other projects involving early years professionals and artists were realized, involving many different media and disciplines ranging from creative dancing to puppetry. In all these projects, practitioners documented the entire process of their experience through various media (i.e. photos, videos, etc.) in order to analyse the effects of practice and the conditions that make them possible and also to share the results with families, communities and other practitioners. The professional network has grown, joined by more and more practitioners in childcare and family day-care services, as well as teachers of initial training institutions, to learn together from this process of practice effect analysis.

The analysis of curriculum implementation in this case study shows characteristics of different educational action cultures coexisting in the same context. It additionally highlights several characteristics of an emergent culture of professionalization closely connected to accompaniment. Accompaniment is not monopolized by teachers, trainers or other specialists in education, although all these actors have a role to play in this process. Rather it is a shared function between actors whose combined action in the process has a global effect on training.

Accompaniers are, in practice, a variety of different workers rather than being characterized by one specific training role (e.g. ONE coordinators, educational advisors or other local partners). Together, they organize a variety of project groups

with the aim of transforming, collaboratively and in an interactive manner, both practice and practitioners. Working with local actors, they debate the predefined criteria of curriculum and contribute to the co-construction of shared, contextualized meanings through analysing the effects of their own practice. In this way, all these actors identify educational conditions to be taken into account when working with children, parents and other professionals. Accompaniers play a crucial role in project groups from the outset; their role broadens to help sustain a community of practice, of which they are themselves members. Although essential, accompaniers are not central figures in the community; instead they work to facilitate connections between other actors: between practitioners in a childcare team, between professional childcare teams, between practitioners, teachers and trainers, etc. They also facilitate external support, inviting specialists to provide essential knowledge to practitioners or to advise regarding participation in other specific training. In this case, knowledge and skills are considered an important resource, but not absolutely key, as specialist expertise can always be sought. Accompaniers can also collaborate with artists without either explicitly needing any educational competencies. None of these actors are specialist trainers, but their action with professionals embedded in an accompaniment system can meaningfully contribute to training and to transforming practice. This analysis shows that accompaniers sustain the development of individual and collective competences not only for the community members but also for themselves. This holistic process differs from a process rooted in the idea of knowledge transmitted through teaching or via the support of professional specialists in the field (teaching culture) and on skills acquired during training sessions (training culture).

Accompanied people are practitioners who play a central role in the identification of projects to be developed, their documentation and the analysis of practice on children, families and themselves, as well as their regulative evaluation. Through this process they can improve daily educational conditions, while simultaneously developing new individual and collective competencies for themselves and the community. They can therefore be viewed simultaneously as actors, learners, contributors and innovators of practice.

The manner in which accompaniers and accompanied people are viewed is contextualized in a framework where the borders between working and training have become blurred and where activity is consequently both "constructive" and "productive" (Rabardel and Pastré 2005). Relationships between workers may, therefore, evolve through the whole process; the hierarchical or vertical relationship inherent to all educational processes is coupled with the development of horizontal relationships in the professional network produced by accompaniment. This change can be observed particularly in the dynamic process of evaluation taking place between peers, transforming the traditionally vertical control system. It operates not only on the basis of an external control but also as an auto-evaluation led by workers' analysis of their practice and its effects (through documentation). Evaluation does not only lead to "the regularization" of practice according to the curriculum but also facilitates "the regulation" of practice based on shared, co-constructed

meanings (Vial 2001). This process opens up the possibility of different ways of acting and thinking, potentially leading to novel and unforeseen outcomes.

This work, involving a variety of actors, is driven by processes rooted in the principle of learning by doing, unfolding over time (e.g. through action training, project groups, action research, community of practice, etc.). The workspace, especially childcare services, can be viewed as a professional space where practitioners can collectively engage in problem solving. These practitioners are in essence starting to engage in primary research: working together to experiment with new practice, to document and analyse their effects and hence to co-construct both knowledge and action. In this way, the workspace intentionally transforms, becoming a new site for the active development of professional competencies.

This process requires an evolutionary view of workspace, learning space and environment. New developments that could not be anticipated at the beginning of a project can occur: these might include new topics, new key players, new actions and new networks that make a shared approach possible. The process addresses the paradoxes of accompaniment (Boutinet 2002), situated simultaneously in the evolutionary, the process itself, that which is unending, i.e. the trajectory and the transitory, having a beginning and an end, and not knowing where one is headed (the accompanied person can doubt his/her direction, having no certainty of finding his/her way, while simultaneously "knowing" that she/he is going somewhere) given the goals, procedures and the on-going accompaniment processes.

17.7 Conclusion

Professionalization is often addressed in literature with a view to improve practice and quality of services in the field of early childhood education. It implies different levels of responsibilities that interact and which require a systemic approach including initial training and continuing development of educators, leaders and coordinators, work conditions in childcare services and public policy. A firm understanding of professionalization requires a contextual approach that integrates different dimensions (actors, action and environment) in an evolutionary and longitudinal view.

For the purposes of this chapter, the authors have elected to frame their work in a practice-based research paradigm. To this end, they often propose the use of intelligibility tools without addressing underlying ways of thinking or acting. The three educational action cultures discussed in this chapter, and the case study presented above, do not provide any specific, practical requirements needed to increase professionalization in the sector. Rather, they are intended to support understanding of some important changes in the field of education and training and in shedding light on some consistencies in the various discourses about professionalization. More than a phenomenon or a discourse, "professionalization" can be viewed as a new action culture of education, alongside the teaching and training cultures observed more frequently in initial training systems and continuing professional development

actions. Professionalization emphasizes and clarifies various changes in practice: the importance of various aspects of practice according to competency development aims, the emergence of new professional functions as accompaniment, the bringing together of working space and training space, a new emphasis on different processes (documentation, analysis of practice, community of practice, action-training research, etc.) and less formal training methods included in the development of services and the transformation of staff roles, not always labelled as "training" or "teaching" actions. What characterizes a professionalization culture is the specific opening of new perspectives in order to understand different ways of transforming actors, actions and the learning/working environment in the context of a systemic approach.

The three action cultures of education can be viewed as supporting understanding of, rather than assessment of, training action systems with labelling risks. The challenge is to refrain from holding these cultures in contrast to one another and by doing so risk organizing them into a hierarchy. As the case study demonstrates, a culture of professionalization does not seek to replace the cultures of teaching and training; the three cultures can coexist in a new configuration. Action project groups and their accompaniment can be connected to teaching and the training of actors who conduct educational action in other contexts.

The three action cultures of education can be used to bring together traditionally separate frameworks, through studying the individual and collective levels holistically and by integrating questions about the development of competencies and services into the process of education design. This challenge is particularly relevant in countries where the structure of service supply is divided and where a lot of qualifications coexist without a common framework.

To conclude, these three educational action cultures could be viewed as a theoretical tool to discuss the notion of competent systems proposed by the European Core Study (Urban et al. 2011), not only as an objective configuration but also as a specific way of thinking. They go beyond the individual level, thanks to the analysis of educational work, links with the environment and the motivation for change. This cultural evolution demonstrates that actions previously considered to be disjoined can be linked and that relationships between actors can change at different levels of responsibility through local action projects where innovations (bottom up) and reforms (top down) are not in opposition. Furthermore, it emphasizes the importance of an action research process that simultaneously considers the co-construction of strategic/action knowledge and competencies, as well as the transformation of practice and its environment.

Notes In French, « Réseau Observatoire International sur la Professionnalisation dans les métiers relationnels et de l'interaction humaine » (ROIP) coordinated by Professor P. Maubant, University of Sherbrooke.

French-speaking part of Belgium.

Attribute given to an individual and/or collective subject through the attribution of characteristics constructed by inference made from his involvement in activities that are situated and finalized and result in a value attribution (Barbier 2011, 46).

Literally: Welcoming early years: taking up the challenge of quality.

References

Ballion, M., Baudelot, O., Helmont, B., Bouvier, N., Hardy, M., Platone, F., Rayna, S., Royon, C., Stambak, M., & Vérillon, A. (1989). *Auto-évaluation régulatrice, une méthode d'évaluation pour les recherches-actions, Etapes de la recherche [Regulatory self-assessment, an assessing methodology for action research, research steps]*. Paris: INRP.

Barbier, J.M. 2005. Nouvelles voies de professionnalisation [New ways of professionalization]. In MR Sorel and R Wittorski (eds.) La professionnalisation en actes et en questions [Professionalization in actions and questions] (pp. 121–134). Paris: L'Harmattan.

Barbier, J. M. (2009). Ingénierie et formation: détermination d'objectifs, élaboration de projets, évaluation d'actions, évaluation de transfert [Engineering and training: Determination of objectives, project development, actions evaluation, transfer evaluation]. In J. M. Barbier, E. Bourgeois, G. Chapelle, & J. C. Junao-Borbalan (Eds.), *Encyclopédie de la formation [Encyclopedia of training]* (pp. 455–479). Paris: PUF.

Barbier, J. M. (2011). *Vocabulaire d'analyse des activités [Vocabulary of the analysis of activity]*. Paris: PUF.

Baudelot, O., & Rayna, S. (2000). *Coordinateurs et coordination de la petite enfance dans les communes [Early childhood coordinators and coordination in municipalities]*. Paris: INRP.

Baudelot, O., Mayer, S., Musatti, T., & Rayna, S. (2002). A comparative analysis of the function of coordination of early childhood education and care in France and in Italy. *Early Years An International Journal of Research and Development, 5*, 32–48.

Beauvais, M. (2008). Accompagner, c'est juger [Accompanying means judging]. *Éducation Permanente, 175*, 123–135.

Bennett, J. (2010). Nouvelles perspectives des études internationales sur la petite enfance [New perspectives in international studies on early childhood]. *Revue Internationale d'éducation de Sèvres, 53*, 31–41.

Bosse-Platière, S., Dethier, A., Fleury, C., & Loutre-Du Pasquier, N. (2011). *Accueillir le jeune enfant : un cadre de référence pour les professionnels [Taking care of young children: A framework for professionals]*. Toulouse: Erès.

Boutinet, J. P. (2002). Questionnements anthropologiques autour de l'accompagnement [Anthropological questions on accompaniment]. *Éducation Permanente, 153*, 241–250.

Brougère, G. (2010). *Parents, pratiques et savoirs au préscolaire [Parents, knowledge and practice in preschool]*. Bruxelles: Peter Lang.

Cameron, C., & Moss, P. (2007). *Care work in Europe. Current understandings and future directions*. London: Routledge.

Camus, P., Dethier, A., & Pirard, F. (2012). Les relations familles-professionnelles de la petite enfance en Belgique francophone [Family-professional relationships in early childhood in French-speaking Belgium]. *Revue Internationale d'éducation de Sèvres, 32*, 17–33.

Children in Europe. (2008). *Young children and their services: Developing a European approach*. A Children in Europe Policy paper.

Crepaldi, C., Pasquinelli, S., Castegnaro, C., Naaf, S., Sarmento Pereira, M. T., Camus, P., Pirard, F., & Vanderkerschove, A. (2013). *Parenting support in Europe: A comparative study of policies and praticies, Eurofund report*. Milan: Instituto per la Ricerca Sociale.

CRESAS. (1988). *Partenaires de connaissance: guide pour analyser en équipe les actions éducatives [Partners of knowledge: A guide dedicated to teams in order to analyze educational activities]*. Paris: INRP.

CRESAS. (2000). *On n'enseigne pas tout seul [Teachers are not alone]*. Paris: INRP.

Cros, F., Lafortune, L., & Morisse, M. (2009). *Les écritures en situations professionnelles [Writings in professional situations]*. Quebec: Presses de l'Université de Québec.

Dalhberg, G., & Moss, P. (2005). *Ethics and politics in early childhood education and care, postmodern perspectives*. London: Routledge Falmer.

Dalli, C. (2008). Pedagogy, knowledge and collaboration: Toward a ground-up perspective on professionalism. *European Early Childhood Education Research Journal, 16*(2), 171–185.

EACEA. (2009). *Early childhood education and care in Europe: Tackling social and cultural inequalities. (Education, audiovisual and culture executive agency)*. Brussels: Eurydice Network.

EADAP. (2011). *Erato – analyse, evaluate and innovate: A guide for early childhood education and care (0–6)*. Edinburgh: Children in Scotland.

European Commission Childcare Network. (1996). *Quality targets in services for young children*. Brussels: Belgium.

Figari, G. (1994). *Évaluer, quel référentiel [How to assess: Which framework]?* Bruxelles: De Boeck.

Hardy, M., Belmont, B., & Noël-Hureaux, E. (Eds.). (2011). *Des recherches-actions pour changer l'école [Action-research to change school]*. Paris: L'Harmattan.

Johansson, J. E. (Ed.). (2010). Special issue: Research on children under three. Reports from 7 countries. *International Journal of Early Childhood, 42*, 77–80.

Kammenou, A., & Agnostopoulos L. (2011). Les relations entre les professionnelles, les familles et les enfants [The relationship between professionals, families and children]. In EADAP (dir.), *Accueillir la diversité dans les milieux d'accueil de l'enfance (0–6 ans), analyser, évaluer, innover. Guide méthodologique Erato [Embracing diversity in community childcare (0–6 years): Analyse, evaluate, innovate, Erato Guide]* Supplement to Le Furet Journal, 9–23.

Lazzari, A. (2011). *Reconceptualising professional development in early childhood education. A study on teachers' professionalism carried out in Bologna province*. Bologna: Università di Bologna – University of East London.

Lazzari, A. (2012). The public good. Historical and poelitical roots of municipal preschools in Emilia Romagna. *European Journal of Education, 47*(4), 556–568.

Leseman, P. (2009). The impact of high quality care on the development of young children: Review of the literature. In*EACEA Early Childhood Education and Care in Europe: Tackling social and cultural inequalities through early childhood education and care in Europe* (pp. 17–50). Brussels: Education, Audiovisual and Culture Executive Agency.

Maubant, P., & Piot, T. (2011). Etude des processus de professionnalisation dans les métiers adressés à autrui [Study of professionalization processes in occupations where people take care of "others" sent to others]. *Les Sciences de l'éducation Pour l'ère Nouvelle [Educational Sciences for a New Era], 44*(2), 7–12.

Miller, L., & Cable, C. (2008). *Professionalism in the early years*. London: Hodder Education.

Miller, L., & Cable, C. (2011). *Professional issues, leadership and management in the early years*. London: Sage.

Musatti, T., & Mayer, S. (2003). *Il coordinamento dei servizi educative per l'infanzia. Une funzione emergente in Italia e in Europa*. Italia: Edizioni Junior.

Musatti, T., & Rayna, S. (2011). Parents-professionnelles. Rapports de pouvoir, savoirs sur la petite enfance et relations interpersonnelles en crèches [Parents-professionals. Power relationships, knowledge about early childhood and interpersonal relationships in nurseries]. In G. Brougère (Ed.), *Parents, pratiques et savoirs au préscolaire [Parents, knowledge and practice in preschool]* (pp. 115–134). Bruxelles: Peter Lang.

Oberhuemer, P. (2005). Conceptualising the early pedagogue: Policy approaches and issues of professionalism. *European Early Childhood Education Research Journal, 13*(1), 5–16.

Oberhuemer, P., Schreyer, I., & Neuman, M. J. (2010). *Professionals in early childhood education and care systems. European perspectives and profiles*. Farmington Hills: Barbara Budrich.

Oberhuemer, P., Brooker, L., & Parker-Rees, R. (2012). Professional issues in work with babies and toddlers. *Early Years, 32*, 2.

OECD. (2001). *Starting strong I. Early childhood education and care*. Paris: Organisation for Economic Cooperation Development.

OECD. (2006). *Starting strong II. Early childhood education and care*. Paris: Organisation for Economic Cooperation Development.

OECD. (2012). *Starting string III. A quality toolbox for early childhood education and care*. OECD Publishing. http://dx.doi.org/10.1787/9789264123564-en.

ONE. (2002). *Accueillir les tout-petits, oser la qualité [Taking care of the youngest, daring quality]*. Brussels: ONE-Fonds Houtman.

Osgood, J. (2011). Constested constructions of professionalism within the nursery. In L. Miller (Ed.), *Professional issues, leadership and management in the early years* (pp. 107–118). London: Sage.

Paul, M. (2005). *L'accompagnement: une posture professionnelle spécifique [Accompaniment: A specific professional posture]*. Paris: L'Harmattan.

Peeters, J. (2008). *The construction of a new profession, a European perspective on professionalism in early childhood education and care*. Amsterdam: SWP Publishers.

Peeters, J., & Vandenbroeck, M. (2010). *Caring and learning together: A case study of Ghent* (Vol. 18). Paris: UNESCO.

Peeters, J., & Vandenbroeck, M. (2011). Child care practitioners and the process of professionalization. In L. Miller (Ed.), *Professional issues, leadership and management in the early years* (pp. 62–76). London: Sage.

Penn, H. (2009). *Early childhood education and care. Key lessons from research for policy makers*. Brussels: NESSE.

Picchio, M., Giovannini, D., Mayer, S., & Musatti, T. (2012). Documentation and analysis of children's experience: An ongoing collegial activity for early childhood professionals. *Early Years, 32*(2), 159–170.

Pirard, F. (2007). L'accompagnement professionnel face aux enjeux de qualité de services [Professional accompaniment, an answer to issues linked to quality of services]. In G. Brougère & M. Vandenbroeck (Eds.), *Repenser l'éducation des jeunes enfants [Rethinking early childhood education]* (pp. 225–243). Brussels: Peter Lang.

Pirard, F. (2009). Oser la qualité, un référentiel en Communauté française de Belgique et son accompagnement [Daring quality? A curriculum in French community of Belgium and its accompaniment]. In S. Rayna, B. C., & P. Moisset (Eds.), *Pour un accueil de qualité de la petite enfance : quel curriculum [Aiming at quality in early childhood education. Which curriculum]?* (pp. 85–105). Toulouse: Eres.

Pirard, F. (2011). From the curriculum framework to its dissemination: The accompaniment of educational practice in care facilities for children under three years. *European Early Childhood Education Research Journal, 9*(2), 253–266.

Pirard, F. (2013). De la production de référentiels à l'accompagnement des pratiques éducatives dans les services de la petite enfance [From the production of curricula to the accompaniment of educational practice in the early childhood centres]. In S. Rayna & C. Bouve (Eds.), *Petite enfance et participation [Early childhood and participation]* (pp. 259–274). Toulouse: Eres.

Pirard, F., & Barbier, J. M. (2012). Accompaniment and quality of childcare services: The emergence of a culture of professionalization. *Early Years, 32*, 169–182.

Pirard, F., Dethier, A., François, N. & E. Pools. (2015). *Les formations initiales des professionnel-le-s de l'enfance (0-12 ans) et des équipes d'encadrement: enjeux et perspectives [Initial training in the field of childcare (0–12 years) and their manager'teams : issues and perspectives]*. Rapport de recherche Article 114 – suites / 1336 – DES – VD soutenu par l'Office de la Naissance et de l'Enfance . On ULG website. http://hdl.handle.net/2268/185594

Rabardel, P., & Pastré P. (dir). (2005). *Modèles du sujet pour la conception; dialectiques, activités, développement [Subject models to design dialectics, activities, development]*. Toulouse: Octarès.

Rayna, S. (2010). Editorial. Qualité, équité et diversité dans le préscolaire [Quality, equity and diversity in preschool]. *Revue Internationale d'Éducation, Sèvres, 53*, 23–30.

Rayna, S., & Laevers, F. (2011). Understanding children from 0 to 3 years of age and its implications for education. What's new on the babies' side? Origins and evolutions. *European Early Childhood Education Research Journal, 19*(2), 161–172.

Rayna, S., Bouve, C., & Moisset, P. (2009). *Pour un accueil de qualité de la petite enfance: quel curriculum [Aiming at quality in early childhood education. Which curriculum?]*. Toulouse: Eres.

Rinaldi, E. (2006). *In dialogue with Reggio Emilia. listening, researching and learning*. London: Routledge Falmer.

Roberts-Holmes, G., & Brownhill, S. (2011). Where are the men? A critical discussion of male absence in the early years. In L. Miller (Ed.), *Professional issues, leadership and management in the early years* (pp. 119–132). London: Sage.

Rosenthal, M. (2003). Quality in early childhood education and care: A cultural context. *European Early Childhood Education Research Journal, 11*(2), 101–116.
Schön, D. (1983). *The reflective practitioner. How professionals Think in Action*. London: Temple Smith.
Sellenet, C. (2007). *La parentalité décryptée. Pertinence et dérives d'un concept [Parenting decrypted. Relevance and excesses of a concept]*. Paris: L'Harmattan.
Sharmahd, N. (2009). Parent participation(s): A glance at the Belgian reality in relation to the Italian one. *Rivista italiana di Educazione Familiare, 2*, 47–63.
Ulmann, A. L. (2013). Le travail en crèche à partir de l'invisible [Understanding the work done in a nursery through the 'invisible' activity]. *Nouvelle Revue de Psychosociologie [New Journal of Psychology], 15*, 193–206.
UNICEF. (2008). *The child care transition. A league table of early childhood education and care in economically advanced countries. Innocenti report 8*. Florence: UNICEF Innocenti Research Centre.
Urban, M. (2008). Dealing with uncertainty: Challenges and possibilities for the early childhood profession. *European Early Childhood Education Research Journal, 16*(2), 135–152.
Urban, M., & Dalli, C. (2008). Editorial. *European Early Childhood Education Research Journal, 16*(2), 131–133.Special edition on Professionalism
Urban, M., Vandenbroeck, M., Peeters, J., Lazzari, A., & Van Laere, K. (2011). *CoRe competence requirements in early childhood education and care*. Report for European Commission, DG Education and Culture.
Urban, M., Vandenbroeck, M., Van Laere, K., Lazzari, A., & Peeters, J. (2012). Towards competent systems in early childhood education and care. Implications for Policy and Practice. *European Journal of Education, 47*(4), 508–526.
Van Der Maren, J. M. (1996). *Méthodes de recherche pour l'éducation [Research methods for education]*. Paris: De Boeck & Larcier.
Van Laere, K., Peeters, J., & Vandenbroeck, M. (2012). The education and care divide: The role of the early childhood workforce in 15 European countries. *European Journal of Education, 47*(4), 527–541.
Vandenbroeck, M. (2009). Let us disagree. *European Early Childhood Education Research Journal, 17*(2), 165–170.
Vandenbroeck, M., & Humblet, P. (2007). Sauver l'enfant pour sauver le monde. Le care et la (re) construction de problèmes sociaux [Saving the child in order to save the world. Care and social problems (re) construction of social problems]. In G. Brougère & M. Vandenbroeck (Eds.), *Repenser l'éducation des jeunes enfants [Rethinking early childhood education]* (pp. 189–206). Bruxelles: Peter Lang.
Vandenbroeck, M., Roets, G., & Snoeck, A. (2009a). Immigrant mothers crossing borders: Nomadic identities and multiple belongings in early childhood education. *European Early Childhood Education Research Journal, 17*(2), 203–216.
Vandenbroeck, M., Pirard, F., & Peeters, J. (2009b). New developments in Belgian child care policy and practice. *European Early Childhood Education Research Journal, 17*(3), 408–416.
Vandenbroeck, M., Peeters, J., & Bouverne-De Bie, M. (2013). Lifelong learning and the counter/professionalization of childcare: A case study of local hybridizations of global European discourses. *European Early Childhood Education Research Journal, 21*(1), 109–124.
Vial, M. (2001). Evaluation et régulation [Assessment and regulation]. In G. Figari & M. Achouche (Eds.), *L'activité évaluative réinterrogée [Assessing activity re-examined]* (pp. 68–78). Brussels: De Boeck.
Wenger, E. (2005). *La théorie des communautés de pratique [The theory of communities of practice]*. Quebec: Les Presses de l'Université de Laval.
Wittorski, R. (2008). La professionnalisation [Professionalization]. *Revue Internationale De Recherches En Éducation Et Formation Des Adultes [International Journal of Research in Education and Adults Training], 17*, 11–38.

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Eastern Europe*

Elena Kravtsova, Nikolay Veraksa and Nikolai Veresov

Chapter 18
Contemporary Research in Early Childhood: Roots and Perspectives

Elena Kravtsova, Nikolay Veraksa, and Nikolai Veresov

Abstract This chapter examines common historical and theoretical roots of new areas and directions of contemporary research and unique innovative practices in early childhood education, which exist in Eastern European and post-Soviet countries. In many ways, they follow the academic tradition established in 1960s and developed in 1970s and 1980s in Soviet Union, which remains foundational for international contemporary studies and educational practices. Unique combination of traditional classical pedagogical research and strong "non-classical" developmental cultural-historical theoretical framework could be considered as a distinguishing feature, which predetermined both the foundations and directions of the history of early childhood studies in contemporary Russia, former Soviet republics and Eastern-European countries.

Keywords Early childhood research • Cultural-historical theory • Activity theory • Child development

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18.1 Introduction: Back to the Future

New areas and directions of contemporary research as well as unique innovative practices in early childhood education and development presented in this section have, however, some common roots. In many ways they follow the academic tradition established in the 1960s and developed in the 1970s and the 1980s in Soviet Union by the generation of prominent academics whose research remains foundational for contemporary studies and educational practices. In some sense, these contemporary approaches, directions, and innovative practices in early childhood studies have historical unifying roots.

In the situation of the political and ideological pressure in Soviet Union in the 1960s, early childhood as a research field became an "island of relative freedom" for researchers working within the Vygotskian tradition. This space of freedom predetermined a unique distinguishing feature of early childhood studies in Soviet Union. On one hand, traditional, "classical," educational, and pedagogical studies were informed by main theoretical principles and concepts of the cultural-historical theory. In some sense, the early childhood studies were the territory of an application of main principles of the cultural-historical theory. This is mainly related to the understanding and theoretical underpinning of psychological development in early childhood as a process of sociocultural genesis of higher mental functions and the personality in child. On the other hand, a huge variety of empirical and experimental studies generated conditions for further development of the theoretical approaches within Vygotsky's tradition.

This unique combination of traditional classical pedagogical research and strong "nonclassical" developmental cultural-historical theoretical framework could be considered as a distinguishing feature, which predetermined both the foundations and directions of the history of early childhood studies in contemporary Russia, former Soviet republics, and Eastern European countries. This methodological heritage did not disappear; on the contrary, new research and immersing innovative educational practices demonstrate its incredible relevance in addressing demands, requirements, and challenges of twenty-first century. Chapters, presented in this section of the handbook, are research-based evidence of the strengths and power of methodological tools and theoretical principles of developmental research in early childhood.

However, it is true that it is hardly possible to understand fruits without looking at feeding roots; the difficulty is that roots are always hidden under the surface. Our chapter is an attempt to show these historical roots, which still feed contemporary research in early childhood.

Likely, these roots have clear chronological and institutional coordinates. 1960 is the year of the establishment of the Institute of Preschool Education[1] within the structure of the Soviet Academy of Pedagogical Sciences. That was a turning point of the development of early childhood studies in Soviet Union. The founder of the Institute, a famous Russian psychologist Alexander Zaporozhets, the academician who belongs to the Vygotsky's theoretical tradition, directed it for over 20 years until his death in 1981 (Zaporozhets 1986).

The variety of the Institute's research directions (the Institute consisted of many specialized units such as laboratories of cognitive upbringing,[2] ethical upbringing, physical upbringing, etc.) was one of the key factors that insured its integral approach to the discipline.

Interdisciplinarity was another unique feature of the Institute's organization. Along with psychologists and pedagogues, it employed physiologists, medical doctors, philosophers, psychophysiologists, and other experts from other scientific domains that facilitated many lines of research. Such unique ensemble of theorists and practitioners allowed synthesizing knowledge of various specialized areas of child development to create a holistic view of the child.

The analysis of issues that the researchers of the Institute were concerned with in their work allows distinguishing two major problems, which continue to shape the current state of early childhood studies in Russia and former Soviet republics – the problems of child's personality and the child's cognitive development.

Although the problem of child's personality development in early years were addressed in the Institute's studies for many years since its foundation in 1960, it was not until 1984 that this problem was assigned to a special laboratory. Inspired by the results of its research, N. Poddyakov, A. Zaporozhets' student, proposed the name for this laboratory – "Formation of child's personality in situation of social and family upbringing" (Poddyakov 1977).

The methodology of personality studies and problem of personal development were actively discussed during meetings of the Institute's Academic Council since the establishment of the laboratory and still are the subject of heated discussions.

The analysis of existing theoretical approaches to the study of personality and of the current early childhood curricula allowed concluding that many of the personality theories at that time were not about actual personality or the development in itself. Determinism inherent in traditional science employs formal logic. That is why internally conditioned developmental processes are outside of its scope. Therefore, Vygotsky's cultural-historical approach, which was widely advocated by

[1] Istitut doshkolnogo vospitania (Институт дошкольного воспитания), where, according to existing terminology of that time "preschool" meant age 3–6 years. However, a lot of research in the Institute was done with babies and toddlers which corresponds with contemporary term "early childhood" with division to early preschool (3–4 years), middle pre-school (4–5 years) and upper/senior pre-school (5–7 years).

[2] Upbringing is the translation of the Russian word vospitanie (воспитание) as it existed in official documents and educational frameworks at those times. However, the research at the Institute was focused on development as sociocultural process of the genesis of higher mental functions in child.

A. Zaporozhets, Vygotsky's student, was used as theoretical grounds in the Institute's research work.

Vygotsky (1987, p. 99) noted that the problem of child's personality was not even present in the old school of psychological thought because it lacked knowledge of the child's history of cultural development and theoretical framework of the higher mental functions. The cultural-historical conception is not just one of the theories in the psychological science. It is a scientific field of its own, with own methodology that is drastically different from traditional methods of scientific discovery.

The theory of sociocultural genesis of higher psychological functions is based on two premises. First, all mental functions are divided into two categories – elementary (natural) and higher (cultural). A child has elementary functions just as she has the body with all its functions. Higher mental functions are voluntary and consciously regulated.

The origins and development of higher functions require the use of psychological tools. Mediation, the key difference between natural and cultural mental processes, is the second premise of Vygotskian approach. The use of signs as psychological tools allows a child to control and master her cognitive processes. To realize, as Vygotsky writes, is to master. The notion of mastering is central to cultural-historical approach distinguishing it from all the other theories based on adaptation-homeostatic notions.

18.1.1 The Study of Child's Personality Development

Researchers of the Institute conducted their studies in several key directions.

18.1.1.1 Development of Motivation in Children

The problem of development of children's motivational sphere was being approached from the standpoints of the A. Leontiev's (2000) activity theory, which differentiates between operational and motivational components of the activity. Motives are related to objects satisfying needs, and the very activity itself can come as a motive. Motivation develops with shifts in the leading activity. For example, significant grown-ups come as the primary motive for babies in their first months. It is seen in baby's reactions – smiles, making of cooing sounds, and getting agitated whenever significant grown-ups come close or by, all to get their attention. In their bonding with babies, adults begin to introduce objects, such as toys, early on to organize communication; however, at this stage, a significant grown-up remains the main motive for a baby. A significant grown-up induces children's exploration of objects.

M. Лисина (1974) in her experimental work showed that baby's attention toward an object lasts much longer when it is held by an adult. Adult-baby interaction lays grounds for the transition to the next type of activity – object-oriented activity, where children's interest in objects becomes their main motive. At this stage the role of a significant adult changes, from being the one a child uses an object to get attention of to being the one who helps mastering this object. Objects begin to motivate children, attracting their interest. However, this motivation is situational. In their early years, children are easily switched from one object to another. As they are progressing in their object-related activity, children begin to separate actions with objects from adults performing them. This makes them realize and understand objective actions and become interested in reproducing them. At this point, as A. Leontiev noted, children's abilities are limited, and they are unable to participate in the activities of adults on equal terms. This contradiction is solved in play activity, where children performing the same actions in a make-belief manner using substitute objects for the ones used by adults. This activity results in the development of special play motivation. A. Leontiev (1983a, p. 303) wrote that the motive of a play is the play itself: a child plays simply to play. Because child play is a complex hierarchy of roles, children develop likewise hierarchy in their motivation. It can be seen in preschooler's favoritism of certain roles (captain, pilot, etc.) over the others. Thus appear motives with different strengths.

Ya. Neverovich (Neverovich and Zaporozhets 1986) studied this phenomenon in depth. She asked children to perform a monotonous, dull task and give them cubes of the same color but different in sizes and asked to sort them. The task varied in instructions, of which there were three types: “sort the cubes,” “sort the cubes for your mom to see how well you did,” and “sort the cubes for other children to play with them later on.” It turned out that young schoolchildren's performance on a task varied dependent on their motivation. The strongest motive was the latter, social one, oriented toward peers. This experiment demonstrates that children develop system of subordinated motives. Moreover, A. Leontiev, by his discovery of the famous “bitter candy” (Leontiev 1983a, p. 202) phenomenon, proved that motives not only incite activity but also create meanings. This phenomenon was observed in an experiment where children were given a difficult task that was impossible to solve abiding by the experimenter's instructions, but could be solved by cheating. The experimenter told the children that as a reward for solving a task, they will be given a candy, gave the task, and left the room. Children, having understood that the task was impossible to solve by the rules, were breaking them thus completing it successfully. Then the experimenter used to come back, praised the child's work, and rewarded them with the promised candy. It turned out that senior preschoolers demonstrated general dislike of the given candy, insisting it being “bitter” and not tasty. This phenomenon vividly demonstrated the presence of the two concurring motives – the one of getting the candy and the other of solving the task by the rules. The realization of the first motive didn't mean the realization of the other, which resulted in negative emotions: it was important not only to have a candy but also to deserve it.

L. Bozhovich (2008) in her works showed that moral motivation develops in the preschool age, resulting in the emergence of special system of emotionally backed norms. It guides moral behavior in various situations. Development of motivation in senior preschool age completes with the emergence of child's inner "personal stand" that marks their readiness for school. Children at this point make transition from preschool childhood with its play to a school childhood with social roles, responsibilities, and pertaining attributes.

18.1.1.2 The Role of Family in Development of Child's Personality

The second direction of the Institute's research work was guided by the principles of the Vygotskian approach that considers development a key in understanding human nature – a feature shared with the views of neoclassical psychology. It is impossible to understand features of one's personality or to create conditions for its development without viewing them in a broader context of other processes, functions, and social environment, such as friends and family.

Discourse of a preschool child's development cannot be limited to discussions of kindergarten's curriculum and activities, leaving child's home upbringing and emotional sphere outside the scope. Moreover, personality studies assume cooperation between researchers and participants, where both are subjects of personal ongoing development. This, in the context of the discussed problem – emergence and development of personality in preschool age – leads to conclude that only personal development of people interacting with children can assure purposeful development of children's personalities.

Intensive scientific inquiry into the field of family upbringing problem is the main example of practical implementation of the neoclassical psychology's principles. This line of research yield results that are being confirmed by scientists and practitioners worldwide: a family alone cannot successfully address formation of the harmonious personality in a child; moreover, families themselves are in need of the qualified psychological assistance because the nature of interrelations within a family can substantially affect the sound development of children's personality.

One of the serious problems in this matter was separation of parents from educational establishments. Kindergartens and school were not involving family members in the educational process, limiting their role to attendance of formal parental meetings. As the result, parents were unaware of their children's activity at school, and teachers had no knowledge of children's situations at home.

The situation began to change after multiple studies of the outcome of family education. It turned out that in preschool children's minds, family image is dependent on shared location. Families, in a preschooler view, are people who live in the same apartment or the same room. Grandparents or parents living in a separate location are not considered a part of the family. It also turned out that preschool children do not differentiate between an ideal and an actual image of a family, and, thus, there are no good or bad families in their view. All families are the same in the mind of a preschooler. This does not mean that interrelations within a family do not affect

child development. It is that a preschool child does not realize that parental neglect, their bad attitude, and conflicts between parents are something that characterizes their own family and not all the others as well. This distorts a child's perception and adversely affects their personality and cognitive development.

A shift in educational orientation toward family resulted in creation of qualitatively new educational programs of preschool development that, among other things, included parents in their children's kindergarten life.

This transition to family-centered pedagogy was supposed to ensure the creation of conditions for purposeful development of preschool child's personality. The distinctive features of this new pedagogy were the holistic view of a preschool child and their living environment and holistic understanding of the individual trajectories in preschoolers' development. Holistic view of the preschool child development acknowledges that preschool education is not limited to only kindergarten or only home, it asserts that classes cannot be planned apart from weekends and holidays, and children's leisure time must not be excluded. Any person, and especially a preschooler, learns a lot more outside of the classroom. Therefore, a variety of the child's life aspects need to be taken into consideration when developing system of preschool education. Otherwise, the educational program will not contribute to the development of the child and would simply be useless or downright harmful.

18.1.1.3 Social Psychology of Preschooler's Personality

The second direction of the Institute's research work was connected to studies of the social context of the formation of the child's personality. This aspect has been first studied in the laboratory of children's social psychology and then in the laboratory of identity formation in social and family conditions.

The results of studies of the communication can be divided into three groups. The studies of the first group were associated with identifying features and patterns of communication of preschool children, the structure of children's group, and specificity of interpersonal relationships between preschoolers (Repina and Sterkina 1990). The other line of research studied the individual characteristics of preschoolers' communication. They yielded unique results showing that beginning from the early preschool age, we can vividly see and distinguish conflict-prone children, children manipulators, children individualists, etc. At this, on the one hand, it was strongly emphasized that all these and many other types of communication had a right to exist, and on another, harmonization of communication necessary for the sound mental and personality development of children in preschool age was promoted.

Another group of studies analyzed communication and interaction of preschool children during various activities. For example, T. Antonova studied communication and interaction of preschool children during their play (Repina and Sterkina 1990).

Among the studies of interpersonal communication of preschool children, a special place belongs to the line of research that began in the Institute of Preschool

Education under the scientific guidance of A. Zaporozhets and continues to present day. In these studies, communication is seen as both a characteristic and a mechanism of the changes that happen to the child during the preschool age. For example, the results of a study by E. Kravtsova (Kravtsova and Kravtsov 2013), on the problem of psychological readiness for school, showed that somewhere between the senior preschool and early school age, child communication with others qualitatively changes. On the one hand, such change readies the child for school and, on the other, becomes a psychological cornerstone for the development of the next leading activity – learning at school.

18.1.1.4 Studies of the Emotional Development of Children

Another direction of supporting the realization of individual trajectory of child development focuses on the emotional sphere of preschool children. According to the cultural-historical theory, emotions are a central feature in the preschool period of child's development. This means that emotions play a special role in the personality development of children of preschool age, and this fact places specific requirements for the organization of the life of preschoolers. Studies of the preschool children's emotional sphere's development were carried out in the laboratory of psychology of emotions under the scientific guidance of A. Zaporozhets. It was found that the development of emotions changes qualitatively during the preschool age.

"I will be angry with you for a long time, for the whole of two weeks," says an 8-year-old boy to his mother. "We laughed equally long at first, but then I took a grip of myself and overlaughed my friend Misha" declares the hero of one of the stories by V. Dragunsky. K. Chukovsky in his famous book writes about a girl who says: "I cry not to you, but to my aunt Lida." All these illustrate the appearance of so-called anticipatory emotions (Zaporozhets) by the end of the preschool age.

The behavior of early preschool-age children (at the beginning of this period of development) is qualitatively different. For example, the younger preschooler gets angry, cries, and swears that he will never play football again (or take other people's things, be friends with that kind of kids, etc.). However, it takes a little time for a child at this age to head for the door and go play football again, take other people's things, etc., assuring his mother that this time things will be different.

Children of early and even middle preschool age often watch the same movie for many times sincerely hoping that suddenly this time it will end differently, and their favorite character will survive or defeat the enemies. In preschool period of their development children are spontaneous and direct, which is manifested in involuntariness and situational nature of their behavior. This is due to the specific integrity of their minds that does not differentiate between the inner and the outer world. Involuntariness and situational nature of their behavior shows that children are not aware of own inner states and emotions and have no means of controlling or comprehending them.

By the end of the preschool age, children acquire the ability to manage their emotions. At this point, two important features in the development of emotions in the preschool years appear. The first is related to the control mechanisms of the emotional sphere. Imagination, being, according to Vygotsky, a central psychological neoformation, is formed between the subject and its emotional manifestations. It ensures formation of the anticipatory emotions in senior preschoolers, or "generalization of sensations and intellectualization of affect," which, according to the father of cultural-historical theory, is a product of the crisis of 7 years of age.

The second feature of emotional development in the preschool years is connected with the emergence and rapid development of empathy, sympathy, and compassion (Strelkova 1989). Both of the highlighted features of emotional development in the preschool years are directly related to the leading activity of this period – child play.

18.1.1.5 Studies of Child Play

Such renowned psychologists, A. Usova, R. Zhukovskaya, D. Mendzheritskaya, N. Mikhaylenko, and others, studied child play, and there was not a single laboratory in the Institute that wouldn't study it.

However, at the same time there was no special department, which would specifically study play activity of preschool children. This largely is the reason why the Institute lacked an integral concept of play activity (some theories have emerged after the Institute was reorganized and restructured). At the Institute's Academic Council, where D. Elkonin presented his book "Psychology of play," he said that all his life he sought to create a tree of the child's play, but he succeeded in creating merely a bush (Elkonin 1978).

Research of child play had its ups and downs. Studies of play activity in the middle of the last century enjoyed wide interest resulting in a large number of various works, whereas at the end of the twentieth century, this interest was largely lost. For the past 5–7 years, the child play once again attracted attention of many researchers. This can be attributed to the fact that after a while theorists and practitioners realized that it is impossible to solve many issues without turning to child play. This is most vividly manifested in problems of psychological readiness for school. If in the 1990s the idea that psychological readiness for school depended on children's play activity seemed revolutionary and was rejected by many researchers, today no one seems to argue against this thesis. However, when it comes to the purposeful formation of psychological readiness for school, that is, creation of the conditions for the formation and development of child play, the situation begins to resemble that of the 1990s.

Studies of play activities conducted in the Institute before and after its reorganization yielded a number of important results. The fundamentally new (the first feature) to understanding of the child play was differentiation of its psychological criteria. Keeping in mind the Vygotskian approach to play activities, as well as his nonclassical psychology, we can define dual subjectivity as its key characteristic and its criterion. Dual subjectivity of child play describes situations when a child is

simultaneously a part of the game, and the one playing it, being at the same time in and out of its boundaries. The above can be illustrated by Vygotsky who noted that in the game of hospital, a child cries as a patient and at the same time is joyful because he is happy playing (Vygotsky 1966, p. 70).

This criterion qualitatively changes understanding of an imaginary situation as a criterion for play activities. According to Vygotsky, an imaginary situation is the space between the real (visual) and semantic (imaginary) field and not the content of the semantic field to which some researchers limited child play.

As shown in studies of E. Kravtsova (Kravtsova and Kravtsov 2013), child play encompasses relationships pertaining to the game (plot, characters) and to the reality (realm of a child's life). In some cases, these relationships do not coincide, for example, when a child in the game comes as an adult who takes care of a baby, played by an adult. In other cases, the relationship does not simply coincide but comes as the subject of a play, as in the case described by Vygotsky, when two brothers play two brothers. However, regardless of whether gaming and real relationships in child play coincide or not, if the player is dually subjective, he or she realizes play activity.

The second feature of the approach to child play that was beginning to take shape in the Institute was connected to the development of periodization of play at the preschool age. In the first approach to play a directed play, the child learns to create a plot by combining different objects. The second – figurative play – is aimed at development of the child's identification abilities. A child is changing walk, voice, and attitude depending on whom they identify themselves at the moment. By merging, the first and second approaches to playing (directed + figurative) form the basis for the formation and development of the role-play. Role-play allows realization of the skills gained in the previous kinds of games and creates conditions for the development of children's cognitive abilities. Thus, as a driver in a game, a child has to make decisions about what to do when their car brakes down or a wheel fells off. Or in another example, a child that is playing a salesman in a shop must think of how to weight products when there are no scales available or how to calculate the amount of change due.

Playing a game by the predefined rules, a close relative of the role-play comes in the senior preschool age. It is this kind of game that accounts for the development of voluntariness in preschool children. Moreover, given that the rules of the game must be learned prior playing it, we can conclude that playing by the rules facilitates development of psychological readiness for school.

The development of child play in preschool age concludes with the return back to the directed play, this time enriched with all the previous experience and knowledge gained in the previous types of games. This in many ways prepares for and ensures smooth transition to a next age period, new leading activity.

The third approach to play connects it to the other types of preschool activities. As it was mentioned before, the periods of child play development in the preschool age (developmental timeline for different types of games) were established. It should be noted that the emergence of new types of child play does not affect the

types a child already mastered, which only become more complex and rich in their content.

At this, each phase of the preschool period is characterized by a certain set of child play types with only one of them being new and newly formed at a time. Only this newly formed type of child play can be defined as a child's leading activity, which changes with the new phase of a child's development. For example, role-play is the leading activity in the middle preschool age, whereas in the senior preschool age, the leading activity becomes playing games with rules.

Leading type of play activity does not dominate the others, but by the end of preschool age, child play gets so advanced that it becomes a predominant type of children's activity. The types of child play that ceased to be their leading activity go from the center to the periphery of the process of cognitive development, becoming a form of organization of children's life.

Two things should be noted in this respect. First, until the child mastered play as an activity, it cannot be used for other developmental purposes. In other words, in this case, the use of play for educational purposes would not only be counterproductive, but will lead to substantial distortions, both in learning and in the development of play skills. Second, the child play can be used in various child activities by creation of situations where dual subjectivity can be realized.

The third approach to child play concerns conditions for development of play in early childhood.

Psychological readiness for play, on the one hand, reflects the continuity of the play as a purposeful activity, which is expressed in the fact that the child gains the ability to change their perception of an object and act according to it. At the same time, the psychological readiness for play involves the special situational forms of communication with an adult and the emergence of key actions with objects.

18.1.2 Studies of Cognitive Development

Studies in the field of cognitive development of preschool children conducted in the Institute had two main directions – the first led by A. Zaporozhets and the second by A. Usova.

18.1.2.1 Research on Learning Opportunities for Children

A. Usova advocated the general idea that preschoolers must have a system of knowledge that reflects basic laws and relationships between the various phenomena of reality. She explained her position by contrasting it to the approach, which posits that children are able to discover basic laws by themselves, by using own experience of interaction and communication with the outside world. Usova stressed that it is important not to overestimate the potential of children's autonomy: "You can often see how child's plain helplessness in some situations is interpreted by a grownup as

deliberation and planning. Child's autonomy develops gradually and requires serious help in this process" (Usova 1970, p. 55). Criticizing this approach, she emphasized that not all children develop speech, numeracy, drawing skills, etc. at the same pace. The division of preschoolers into groups according to the level of development of certain faculties creates large groups of children who did not reach that level and were labeled accordingly. The situation is exacerbated when such division is used in selection of children for school. Children of such groups are distributed to classes and schools of lower level that determines the future of these children.

Usova's research emphasized that there are two positions toward the child. According to the first position, the development of appropriate knowledge and skills may be regarded as desirable, but optional, and in this case, the child's mastering of the proposed content can remain on a relatively low level. According to another view, shared by A. Usova, children must master the proposed cultural content.

Usova offered to organize special classes for children within the system of preschool education that would help all of them to master the selected content. At the same time, the requirements for the organization of classes were formulated as follows: the classes must be interesting, full of activities, and accessible by all children and must get children emotionally involved. The classes should develop thought, speech, perception, etc. and at this let children lead their everyday lives. Along with the importance of classes, A. Usova stressed the importance of play and work, transforming into each other in some situations.

Usova singled out two types of skills and knowledge that children acquire. The first type is knowledge acquired through children's own experience. The second is the knowledge that deliberately transferred from an adult to a child. She insisted that the efficient educational process takes into account children's experience and relies on it. Classes should be organized in such a way that each child involved in the educational process achieves the results.

Thus, she mentions: "Children can acquire knowledge and skills in literacy, numeracy, drawing, construction and so on only when being taught these. Under these conditions, the experience in the form of knowledge and skills will be accessible to all children; will have an impact on their development. These tasks should not be linked to giftedness in children. All children are able to achieve a certain level of development when taught by an adult, considering and using activity" (Usova 1970, p. 53). When the classes are properly organized, there is an additional effect when children influence each other. Hence emerged the idea of daily group sessions conducted for 20–25 min twice a day in day care centers.

The sessions designed by A. Usova were based on the idea of imitation. The works of great number of researchers have shown that imitative behavior is common to preschool children. By giving a child a model to reproduce, adults reduce the chance of mistakes and lead child's activity directly toward the desired result, facilitating the development of knowledge and skills. On the other hand, children in their imitation must be active in own orientation to discover the key features to reproduce. In this case, the child comes as a subject of cognitive activity, not an object.

Usova considered educational sessions as a way of preparing preschool children for the transition to school. They seemed important to her, because she believed that

playing doesn't automatically entail learning, because learning is a result of special pedagogical impact: "One can cite numerous examples from educational practice showing how kids who are great at play, are far from performing the simplest and the basic requirements of learning activities: listening to adult, following instructions in their of mastering content, skills and methods of action. It has been shown in practice that children in the preschool age need to be taught in order to enable them to master skills required for their proper development and get them ready for school. Learning for a preschool child is a special activity that is formed during organized sessions" (Usova 1970, p. 67).

It should be noted that A. Usova welcomed the Montessori system. However, its autodidactic principle was main disadvantage to her, and therefore Usova favored learning sessions led by a grown-up.

Usova emphasized the importance of preschool education in the form of learning sessions. She also realized that children in their preschool years do not master the method of acquiring knowledge. Consequently, the learning activity itself does not develop, although children acquire certain qualities needed for the formation of educational activity in the future. Nevertheless, A. Usova considered learning sessions in kindergarten the only way of organizing developmental teaching, that is, to make sure that teaching would entail development.

The work of A. Usova resulted in many practical application of learning sessions on various subjects that were included in many different preschool educational programs.

18.1.2.2 Studies on Speech Development

One of the results of the Institute's work was development of system of classes for speech development for preschool children. The program was based on research conducted in the Institute's laboratory of speech development headed by F. Sohin (1984) and O. Ushakova (2002). Three research areas, structural (formation of structural levels of language – phonetic, lexical, grammatical), functional (development of coherent speech and communication), and cognitive (development of understanding phenomena of language and speech), were the main directions in studies of psychological-pedagogical problems of language development in preschool children. All three directions were intertwined, because awareness of speech and language phenomena is integral to all studies of preschoolers' speech development.

Studies have shown that the specially organized education system leads to substantial shifts in the speech and general cognitive development of preschool children. Children develop high culture of speech and a tendency toward its improvement, perfect accuracy, and expressiveness of their speech. Preschoolers begin to use appropriate means of artistic expression in their verbal creativity (by composing fairy tales, stories, riddles, poems).

According to A. Leontiev, any verbal expression requires a whole set of skills: a quick orientation in a situation of communication, an ability to plan speech and

choose its content, finding linguistic means for transmission, and an ability to provide feedback; otherwise communication will be ineffective and will not yield the expected results. It should be emphasized that the most important tool in acquiring verbal skills is the ease of transferring of linguistic units to the new, not yet encountered, combinations. This constitutes the so-called sense of the language, which enables the child to apply language skills to an unfamiliar language material, to distinguish the correct grammatical forms from the wrong ones.

The formation of linguistic abilities must include the development of a sense of language, which comes in use when a child needs to introduce linguistic units into a statement. We should point out the creative nature of such introduction. For one thing, the situations of verbal communication are constantly changing, which causes children to create phrases new to their linguistic experience and introduce them into new combinations. For another, changes of situations and creation of new combinations bring forth new ideas in child, causing the need of their expression with new speech forms. Children's linguistic skills develop in the very moment when they come to new linguistic solutions.

This ability is associated with the mastery of native language, development of linguistic skills; it develops by practicing communication as a system of verbal associations and can be purposefully formed.

The main objective of linguistic education is child's creative mastering of native syntax and its flexible application in specific situations, as well as mastering of basic communication skills. Individual differences in verbal fluency in children of the same age can be vast, so it is necessary to take into account individual characteristics of each child's speech development.

The main tasks in the development of speech, such as formation of phonetic culture of speech, enrichment of vocabulary, mastery of grammatical structure of speech and its coherence, and instillment of interest in artistic expression, are being solved throughout the preschool years, but in each age period these tasks gradually become more complex, with the subsequent changes in the teaching methods. Each of these tasks has a whole range of problems that must be addressed in a parallel and timely manner.

By assimilating native language, preschoolers master the most important form of verbal communication – spoken language. Communication in its full form – speech recognition and active speech – develops gradually. Therefore, language acquisition and language development are considered not only in terms of linguistics (phonetics, grammar, vocabulary) but also in terms of interpersonal communication skills with other children and adults, making it important to master not only the culture of speech but also the culture of communication.

In preschool education a close relationship of the structural components of communicative competence is seen as a relationship between communicational and speech abilities of the child, as the development of speech in the process of communication, assimilation of social experience, and development of creativity. All these skills give children an opportunity to anticipate communication in the elementary forms and orient with the conversational partner's status (a friend, a teacher, a parent, a strangers). Advanced culture of verbal communication is not mere proficiency

in native language; it is also an ability to use expressive means of native language in various contexts of communication. It is both speaking the right words and doing so in the right situational context.

Properly organized education and communication allow children to successfully acquire speech and communicative skills and develop their creative skills in various forms of artistic activity: art, music, theater, etc. A child can express her emotions and feelings with a spoken word, which should be figurative, concise, and to the point. Along with the culture of speech, the culture of communication and speech etiquette develops. However, teaching the culture of communication should not be limited to mere memorization of etiquette rules.

Speech skills include excellent verbal memory, general erudition, and feeling of the language, i.e., proper choice of linguistic means, logical construction and presentation of speech, and the ability to listen to other parties in a conversation. Communication skills include initiative in conversations, independence of judgment, the ability to engage in a conversation, activity, and emotionally evaluative responses.

Sufficient level of preschool speech includes:

Knowledge of literary norms and rules of the native language: the free use of vocabulary and grammar in expressing thoughts and compiling statements of any type
Well-developed culture of communication: the ability to establish contact with adults and peers (to listen, to respond, to argue, to ask questions, to explain)
Knowledge of the norms and rules of speech etiquette: the ability to use them depending on the situation

18.1.2.3 Development of Perception

As it has been noted, studies of cognitive development were conducted under the scientific guidance of A. Zaporozhets. Special attention was given to the research devoted to development of perception, thinking, and imagination, with studies of perception being common grounds for all the work in this field.

Zaporozhets believed that perception is a culturally conditioned process connected with the development of the sensory standard system that is carried out in the course of productive activities. He showed that the perception of a preschooler is of activity nature and represents a system of perceptual actions characterized by the use of sensory standards. At the preschool age, children become able to perceive the world not through innate properties of perception (as, e.g., a set of sensations as understood by associative psychology), but with a system of sensory standards, which have been developing by society throughout its history. Sensory standards are qualities according to which a child arranges objects around them. Those include shape, size, color, musical tones, phonemes, and so on.

Development of perception in terms of the activity theory is shaping child's mind with the properties of objects. However, as the development of child's system of sensory standards progresses, objects themselves begin to be interpreted (assimilated)

through the pertaining sensory standards. It was experimentally observed by L. Venger in the phenomenon where colors of objects were "elevated" to match the sensory standards (Venger 1969). For example, young preschoolers interpret the color orange as either red or yellow, because, as noted by L. Venger, they didn't yet master the whole system of sensory standards, only primary colors, and when faced with a complex color, they tend to search for a match in their system of sensory standards, among primary colors.

Together with L. Venger, A. Zaporozhets developed a system of sensory training within a preschool curriculum that offered a variety of activities aimed at development of an ability to use sensory standards in the analysis of various properties of objects. It turned out that the mechanism of visual perception is not limited to the irritation of the retina with reflected light from objects, it is perceptual activity related to the analysis of the object's perceived properties. In other words, perception is different from the process of distinguishing one object from the other. It is a process governed by the laws of human culture.

In an experiment by L. Venger, young preschool children were asked to retrieve objects through a wooden plank with holes similar to the shapes of objects. Thus, a child was required to pull an object through a hole of the similar shape. The task turned out to be difficult for children. Although they saw objects and openings, the decision required separating the shape of an object from its other properties, such as color, and relating it to the shape of the hole. In other words, young children had to solve a special perceptual task that was accessible only to senior preschool children. These studies resulted in the theory of child's perception development. According to this theory, the perception of a preschool child is a special process of analyzing objects with perceptual actions and sensory standards. First, in a child, there are only psychophysiological processes accountable for distinguishing one object from other. With an engagement in activities, the child begins to master perceptive actions and develop sensory standards. Children first master substandards. For example, a child may say "round like a cherry," or "similar to a cucumber" when referring to the oval. These definitions are based on the personal experience of interacting with these objects, and they are applied in the analysis of other objects. Along with the development of substandards form actions of perceptual identification, which is analysis of an object on the subject of similarity to one of the substandards. For example, a young preschooler may say that a bird is a creature that has a beak, but the beak in this respect is some definite, visual property. On the next stage of the preschool age, a child begins to develop the simplest sensory standards – color, shape, and size. This marks the beginning of the formation of cultural notions about shapes (circle, triangle, square), sizes (large, small), and color (red, blue, green, yellow). At this age, an action of referral to the standard is being formed: children are becoming able to analyze an object apart from its other properties in solving perceptual tasks. They become aware that a ball is round, ignoring the material it is made of, its color, or way of use.

By the age of four, children begin to develop understanding of the transformation of objects that means they become able to perform the action of perceptual seriation, for example, to arrange items in an order from the smallest to the biggest and vice

versa or sort color pictures according to the saturation of color, from the most vivid to the most bleak, and so on. That manifests the development of order notion of sensory standards. By the age of five, children have understanding of sensory standards and develop perceptive modeling, which allows consideration of an object as a set of various cultural properties. For example, a house can be represented as consisting of windows, doors, and roofs – a unified set of various culturally defined qualities. It is important to emphasize that such perceptional system only develops with appropriate training aimed at the development of sensory standards.

18.1.2.4 Development of Imagination

According to Vygotsky, imagination occurs when the child becomes independent of her own perception. When, for example, a child who sees the doll sitting is asked to say that the doll is standing (example by Vygotsky), they are unable to do that if they realize themselves as subjects of own speech and then employ a new cognitive function called imagination. Imagination allows the child to control the field of their own perception. In other words, the crisis of 3 years of age results in an ability of children to realize themselves as subjects of own speech and gradually, with the help of the speech, change their visual space. Irrespective of the objective reality, they become able to repeat the words of an adult – the doll is standing, the doll is sitting, etc.

Studies of imagination at the Institute were simultaneously conducted in two laboratories – the one under the supervision of L. Venger and the other under the supervision of V. Davydov (Kravtsova and Kravtsov 2013; Кудрявцев 1990 and others). These studies have provided data on the development of imagination on preschool years. Thus, a study by O. Dyachenko resulted in distinguishing two stages in imagination development – objectification and inclusion (Diachenko 2011). Important results were also obtained in experimental studies of imagination in the preschool years with respect to two different kinds of imagination – emotional and cognitive (Veraksa 2011).

Data were obtained on the structure of the imagination, which is implemented through the objective environment, past experience, and suprasituational internal position, on close connection of imagination to the development of creativity in the preschool years and on the role of imagination in the psychological readiness for school (Kravtsova and Kravtsov 2013; Кудрявцев 1990).

18.1.2.5 Development of Cognition

The studies of cognition's development, which components were cognitive actions, were carried out in the context of the activity theory. Three forms of cognition were singled out: visual-active, visual-figurative, and verbal-logical. N. Poddyakov studied visual-active form of cognition in early years child. It was shown that this type of cognition is characterized by the child's way of operating with objects. Initially

it is chaotic, disorganized. The child operates an object without expecting any result. This was experimentally studied using a special machine with holes in its top, through which by pushing buttons rods would pop up. At first, the child presses buttons at random without paying attention to the appearance of rods, but over time they begin to notice them, which happens spontaneously, not intended. The development of visual-active cognition happens when chaotic actions start to organize into probing, exploratory actions, where a child puts a theory forward and tests it, anticipating certain results. Here not only a connection between the action and the result establishes but also appears purposefulness of actions. For example, when children are faced with a task of making a ball roll off a hill and to stop at a certain place, they approach it differently at different age. Children of 2 years of age simply put the ball on the hill (regardless of how high or how low on the hill), release it, and watch what happens. Children of 3 years of age act fundamentally different: they begin to test different starting points on the hill to determine how far will the ball roll. Eventually they manage to establish the dependence of the ball's stopping point from its initial position that solves the task.

N. Poddyakov specifically studied the transition from visual-active to visual-figurative thinking, which is manifested not in the child's actions with objects in a situation, but in child's cognitive representation of the relations between them. He considered operational standards that reflect basic connections in a symbolic form to be essential in transition to visual-figurative cognition. The use of operational standards can be illustrated by the following experiment. A circle that rotates like a record is placed before a child. On this circle a figure of an animal is placed and above the circle there is a flat platform with another animal figure. A task is to place the animal figure on the circle in such a way that by rotating the latter, the two figures would meet at some predefined point. For children of early preschool age, this task is difficult to solve. Drawing rotation trajectories on the circle helps children to solve this task. In fact, these trajectories act as operational of standards, allowing children to anticipate the circle's rotation before actually rotating it. Another tool of figurative cognition is manipulating image, which is a representation of an outcome of own actions.

The use of manipulating image can be illustrated by the following experiment. N. Poddyakov introduced a special device to children consisting of a plank with a figurine which movement could be controlled by special buttons. The task was to move the figure from one point of the panel to another. Children's strategies in solving this task varied according to their age. Younger preschoolers used to immediately press buttons until desired result was achieved. Older preschool children would first try every button, watch the corresponding effect, and then solve the task very quickly. N. Poddyakov explained this result by the fact that the children had formed a special cognitive tool – manipulating image – which allowed them to anticipate movement of the figure depending on what buttons they press. Cognitive tools, such as operational standards or manipulating images, were central to development of child's cognition in the activity theory. Along them motivational side of cognitive activity was studied. N. Poddyakov discerned two types of cognition based upon two situations – solving of a task proposed by an adult or unguided

exploration of the objects and situations. Two of these motivations result in their own outcome. In the first case, adult-organized activity leads to the formation of distinct notions about the properties of objects. In the second case, where cognitive activity is initiated by the child, notions don't have that clarity because a child doesn't take into consideration main characteristics of the situation in which they act. Therefore children possess two types of notions – clear and schematized and uncertain and uncategorized. N. Poddyakov wrote that it was the second type of notions that constituted the child's zone of proximal development, being the source of their creativity, because they have a potential to eventually turn it into clear, distinct knowledge.

Studies of figurative cognition conducted under the scientific guidance of L. Venger revealed the important role of the so-called schematized representations – internal images of objects and the relations between their constituent elements that represent only the properties needed for solving particular tasks. This can be illustrated by an experiment in which a child was asked to find a toy in a room using a plan that represented only the main relations between the content of the room. To complete the task children were required to have a mental representation, which connected items on the plan to their referents in the real room. It is the ability to see the scheme (the schematized image) that makes this task solvable.

Studies by N. Veraksa discerned another form of preschool child's cognition – dialectical cognition. It has been shown that the development of dialectical cognition is a special independent direction of preschool children's cognitive development (Veraksa 2010).

We can see that in the work of N. Poddyakov, L. Venger and their colleagues descried above, cognition, as well as perception, is a culturally mediated process that can be purposefully developed through activities in the course of which the child develops cognitive tools. Such activities are mainly construction and art.

Concluding the description of the work of The Institute of Preschool Education of the Academy of Pedagogical Studies of USSR, it should be noted that it was practically oriented and resulted in creation of various educational programs for preschool children across all the countries of the former Soviet Union and others. Among such programs are "From birth to school" (Veraksa et al. 2010), "The Golden Key" (Kravtsov 2014), and "Razvitie" (Venger and Diachenko 2000), presented in Russia, Ukraine, Belarus, and Kazakhstan, "Tools of the mind" (Bodrova and Leong 2003) in the USA, and "Key to Learning" (Dolya 2010; Esteban et al. 2010) in the UK, the USA, Poland, and other countries.

References

Bodrova, E., & Leong, D. J. (2003). Learning and development of preschool children from the Vygotskian perspective. In A. Kozulin (Ed.), *Vygotsky's educational theory in cultural context* (pp. 156–176). New York: Cambridge University Press.

Diachenko, O. (2011). On major developments in preschoolers' imagination. *International Journal of Early Years Education, 19*(1), 19–25.

Dolya, G. (2010). *Vygotsky in action in the early years*. London/New York: Routledge.

Elkonin, D. B. (1978). *Psikhologiya igry [Psychology of play]*. Moscow: Pedagogika.

Esteban, M., Dolya, G., & Veraksa, N. (2011). Key to learning. A neo-vygotskian program for children aged 3–7. *Revista de Psicologia y Educacion, 11*, 2.

Leontiev, A. N. (1983a). *Izbrannye psihologicheskie proizvedenia [Selected psychological works]* (Vol. 1). Moscow: Pedagogika.

Leontiev, A. N. (1983b). *Izbrannye psihologicheskie proizvedenia [Selected psychological works]* (p. 2). Moscow: Pedagogika.

Leontiev, A. N. (2000). *Lekcii po obshchey psykhologii [Lectures in general psychology]*. Moscow: Smysl.

Poddyakov, N. N. (1977). *Myshlenye doshkolnika [The mode of thinking of the preschool child]*. Moscow: Pedagogics.

Ushakova, O. S. (2002). *Programma razvitiya rechi detey doshkol'nogo vozrasta v detskom sadu [Educational program of speech development in kindergarten]*. Moscow: RAO.

Usova, A. (1970). *Education in kindergarten*. M.: Prosvashenie.

Venger, L. A. (1969). *Vospriyatiye I obucheniye [Perception and education: preschool age]*. Moscow: Pedagogics.

Veraksa, N. (2011). Development of cognitive capacities in preschool age. *International Journal of Early Years Education, 1*, 79–88

Veraksa, A. (2013). Symbol as a cognitive tool. *Psychology in Russia: State of the Art, 1*, 57–65.

Veraksa, N. (2010). Structural approach to dialectic cognition. *Psychology in Russia: State of the Art, 1*, 227–239.

Venger, L. A., & Dyachenko, O. M. (Eds.). (2000). *Razvitiye: Programma novogo pokoleniya dlya doshkol'nykh obrazovatel'nykh uchrezhdeniy [Development: The program of new generation for preschool educational institutions]*. Moscow: GNOM i D.

Veraksa, N. E., Komarova, T. S., & Vasilyeva, M. A. (Eds.). (2010). *Ot rozhdeniya do shkoly. Osnoovnaya obsheobrazovatelinaya programma doshkol'nogo obrazovaniya [From birth to school. The main educational program in preschoolage]*. Moscow: Mozaika-sintez.

Vygotsky, L. S. (1966). Igra i ee rol v umstvennom razvitii rebenka. *Voprosy psihologii [Problems of psychology], 12*(6), 62–76.

Vygotsky, L. S. (1987). *The collected works* (Vol. 1). Plenum Press.

Zaporozhets, A. V. (1986). *Izbrannyye psikhologicheskiye trudy: v 2t., tom 1. [The selected psychological works: In 2 vol. Vol. 1. Mental development of the child]*. Moscow: Pedagogics.

Божович, Л. И. (2008). *Личность и ее формирование в детском возрасте*. Питер: СпБ.

Кудрявцев В. Т. (1990). Творческая природа человека//Вопросы психологии, 3, pp. 113—120.

Запорожец, А. В, Неверович, Я. Э. (Ред.). (1986). Развитие социальных эмоций у детей дошкольного возраста. Психологические исследования. Москва: Педагогика.

Кравцова, Е. Е., & Кравцов, Г. Г. (2013). *Психология и педагогика обучения дошкольников*. Мозаика-Синтез: Учебное пособие. Москва.

Лисина М.И. (Ред.). (1974). Общение и его влияние на развитие психики дошкольника. Москва.

Стеркина, Р. (Ред.). (1990). Общение детей в детском саду и семье. Москва: Педагогика

Стрелкова, Л. П. (1989). Уроки сказки. Москва: Педагогика.

Сохин Ф.А. (1984). Развитие речи детей дошкольного возраста Москва: Просвещение.

Крацов, Г. (Ред.) (2014). Примерная основная образовательная программа дошкольного образования "Золотой ключик". Москва: Левъ.

Chapter 19
Symbolic Means in the Educational Programs for Preschool Children in Russia

Nina Salmina and Aleksander Veraksa

Abstract This chapter is devoted to the problem of the symbolic function development at the preschool age. J. Bruner, L. S. Vygotsky, and J. Piaget believed that the significant transformations of the child's mind are behind the symbolic function formation. L. S. Vygotsky stated that it is the sign or means of its use which are the basis of the psychological structure of the child consciousness. The problem of psychological process mediation by signs, possibilities of their use, and creation of signs by children became one of the most important in the Russian developmental psychology. In this chapter we will discuss three trends in symbolic tools for learning in preschool educational programs: play activity, drawing activity, and speech. Special attention is given to the comprehension of sign-symbolic systems and their acquisition during educational process. These areas are illustrated by the examples from the educational programs, which helps to see the logic of symbolic development understanding in the Russian early years education.

Keywords Symbolical function • Symbolical tools • Programmes of early childhood education • Programmes for symbolical function development

The problem of the symbolic function development at the preschool age has always attracted attention of researchers. J. Bruner, L. S. Vygotsky, and J. Piaget believed that the significant transformations of the child's mind are behind the symbolic function formation. J. Piaget understood the symbolic function to be "the ability acquired in the second year of life to represent absent object or event not apprehended directly by means of symbols or signs, i.e. those, which denote and which differ from those that are denoted" (Piaget 1976, 107).

According to Piaget, the symbolic function begins to appear in different types of representation – imitation, symbolic game, mental image, presentation, and speech.

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In Piaget's works, the process of symbolization is shown as a special form of reflection of reality by a child achieved by virtue of an individual own activity as opposed to a sign of collective nature. J. Piaget emphasizes that a symbol carries an affective aspect and its application by a child is conditioned by the difficulties of subjection to external instructions and orders. The symbolic reflection is a special form of reality representation in the child's mind, which can precede the reflection of a world in the form of signs. At the same time, Piaget's attitude allows identifying a sign and a symbol as a part of a single process of symbolic function development. That is why the main discrimination in the psychological literature came to be associated with not so much by the sign-symbol line as by image and verbal representation line.

L. S. Vygotsky, who determined the range of problems and theoretical approach to analysis of the semiotic function development, proceeded from the assumption that in the higher psychological structure, "the entire functional determinant or the focus of the whole process is a sign or a means of its use" (Vygotsky 1983, 116–117). The problem of psychological process mediation by signs, possibilities of use, and creation of signs by children became one of the most important in the Russian developmental psychology. In this chapter we will discuss three trends in symbolic tools of learning in preschool educational programs: play activity, drawing activity, and speech.

19.1 Development of the Children's Play

According to Piaget, the symbolic play is a culmination of the development of child's play. A child, who is constantly forced to adjust to social and physical life of adults, which remains internal and difficult to appreciate, fails to satisfy affective and intellectual needs. Piaget emphasizes that for the purpose of affective and intellectual balance, it's necessary for a child to have an accessible area of activity, the motivation for which is not an adaptation to reality, but its assimilation without compulsions or orders. Such sphere is a play, which adapts reality by means of assimilation to the child's needs, while imitation acts as an accommodation to external models.

Traditionally, the sign-symbolic mediation development in Russian preschool education is associated with the play, child's speech development, and figurative activity. Speaking about child's play, L. S. Vygotsky assigned a huge part to it in development of imagination and creativity. In the creative process, Vygotsky singles out the specific type of children activity characterized by the process of the reference of images of one reality to another one. It is a peculiarity that distinguishes play from the other productive types of preschooler's activity. Vygotsky noted that each age has its own form of creativity connecting "activity of imagination with reality." The form of connection between activity of imagination and reality determined by Vygotsky as "an emotional" is of special interest. He emphasized that "every feeling, every emotion strive for taking shapes in the known images corresponding to this feeling" (Vygotsky 1967, 13). According to Vygotsky, an emotion

has a special ability to choose the corresponding impressions for it. Here "the principles of double expression of feelings" become apparent, according to which human internal states are reflected in the external products, and the image-fantasy acts as an internal language for our feelings. We see that Vygotsky, without any direct mentioning, pointed at the specific process of mediation between two different realities, one of which represents the cognitive processes and another one affective. In this case, it is necessary for us to emphasize an idea of the unity of affect, and intellect is an idea of the existence of specific relation between cognitive and affective human areas. This relation features the symbolic mediation. The symbolic mediation establishes relation between two reality chains – an emotional chain, "where the general feeling, general emotional sign form its basis" (Vygotsky 1967, 14) and a cognitive chain, which can be easily combined mentally. Vygotsky noted that emotional experiences represent the specific reality. Their interpreting through the cognitive area is based on the same mechanism as a child's play.

In fact, it is hardly lawful to think that a child acting with a stick has no other reality in his mind (acting with a horse). Here we can observe the same phenomenon as in the case with emotional imagination. Not knowing the real horse-riding method, a child acts with a stick, but refers his action exactly to the situation with a horse. In other words, we deal with the specific function of a symbol, when a child acts in space of a symbol, and the reality itself becomes to lose its mysteriousness when playing. It is clear why Vygotsky emphasizes that a playing child keeps two plans: a real plan and an imagined plan. To our opinion, it is connected exactly with the possibility of interpretation of one plan through another. When playing a game, the known closed field appears before the preschooler, but he does not simultaneously lose the concept of the real meaning of things. If a chair is a horse in this game, it does not prevent a child from moving a chair, although a horse can not be carried in one's arms (Vygotsky 1967, 51). To our opinion, having done this and the same actions, a child returns to the imaginary situation, which becomes more clear for him exactly due to the fact that an action with the real chair acts as a form of understanding action with a horse.

Such interpretation of a role of a game in the symbolic reflection development corresponds to the viewpoint of A. V. Zaporozhets, a follower of L. S. Vygotsky, who wrote that " … an important role of a game in the child's psychic development is explained by the fact that it equips a preschooler with accessible means of an active recreation, modeling by virtue of external object actions of such contents, which upon other conditions could be inaccessible and, therefore, could not be mastered properly" (Zaporozhets 1986, 214). When Zaporozhets speaks about the model nature of reality reflection in the play activity, he means "the systems of generalized, typical images of surrounding things and phenomena," which a child builds to "do its different mental transformations" (Zaporozhets 1986, 242). It seems to us that an imaginary situation is not so much characterized by the system of model (i.e., sign) relations, as by the system of symbolic actions, which in certain circumstances can be treated as sign.

The orientation specific character based on the symbolic reflection in the context of analysis of the child's play is presented in the works of A. N. Leont'ev. According

to Leont'ev, the play activity results from the conflict between the development of a need to act with things and "the development of operations by virtue of which these actions are carried out" (Leont'ev 2000, 475). Since a game is not productive, "the operations needed in the play action can be replaced by another operations, and its object conditions can be replaced by another object conditions; moreover, the content of an action itself remains. As a result, it is a play, where a child can learn a wider scope of reality directly inaccessible to him" (Leont'ev 2000, 475). It is this case for a play to become symbolic.

When analyzing a play process, A. N. Leont'ev paid attention to the method of carrying out the play operations. While considering an example of Vygotsky with a game of a child playing at horses, he wrote: "A stick comes into a game as a thing having its own meaning; a child uses it like a stick, but not like a horse. A stick has no symbolic meaning here. However, something changes: a stick acts in a game in a different way as opposed to the practical operation. This change can be explained as follows. A stick acquires not new symbolic functions, new meanings, but a certain personal sense for a child. This specific sense, a meaning for a subject is generated by peculiar motivation. The concrete motive corresponding to concrete need is both affective and affectogenic. An action with the play object reflects a concrete need and, therefore, I lay special emphasize on it, it acquires both known affective content, affective-subjective sense and subordinates the object meaning of the play object. A stick acts in the specific role, which is more instructive than a role of just a symbol or a second, temporal meaning" (Leont'ev 2000, 300–301).

We cited this extract from expression of Leont'ev as to our opinion it reveals the complex nature of the transformations of situation happening in space of a symbol sufficiently complete. From our viewpoint, the symbolic reflection, which develops during play, is represented here with all distinctiveness. Firstly, Leont'ev points at the concrete need satisfied in the play action. It seems that a child wants to ride a horse rather than a stick. But there is no horse actually. In other words, there is some motivational-need tension caused by the clear situation of uncertainty (a child has no horse at hand in reality). As a result the substitution of a horse with a stick happens. It is not a simple substitution, but also the reference of actions with a stick to a horse, i.e., the objectivation of a need in a stick. As a consequence, a new motive to play at horses occurs. This motive satisfies a need and generates a new sense: to ride a stick so as it is a horse. The sense, in its turn, structures the whole conditional game situation and determines the nature of a child's play actions.

We believe that the function of substituent in the play activity is transferred to something that is substituted, which results to that something that is substituted becomes clearer. Certainly, it is a peculiar, some kind of the primary means to comprehend reality. But due to the processes of symbolic mediation, it allows children building a model of relations of adults being studied, objectivating needs and displaying activity, though in naive form.

Since after the fundamental studies of Zaporozhets, Leont'ev, Usova, and Elkonin a play became to be considered as a leading activity, the development of the children's play activity was included into all preschool education programs in Russia as one of the major teachers' areas of work.

The development of play activity in the most widespread program in the Russian Federation "From Birth to School" (edited by Veraksa et al. 2010) begins at the age of 2. A teacher supports a child's interest in the play activity and forms skills to do several actions with one object, to transfer the known actions from one object to another and to use the object substituents. It should be specially noted that an object substituent fulfills a sign-symbolic function allowing representing an absent object. The symbolic function of an object substituent was noted by the majority of authors. Elkonin associated the possibility to substitute one object by another in a game, their renaming with an action: "The available data allows supposing that the renaming of objects by children is limited with those, which, by their properties, allow carrying out actions required by new names" (Elkonin 1989, 343).

The substitution development line remains in the educational work with children at the age of 4. Moreover, the participation of children in the joint games is encouraged. A teacher helps children to organize the game unions in pairs or by three based on the children's sympathies. The plots of children's games are based on the topics of day-to-day life and on the content of understandable literary works.

At the age of 5 the symbolization is supported through the development of ability to choose objects and attributes for the games. A teacher makes the process of distribution of roles and fulfillment of play activity in compliance with the rules and game concept more active. The interest of preschoolers in theatrical performances is supported. For this purpose children are involved into the process of playing simple performances based on the known literary works. Children create the expressive images using the means of expression (intonation, facial expression, gestures).

The play activity development at the age of 6 and 7 is associated with improvement and expansion of game concepts and skills of children. Demonstration of creative work, composing of new topics for the games, new roles, and new attributes, is encouraged. The special part in the teacher's work is assigned to formation of abilities in preschoolers to organize the joint play activity, to promote creation of the game unions of children. In theatrical games children master different roles presupposing the change of the child's role behavior.

In the "Development" program created under the guidance of L. A. Venger and O. M. Diachenko (1996), the play activity development is carried out during the preschool age for the period from the age of 3 to the age of 7. The creation of imaginary situation and ability to interact with the partner is of importance for children at the age of 4. For this purpose a child masters the conditioned object activity ("make-believe" actions) with the help of a teacher. Also a child is taught to take up the simplest roles and to interact in pairs with the partner, such as doctor-patient and driver-passenger. The object substituents (e.g., stick thermometer) are used for the development of conditioned play actions. The main task of a teacher in interaction with children at the age of 5 is to develop more complicated game interaction of preschoolers: to increase a number of children playing sociodramatic games, thus, a number of roles; to reveal the possibilities to children for changing the role behavior during the game; and to explain the necessity to agree roles during the game. The plots with numerous characters are used for that reason. The special attention is paid to the role dialog. When working with children at the age of 6, the main task of a

teacher is to develop flexible role behavior. The major direction for the play activity development is connected with the use of new roles in the plots known to children. For instance, in the "ship journey" game learned by children with the usual set of roles, captain, seamen, and passengers, there is a new conceptual character to be introduced, namely, Barmaley, a sea robber. In such a case the loosening of learnt schemes of preschoolers' game behavior occurs. Another direction of the game flexibility development is associated with invention of plots carried out orally only. A teacher offers any fairy-tale plot known to a child and discusses the possibilities for changing actions of characters under new conditions while it unfolds. The work with children at the age of 7 is aimed at the development of initiative and independency of preschoolers when realizing game concepts. The main task of a teacher is associated with the development of children's imagination. For this purpose children are offered to create various plots. The combination of characters from different conceptual spaces, Buratino and a spaceman, Baba-Yaga and a seller, etc., can be used as a way to unfold a new plot.

19.2 Development of Drawing Activity

According to the program "From Birth to School," a teacher begins to work on mastering necessary drawing skills (use of a pencil and a brush) with children at the age of 3. Children are motivated to depict known objects by offering them to outline objects. The work on improvement of drawing skills continues at the age of 4. Children are offered to draw simple objects: ribbons, roads, a fence, and a headscarf. Children are incited to convey a beauty of the world around in their pictures (a sky, varicolored leaves, falling snowflakes, etc.). At the end of the year, children draw certain objects and simple plots using necessary colors. At the age of 5 children draw objects by means of creation of distinctive forms and selection of color, convey easy plots, and use expressive means. At the age of 6 the children create pictures of objects from life and out of imagination using different compositional solutions. They use different colors and tints to achieve expressiveness of figurative images.

By the end of preschool age, children can create individual and collective pictures, decorative objects and narrative compositions on the topics concerning life, and literary works using different materials and methods of creating pictures.

According to the program "Development," the drawing activity is carried out during the whole preschool age, starting from the age of 3 (Venger and Diachenko 1996). One of the tasks set for children is aimed at mastering a combination of object representation and sheet coloring. When working with color, the stress is laid on its symbols. When working with an object graphic image, the task to master concrete drawing methods is not set. During drawing activity, children are incited to convey emotional state.

The object side of drawing activity is being developed and the composition plan tasks are set before children at the age of 5. A teacher introduces a preschooler to

the elements of image generation. At the same time, this work is organized so that not to prevent from the creative process of expressive image generation.

The task associated with transferring different human-world relationships in image is set for the children at the age of 6. This task is solved in the process of generating an expressive object-image composition. Children reflect pair relationships: human-object, human-animal, animal-animal, human-human, and I and world around me. The compositional tasks are solved, firstly, by virtue of the graphical image generation and then by its color score.

Children at the age of 7, who mastered the use of compositional and pictorial means of transferring relationships and personal mental outlook, solve more complex figurative tasks connected with the expressive image generation. An idea, which is put into the plot with further sketch elaboration searching for compositional and color score, is of particular importance. During the graphical image generation, the detailed elaboration of an idea is carried out; the image concept structure is defined more exactly; the symbolic content of a work enriches itself. The plot acts as a main structure element of children's literary works. The topics for plots can be chosen from the folklore (e.g., fairy tales where there is an opposition of good and evil).

19.3 Speech Development

An important social adaptation instrument is, according to Piaget, language, which is not invented by a child, but passed on to him as ready to use, compulsory and collectively.

The child's speech development in the preschool early childhood education system was singled out as a separate significant direction of the teacher's activity. In the Institute of Preschool Education of USSR (now Institute of Psychological and Pedagogical Problems of Childhood of Russian Academy of Education), there was a special laboratory of speech development in early childhood. F. A. Sokhin, its director, elaborated a theory of language acquisition in the preschool age. He showed that even without special training, starting from the very early childhood, children show huge interest in language reality, they "experiment" with words and create new words being guided by both sense and grammatical side of a language. Sokhin attributed the preschoolers' speech development to the consciousness of language phenomena, i.e., with the development of their metalinguistic activity (Sokhin 2002). He showed experimentally that the spontaneous immersion in speech environment does not guarantee the high level of language consciousness. In order to achieve it, one shall conduct special training. Firstly, the tasks of such training consist in formation of language generalization and consciousness of language phenomena. The interest in native language and speech creative work is based on that. The main strategy in the teacher's work on mastering language in preschool childhood early childhood shall consist in establishment of connection between

consciousness and child's speech functions as well as in formation of speech abilities and skills.

These provisions, advanced and substantiated by Sokhin, served as a benchmark for elaboration of detailed program for the speech development in early childhood executed under the guidance of O. S. Ushakova (2002). The program goal was the development of speech ability intending to master norms of language and speech. The development of speech abilities and skills in the field of phonetics, vocabulary, grammar, dialog, and monolog acts as its content. At the same time the different verbal, visual, and gaming methods and techniques were used at the group and individual classes. The classes were aimed at acquisition of knowledge of language and speech, including speech terms and concepts of the basics of linguistics. According to the program, the ability in four different types of speech activity (speaking, listening, writing, and reading) was developed in children. The teacher's work included the formation of ability to create and to apprehend texts as a result of speech activity.

The preschoolers practiced in resolving the following speech tasks:

To express the given sense by different means (ability to paraphrasing)
To extract the meaning from what was said and at the same time to differentiate expressions, which are outwardly similar but different by meaning (differentiation of homonymy) as well as to find the general meaning in the outwardly different expressions (proficiency in synonymy)
To differentiate the right sentences from the wrong linguistically
To choose among the thought expression means variety that, which corresponds to situation of communication mostly and which expresses personal characteristics of its participants to the fullest extent possible (selective ability)

In other words, the program is aimed at mastering all types of speech activity and basics of the spoken language culture, abilities to use language in communication situations, i.e., at the linguistic competence development. The linguistic competence came to be understood as a totality of speech abilities and skills developed in a child and allowing her to understand and to build new expressions according to speech situation and within the system of rules adopted in this very language for expression of thoughts. The linguistic competence development is closely related to the "speech culture" term (proficiency in the literary standards and ability to use them according to goals and speech situation) and also to the emotional sphere (ability to empathize, to understand your own feelings and the feelings of another person).

19.4 Mathematics Development

Highly appreciating the Piaget's studies on the symbolic function development, G. Vergnaud points to "the defects of Piaget's approach preventing from studying a problem of transfer and obtaining knowledge at school. One of them is absence of

analysis of learning the customary social instruments of representing terms (schemes, diagrams, drawings, pictures, and algebraic formulas), with the help of which a teacher tries to impart knowledge to pupils (including analysis, definitions and conclusions) worked out in a culture. Piaget pays considerable attention to the child's pictures, but this picture is rather treated as a product of a child's thought generation, while it is necessary to see mastering the means of representation and social communication by a child in it. It is also true towards an attitude to speech (language): absolutely accepting a Piaget's view point, according to which it is an action, but not a thing that is the most determinant factor in the operative thinking formation, it should be noted that there are a lot of action tasks laid and mediated in a speech. In such a way, if the study of something that is denoted is mostly important and it shall be carried out by observing an active behaviour of a subject in situation, than it is impossible to ignore the study of things that are denoted, particularly, social things, which denote and by means of which the things, which are denoted, are symbolized in communication and in the school communication in particular, which Piaget didn't pay attention to" (Vergnaud 1981, p. 9).

Despite the significant theoretical studies, this problem continues to remain open in many respects. The comprehension of sign-symbolic systems is acquired earlier than producing. The regularities of mastering the sign-symbolic systems are specific for each of them and are caused both by means of learning and functioning as well as by their semiotic characteristics. There is a conflicting material in literature regarding easiness-hardness of mastering signs and schemes by children. A.K. Zvonkin, when teaching math to preschoolers, has fixed great difficulties in using signs by them: "An idea of "signs" turned out to be extremely alien to children" (Zvonkin 1990, 97). N. Picard, in her fundamental study (Picard 1976) of process and results of realizing her basic math course, where the main means of learning the complex material by children was the use of symbols and work with different types of schemes ("tree," Venn-Euler diagrams, tables, different types of graphs), has discovered difficulties in using only some schemes (first of all, Euler diagrams when using it for the class intersection tasks). In principle, to her opinion, a schematization is a first stage of mathematization, which leads to preparation for learning math language. An analysis of children difficulties upon studying math shows that one of the reasons is a low level of symbolic development. The sign-symbolic preliminary instruction is presented in the early childhood programs in different ways, what influences the child's mental development and her further successfulness.

To prepare children for school and, above all, to the study of mathematics, a special preschool program mathematics was elaborated (Salmina and Tarasov 2000). The program is based on the assumption that the development of the symbolic function is its center line, because, on the one hand, mathematics and other subjects commonly use symbolic means (numbers, letters, symbols relationships, diagrams, tables, etc.) and learning difficulties of mathematics and other knowledge is often caused by a low level of development of the symbolic function as a whole. On the other hand, to operate with symbolic tools, you need to master the specific actions and systems of signs and symbols.

Despite the selection of the symbolic function as an independent unit, its formation is carried out in all the blocks of the program. The system of tasks associated with the creation of signs and symbols, and operation with them, was presented in all subsequent topics. Main feature of the tasks of the program is that they are all represented by drawings, signs, and symbols, with very little use of the verbal text. Drawings are used not for illustrative function, and they are the material for the formulation of the task, the implementation of children's activities (analysis, decoding, etc.), presenting the results of actions, i.e., symbols and signs are used for different functions. Presentation of tasks in symbols and signs on the material of all kinds of pictures, charts, and tables, using the same notations, makes the task clear for everyone, including children, poor in reading or not reading at all. In addition, the visualization allows to individualize the pace of the child tasks, which is especially important in the early stages of learning. The program uses symbolism created by children, with a gradual transition to a socially accepted symbolism. An important thing is that signs and symbols are included in work for the solution of practical problems (they are used for the solving of mathematical tasks, language tasks, arts acquaintance, etc.).

The main skills introduced in the program that are necessary for mathematical concepts are one-to-one correlation, the effect of the measurement using a label for the recording of the results of measurement and comparison, and relations being "more-less" and "equal, not equal" equalization of units. The process of mastering the course content is based on a psychological theory of gradual formation of mental actions (Galperin 1976), according to which the assimilation of new knowledge must begin with the operations with real objects, or their substitutes, and their subsequent transfer by means of signs and symbols in mental plan. For the organization of real objects, operation toys and real objects (buttons, beads, dolls, sticks, geometric shapes, and other objects that differ in shape, color, and size) are used (Salmina and Sokhina 1975; Salmina and Forero Navas 1994). Plot drawings and geometric shapes are introduced gradually. Attention is directed toward working out of a child's speech: group work with the sounded planning, pronunciation, and discussion of their own activities is used.

In accordance with the theory of the gradual formation of mental actions, learning is constructed in such a way that the finished solution approaches are not given; they are elaborated in a joint activity with an adult. The decision stands out as method that is applied to different situations and tasks. In each block of the program, children build and create not only methods to address the tasks but also the means (tables, diagrams, classifications, etc.). The consequence of all this is that the children do not memorize, but master necessary knowledge and skills during activities with real objects, diagrams, and symbols.

References

Elkonin, D. B. (1989). *Izbrannye psikhologicheskiye trudy [Selected works in psychology]*. Moscow: Pedagogika.

Galperin, P. Y. (1976). *Vvedeniye v psikhologiyu [Introduction in psychology]*. Moscow: MSU.

Leont'ev, A. N. (2000). *Lekcii po obshchey psykhologii [The lectures of general psychology]*. Moscow: Smisl.

Piaget, J. (1976). *Izbranniye psyknhologicheskie trudy. Psykhologiya intellecta. Genesis chisla u rebenka. Logika i psykhologiya [Selected psychological works. The genesis of numeric in childhood. Logic and psychology]*. Moscow: Pedagogika.

Picard, N. (1976). *Agir pour abstraire. Apprentissage des mathématiques et conquête et l'autonomie*.

Salmina, N. G., & Forero Navas, I. (1994). *Matematika. Uchebnik dlya detey 6–7-letnego vozrasta. Metodicheskoye posobiye dlya uchitelya [Mathematics. Textbook for children at 6–7 years old. Tutorial for teachers]*. Moscow: Didakt.

Salmina, N. G., & Sokhina, V. P. (1975). *Obucheniye matematike v nachal'noy shkole (na osnove eksperimental'noy programmy) [Learning mathematics in school (based on experimental program)]*. In P. Y. Galperin (ed.), Moscow: Pedagogika.

Salmina, N. G., & Tarasov, B. A. (2000). *Matematika. Programmy obshtobrazovatel'nykh uchrezhdeniy. Nachal'naya shkola (1–4), v 2 chastyakh, chast' 1 [Mathematics. Educational program. Primary school (1–4), in 2 parts, part 1]*. Moscow: Prosveshenie.

Sokhin, F. A. (2002). *Psikhologo-pedagogicheskiye osnovy razvitiya rechi doshkol'nikov: nauchno-metodicheskoye posobie [Psychological and pedagogical basis of speech development in preschool age: tutorial]*. Moscow: MPSI.

Ushakova, O. S. (2002). *Programma razvitiya rechi detey doshkol'nogo vozrasta v detskom sadu [Educational program of speech development in kindergarten]*. Moscow: RAO.

Venger, L. A., & Diachenko, O. M. (1996). *Obsheobrazovatelnaya programma "Razvitie" [Educational program "Razvitie"]*. Moscow: Gnom i D.

Veraksa, N. E., Komarova, T. S., & Vasilyeva, M. A. (Eds.). (2010). *Ot rozhdeniya do shkoly. Osnoovnaya obsheobrazovatelinaya programma doshkol'nogo obrazovaniya [From birth to school. The main educational program in preschoolage]*. Moscow: Mozaika-sintez.

Vergnaud, G. (1981). Jean Piaget, quels enseignements pour la didactique? *Revue Française de Pédagogie, 57*, 7–14.

Vygotsky, L. S. (1967). *Voobrazheniye I tvorchestvo v detskom vozraste [Imagination and creativity in childhood]*. Moscow: Prosvescheniye.

Vygotsky, L. S. (1983). *Sobranie sochineniy: v 6-ti t. T.3. Problemy razvitiya psikhiki [Collection of thesises. Vol 3. The problems of psyche's development]*. Moscow: Pedagogika.

Zaporozhets, A. V. (1986). *Izbrannye psikhologicheskiye trudy [Selected works in psychology]*. Moscow.

Zvonkin, A.K. (1990). Abstraktciya s yazykovoi podderzhkoy [Abstraction with support of language]. *Yazyk i stuktura znaniya [Language and structure of knowledge]*. Moscow, p. 86–95.

Chapter 20
Preschool Education in Ukraine

Roman Shyyan, Igor Shiyan, and Natalia Sofiy

Abstract The system of preschool education in Ukraine is described in the chapter: the legislation and policy, issue of coverage, the content of the preschool education, and some modern trends of development in Ukrainian preschool education are discussed.

According to Ukrainian legislation, preschool education is the primary stage of the whole structure of education system, while attendance to any preschool establishment of any jurisdiction, type, and ownership for children under 5 is not defined as obligatory and is granted to children at the parents' (or substitute persons) decision.

The content of the preschool education is regulated by three fundamental documents: State Law on Preschool Education of Ukraine, basic component of preschool education, and basic program of preschool education.

The basic component represents a certain compromise between acknowledgment of the necessity of following modern concepts of the quality of preschool education and traditional ways of work with preschool children.

Updating the content of education is gradually emerging in the traditional approaches. Since the mid-1990s, a significant impact on the system was provided by the programs of international organization "Step by Step." The other project "Learning to think" is implementing in Lviv and designed on the basis of Lev Vygotsky's doctrine.

Keywords Preschool education • Preschool education institution • Quality of education • Child development

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20.1 Legislation and Policy

Preschool education[1] has been recently declared as one of the highest priorities of Ukrainian educational policy.

According to Ukrainian legislation, preschool education is the primary stage of the whole structure of education system, while attendance to any preschool establishment of any jurisdiction, type, and ownership for children under 5 is not defined as obligatory and is granted to children at the parents' (or substitute persons) decision.

The Law on Education[2], (1991) states:

Article 33. Preschool Education

Preschool education and training shall be carried out in a family and preschool institutions in cooperation with a family and shall be intended to ensure physical and psychological health of children, their comprehensive development, obtaining life experience, and acquisition of abilities and skills necessary for their further education.

Article 34. Preschool Educational Institutions

1. Preschool educational institutions shall include nurseries, kindergartens, nursery schools, family, promenade, preschool institutions of compensative (for children who require correction of physical and mental development) and combined types with a short-term, day, and full day stay of children, as well as kindergartens of a boarding school type, children's houses, and others.
2. Admission of children to preschool institutions shall be made according to the wish of parents or persons substituting them[3].

The Law on Preschool Education of 2001[4] defined preschool education as an obligatory primary component of the system of continuous education and listed three options to fulfill that obligation: family, institutions, and individuals. And only in 2010 amendment regarding an obligation to attend to preschool institution was adopted[5]. All Ukrainian citizens have the right to receive preschool education in preschool educational institutions as well as in the family or with proper individuals. The law describes preschool education as a wholistic process that should provide children with comprehensive development in accordance with their inclinations

[1] Doshkilna osvita (дошкільна освіта) is the term related to the system of education of children of age 3–7 which corresponds to "early childhood."

[2] The Law on Education of Ukraine http://planipolis.iiep.unesco.org/upload/Ukraine/Ukraine_Education_law.pdf

[3] The Law on Education of Ukraine http://planipolis.iiep.unesco.org/upload/Ukraine/Ukraine_Education_law.pdf

[4] The Law on Preschool Education in Ukraine. http://zakon4.rada.gov.ua/laws/show/2628-14

[5] The Law of Ukraine On Amendments to Legislative Acts on secondary and preschool education on the organization of the educational process http://zakon4.rada.gov.ua/laws/show/2442-17

and their individual, intellectual, and physical capabilities and cultural needs. According to the law, preschool educational institutions should ensure the physical, intellectual, and spiritual development of children and their social adaptation and readiness to continue their education. Preschool-age children include infants and junior, middle, and senior preschoolers.

The issue of state guarantee for accessibility of preschool education is controversial. The Constitutional Court finds[6] that “the provision of accessibility and gratuitousness of preschool education is assigned to the state only to the extent related to educational institutions of state and municipal ownership forms (Article 53.3 of the Constitution). In accordance with Article 3.2 of the Law ‘On the preschool education’ the state only renders assistance to the development and preservation of the preschool educational institution networks of other forms of ownership.”[7] In terms of “ensuring by the state of the opportunity to exercise the right of individuals for education,”[8] it means that preconditions for unequal opportunities for children in their preparations in their preparations for school exist.

As it is emphasized in a recent National Human Development Report[9], nonattendance of preschool education institutions (PSEIs) or any reason or attendance of an overcrowded PSEI limits a child’s important starting opportunities. Education of preschool-age (5 years old) children not in family, which became obligatory from 2010, is especially important to ensure an equal start in school. In the light of the shortage of places in PSEIs, general secondary educational institutions provide education to children of preschool age through special groups. In some instances, children visit traditional PSEIs temporarily (for a few hours). Almost 40 % of childcare institutions are located in modified and adapted buildings and therefore do not have the necessary infrastructure. Private or privileged institutions as well as third option mentioned in the Law on Preschool Education – proper “physical persons” – remain unaffordable for the majority of families.

A central place in the curriculum of preschool education is occupied by activities aiming at developing children’s moral qualities and aesthetic tastes and strengthening of their health. With older children more attention is paid to the development of their abilities, memory, thinking and language skills, etc.

A variety of preschool institution types is listed as nurseries, nursery-kindergartens, kindergartens, and school-kindergartens (the latter mainly in rural areas). Other institutions providing preschool education include orphanages, nursery-kindergartens of compensating type, kindergartens of a boarding-school type, nursery of a family type, child development centers, and orphanages of family type. Preschool educational institutions must be licensed. The average workload for children is 15 lessons per week (each lesson lasting 30 min).

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[6] Summary to the Decision No. 5-rp/2004 of the Constitutional Court of Ukraine as of March 4, 2004 http://www.ccu.gov.ua/doccatalog/document?id=12373

[7] Summary to the Decision No. 5-rp/2004 of the Constitutional Court of Ukraine as of March 4, 2004 http://www.ccu.gov.ua/doccatalog/document?id=12373

[8] ibid

[9] National Human Development Report – Ukraine: Towards Social Inclusion http://www.undp.org.ua/files/en_95644NHDR_2011_eng.pdf

20.2 Issue of Coverage

Coverage of relevant age children with preschool education[10] during the last decade of the twentieth century decreased in more than 2.5 times (from 2,428,000 in 1990 to 968,000 in 2001). Thus in 2001 the lowest level of coverage was reached. It was the only a year with less than a million children involved into preschool system. Subsequently, till 2004 the bottom line was reached for PSEI network, which was cut by 39.2 % (14,900 entities vs. 24,500 in 1990). A number of available places during the same time decreased from 2,277,000 to 1,040,000. In 2001, only 90 out of every 100 places available in the nation's preschools were filled, showing a reverse tendency compared to a ratio of 107:100 recorded in 1990. This ratio had dropped to 76:100 in 1995 and was about 70:100 in 1996–1998, while the number of children per teacher remains close to 1990 levels – 8:1 vs. 9:1. This implies that the actual teaching load has been reduced. In 2003, the number of children in preschool showed growth for the first time in 2 years. Enrollments rose by 5,000, pushing the proportion of such children up by 4 % and making it now 45 % of all children in that age group.

Decreased enrollment rates in preschool programs in Ukraine are mainly related to the consequences of the socioeconomic crisis in the 1990s, lower birth rates, and, as a result, a sharp decline in the network of PSEIs (Millenium Development Goals. Ukraine – 2010. National Report. Kyiv, 2010[11]).

The reduction of the network of preschool educational entities was caused by birthrate decreasing naturally followed by decreasing preschool-age children population. It was complemented with the abovementioned negative dynamics for coverage of children from relevant age group. Experts explain this tendency by several interrelated socioeconomic factors, such as the fall of production leading to transfer of preschool establishments to subordination of local self-governance authorities, which were not able to ensure their sufficient funding; general lack of budget resources for education reflected also at preschool level; low income of many families not allowing them to pay preschool fees; and high youth unemployment rate, particularly among women, not encouraging young families to send their children to preschool establishments. Another factor that encouraged parents to keep children at home was the Law on Public Assistance to Families with Children adopted in 1992, according to which financial support equal to the legally defined monthly living minimum for childcare was provided for families with limited incomes (but only until the child was 3).

The Multiple Indicators Cluster Survey 2005[12] found that 58 % of the children aged 36–47 months were attending early childhood education, and in the case of the

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[10] Percentage of preschool children is calculated as the ratio of the number of children in preschool to the total number of children of appropriate age at the beginning of the year following the reporting one.

[11] Millennium development goals. Ukraine – 2010. National report. http://www.undp.org.ua/files/en_5521MilleniumDevelopmentGoalsReport2010.pdf

[12] Multiple Indicators Cluster Survey 2005. http://www.childinfo.org/mics3_surveys.html

children aged 48–59 months, the percentage was 67.2 %. About 65 % of the 6-year-olds attending the first stage of primary education had attended a preschool program the previous year.

The increase of children's involvement in preschool education in recent years is the result of the introduction of different forms of preschool education provision, such as full-time or part-time groups, multi-aged groups, play groups, consulting groups, compensative groups (specialized and sanatoria based), social rehabilitation groups, and development groups and centers at preschool educational establishments.

According to the Ministry of Education and Science in 2008, some 8,700 preschools were in rural areas, enrolling about 221,000 children. According to the State Statistics Committee, by the end of 2009, there were about 15,500 preschool education institutions (6,700 in urban areas and 8,800 in rural areas), of which some 1,100 were not in operation. The total enrollment was about 1,214,000 children (of whom 307,000 children in rural areas), representing 56 % of the children in the corresponding age group (68 % in urban areas and 33 % in rural areas) (State Statistics Committee 2010).

The Ministry of Economy reports that in 2008 the net enrollment ratio at the preschool level (children aged 3–5) was 88 % in urban areas and 47.6 % in rural areas. Overall, in 2008 there were 15,400 preschool institutions in the country (of which 1,200 were not operational) with some 1,195,000 children enrolled, representing 57 % of the children in the corresponding age group. (Ministry of Economy 2010)[13].

In the 1990s, almost 40 % of state-funded PSEIs were closed down, a significant number of them in rural areas, owing to the collapse of collective and state farms that funded those bodies before. As a result, 44 % of school-age children, including 33 % of children in rural areas, did not attend PSEIs in 2010. At the same time, in some rural regions, PSEIs are half empty. A number of factors contribute to such low enrollment rates: aging of the rural population, excessively high costs for rural inhabitants of placing a child in a PSEI, and traditions of bringing up children at home before they attend school. However, a significant share of children from rural areas cannot even attend these institutions as they do not exist – 71 % of villages with school-age children have no PSEI. In urban areas, there is a shortage of childcare places, from 113 in 1990 to 123 children per 100 spots in 2010.

To get a more objective appraisal of the preschool situation, it makes sense to study 3-, 4-, and 5-year-old children enrolled in preschools but the state statistics agency does not operate with this kind of data.

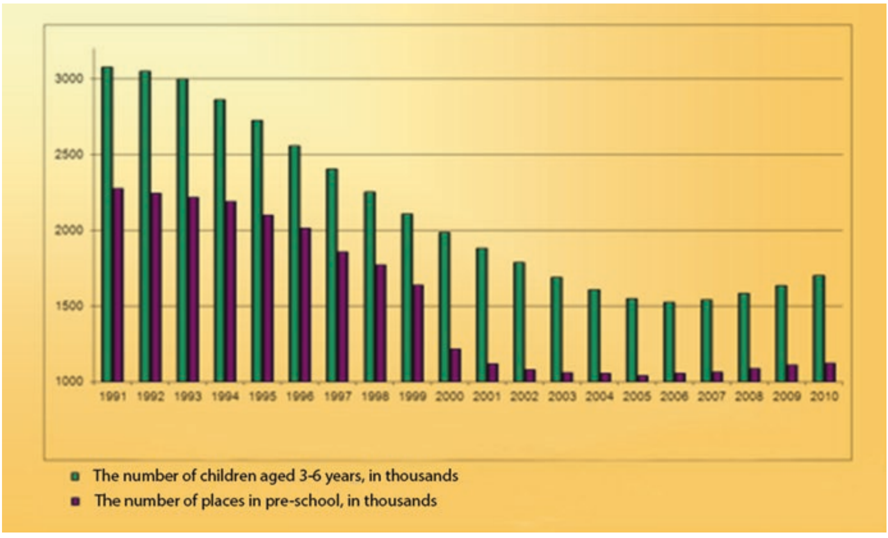
Millennium Development Goals (MDG) working group decided to change indicators for monitoring progress on the goals relevant to preschool enrollment measures. Indicators for monitoring progress on the goal's achievement, set up in 2003, inadequately reflect the situation in the education sector. Therefore, the matrix of indicators needs to be updated to take into account recent reforms in the educational

[13] Compiled by UNESCO-IBE (http://www.ibe.unesco.org/) World Data on Education, 7th edition, 2010/11

system. In particular, the net enrollment rate of children aged three to four in PSEIs and that of those aged five in PEIs should be combined but urban and rural data are separated: indicator 2.1 Net enrollment rate for children aged 3–5 in urban area and indicator 2.2 Net enrollment rate in rural area (see table below).

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2015
Indicator	1.2 (urban)	79.5	82.6	85.8	86.9	87.2	87.3	88.0	86.5	87.5	87.6	95
	2.2 (rural)	27.5	29.9	33.2	38.0	41.7	44.9	47.6	47.8	49.7	53.2	60

20.3 Availability of Preschool Education



The lack of available places in PSEIs and an absence of PSEIs altogether appear to be the most serious problems in some settlements. In response, some alternative solutions, such as short stay groups for children, weekend groups, family groups, child development centers, etc. have been implemented. In several regions of Ukraine, social and pedagogical patronage has been established.

However, the introduction of various forms of enrollment for children in preschool education (short stay groups for children, weekend groups, family groups, child development centers, etc.) remains a critical issue.

Problems of equal opportunities for all to access quality education, starting from preschool education, remain crucial. Quality of education is limited by problems of

staff, by retraining and teachers' skills, as well as by material, technical, scientific, and methodological issues in terms of providing education. Access to preschool education is problematic in big cities and in rural areas, whereas access to quality secondary education causes problems primarily in remote rural areas.

According to NHDR Conclusions[14], to further develop the preschool education system, it is important to ensure that the network of PSEIs is optimal and balanced enough to respond to the population's needs and demographic situation. In this direction, it is necessary to:

1. Increase the number of places within the PSEIs of communal property according to need and transfer ministerial PSEIs and those financed by collective agricultural enterprises to communal property
2. Develop the network of PSEIs of compensating and combined types owing to an increase in child morbidity and continue the development of child development centers
3. Strengthen scientific and methodological support to preschool education, update its standards, and introduce on wide scale a new generation of preschool education programs
4. Enhance functions of preschool institutions by introducing socio-pedagogical patronage by families who raise children of preschool age, including those with psychological impairments who, for different reasons, do not attend preschool institutions
5. Support the establishment of educational associations of "preschool institutions" – schools

	Number of entities, in thousands	Number of places in entities, in thousands	Number of children in entities, in thousands	Coverage of children by institutions, percent by number of children of appropriate age
1990	24.5	2277	2428	57
1991	24.4	2243	2268	55
1992	23.8	2216	2063	51
1993	23.2	2189	1918	49
1994	22.3	2101	1736	47
1995	21.4	2014	1536	44
1996	20.2	1856	1342	41
1997	18.4	1770	1172	38
1998	17.6	1638	1103	38
1999	17.2	1216	1055	39
2000	16.3	1117	983	40
2001	15.7	1077	968	41
2002	15.3	1060	973	48

[14] National Human Development Report – Ukraine: Towards Social Inclusion http://www.undp.org.ua/files/en_95644NHDR_2011_eng.pdf.

	Number of entities, in thousands	Number of places in entities, in thousands	Number of children in entities, in thousands	Coverage of children by institutions, percent by number of children of appropriate age
2003	15.0	1053	977	49
2004	14.9	1040	996	50
2005	15.1	1056	1032	51
2006	15.1	1063	1081	53
2007	15.3	1084	1137	54
2008	15.4	1110	1195	54
2009	15.5	1121	1214	53
2010	15.6	1136	1273	53
2011	16.1	1171	1354	57
2012	16.4	1204	1428	59

20.4 The content of the preschool education in Ukraine

In accordance with the State Law on Preschool Education of Ukraine[15], the state standard called the basic component of preschool education has been established. The basic component determines state requirements as below:

To the level of development and social training of the preschool children.
To the conditions allowing those requirements to be met.
Basic program of preschool education should be designed with regard to this basic component.
Content-related analysis of the relation of those three fundamental documents (State Law on Preschool Education of Ukraine, basic component of preschool education, and basic program of preschool education) helps one to discover main tendencies of current preschool education in Ukraine and evaluate possible route of its development.

The abovementioned law presents the requirements to the general content of preschool education:

- Formation of the basis of social adaptation and life competence of a child
- Development of the elements of nature-aligned vision and positive emotional and axiological relation to the environment and the world in general
- Establishment of emotional and value-conscious attitude to the practical and spiritual activity
- Formation of the necessity of realization of his/her creative abilities

[15] The Law on Preschool Education in Ukraine. http://zakon4.rada.gov.ua/laws/show/2628-14

Such a statement of expected results of preschool education definitely reflects European trends existing in Ukrainian preschool professional community, the focus on positive experience of the childhood, acquirement of life competences, and development of creativity.

These requirements should be implemented in the framework of the state standard (i.e., basic component) and therefore, in the basic program of preschool education.

Let us look at the documents more closely.

There are seven main lines defined by the basic component:

Personality of a child
An individual in the society
The child in the natural environment
The child in the world of culture
The play of a child
The child in the sensorial and cognitive space
Speech of a child

Firstly, we should mention the preamble of the document naming expected educational results in the competence aspect.

Educational line called “Personality of a child” contemplates formation of positive self-concept, development of arbitrariness, independency, and responsibility by the end of preschool age.

The content of the line “A child in the society” is focused on the development of ability to orientate in the world of human relations, formation of the interest to understanding of other people, joined activity with peers and adults and development of relevant skills, as well as on correct evaluation of his/her own abilities, on respect to wishes and interests of other children.

In the part devoted to “A child in the natural environment,” one finds guidelines concerning emotional and axiological and responsible ecological attitude to nature.

Educational line named “A child in the world of culture” presupposes formation of aesthetical perception, acquirement of various objective and creative activity, positive motivation for achievements, development of the interest in products and process of artistic and practical activity, and formation of the culture of consumption.

The line called “Play of a child” is devoted to development of artistic capabilities, leadership, initiative, and independence. This educational line is meant to provide meeting of playing preferences and bring along friendly relations, partnership, and exchange of thoughts and also promote child’s improvization.

The goal of the line “A child in sensorial and cognitive space” is formation of representations, concepts, and models reflecting features, characteristics, and relations of different objects of the external world, as well as the ability to implement those models in activities. It is supposed that this formation results in development of thinking, research skills, elementary mathematical concepts, and competent behavior in everyday life.

The "Child's speech" is dedicated to acquirement of the culture of communicative speech and the rules of usage of language in different situations. Here the speech is regarded as a mean of cognitive development.

Each educational line included in the basic component will lead to generalized result of educational work, the document says, – which means formation of certain type of competence.

We do not consider the lines described above to be sequent and equal. They are divided in two groups: the first four lines are connected to different substantive areas of a child's development, and the last three are more about development of ways of acting providing the child with the opportunity to acquire those areas and formation of the competences mentioned there. Moreover, the most complicated line called "A child in the sensorial cognitive space" is simplified, above all, in the very name of the course.

Probably, those two aspects are the reasons why one can see domination of "formation of representations" over "formation of means" and "development of competences" in more detailed description. The following formulations are used mostly in order to describe performance of preschool education: "realizes," "wields the representations," "understands," "knows," and "distinguishes." On the one hand, competence-based results are defined for every area, but on another hand, the means and ways of their formation are not stated in supposed content of each educational line. For instance, it is not clear how the "sensorial cognitive competence" appears on the basis of acquirement of sensorial models and on which content cognitive competence should be grounded.

From our point of view, the basic component of preschool education represents a certain compromise between acknowledgment of the necessity of following modern concepts of the quality of preschool education for the professional community and traditional practical content and ways of work with preschool children, established long ago. We regard the variative part of the component as a compromise, too. This part proposes four additional educational lines which are IT skills, foreign languages, choreography, and chess.

This compromise results in "Confident start,"[16] the basic program of preschool education. This program consists of seven parts devoted to physical, cognitive, artistic, and aesthetical development and the development of speech as well as to play and labor activity. The program is almost totally focused on formation of knowledge, abilities, and skills in different areas. The only partial exception is the part describing the play motivating parents and teachers to promote development of play activity. The authors of the program prefer description of traditional kinds of activity implemented in kindergartens to conceptual design of the mechanisms of child development and ways of interaction of children and adults.

This basic program mostly preserves traditional ideas on the performance in preschool education instead of becoming a tool of its development. The moving force of such a development can be represented by alternative, partial, and

[16] Confident start. The basic program of preschool education in Ukraine. http://old.mon.gov.ua/images/files/doshkilna-cerednya/doshkilna/progr_rozv/1.pdf

experimental programs[17], designed on the basis of stable conceptual ground and with the view of modern understanding of development, opportunities of the preschool age, and performance of preschool education.

20.5 Some Trends of Development in Ukrainian Preschool Education

Along with many countries in the world, Ukraine has set ambitious goals to achieve: to increase both quantity and quality of early childhood development and education provisions for young families and their families. The rationale behind these goals is based on economic, as well as neurobiological, educational, and social arguments. At the individual level, early childhood experiences have been recognized as a key factor in building strong foundations for learning and successful participation in community throughout the life; at the societal level, this period in the life of the child and family plays a crucial role in promoting inclusion and strengthening social cohesion; from economists' point of view, the best return of investment comes from investments in the early years.

Updating the content of education is gradually emerging in the traditional approaches. Introduction of modern methods is often supported by partners from abroad. Since the mid-1990s, a significant impact on the system was provided by the programs of international organization "Step by Step." The network of "pilot" preschools was organized with the aim at the implementation and spread the idea of democracy in preschool education, involving families and communities to participate in the education of children.

20.6 Ukrainian Step by Step Foundation

Ukrainian Step by Step Foundation (USSF) is nongovernmental organization in Ukraine, which shares the vision of early childhood as a life space where educators and families work together to ensure access to early childhood services that promote well-being, development, and learning for each child based on the principles of democratic participation. Since 1994, the Step by Step program, an initiative of the Open Society Institute (OSI) strongly supported by George Soros, has been a symbol of change in the preschools, primary schools, and communities of Central, Eastern, and Southern Europe and Central Asia. It has been a symbol for empowering educators and other early years development professionals, families, and whole communities to support the development and learning of each child to his or her full potential. Equal access to education ad care opportunities, child-centered,

[17] About the creation of the programs on preschool education. The Ministry of Education and Science letter № 1/9–152. 28.02.2013 http://osvita.ua/legislation/doshkilna-osvita/34830/

individualized teaching, a holistic approach to child's development, inclusion, the significant role of parents and community involvement, and culturally appropriate learning environments and approaches have been the core principles of the program from its very beginning.

USSF is a national member of the International Step by Step Association (ISSA), which was established in 1998. One of its first activities was the development of the ISSA pedagogical principles. Educators that make a difference can be unofficial title of those teachers receiving the ISSA certificate of excellence based on assessment, using the ISSA pedagogical principles.

Being recognized as a source of innovation in the region, ISSA and USSF have always promoted professional discussions and encouraged educators, program managers, educational authorities, and other stakeholders to follow the development in the field and changing the situation and needs in the region. Establishing of ISSA pedagogical principles was an important step to demonstrate that the definition of quality and the way to improve it in practice is not a statistic, easily decided issue with one correct answer. The quest for quality is built on lively exchange of knowledge, experiences, and dispositions of all involved stakeholders. Competent Educators of the 21st Century: Principles of Quality Pedagogy document, developed by ISSA, encourages professional discussion, builds and expands the partnerships, helps to improve the practices, and brings change into the lives of young children in the countries of ISSA, including Ukraine.

There are a lot of discussions about quality of preschool education. However, what constitutes high quality in education still remains a complex, multifaceted matter, which includes structural conditions (e.g., group size, adult/child ratio, etc.), as well as a process factors (e.g., sensitivity of the adult, quality of interactions and curricula, etc.). Unfortunately, the language of quality, as well as initiatives and policies, sometimes creates unintended consequences as they legitimize the proliferating maze of regulations in early childhood education and often undermines, instead of providing support, professional autonomy. USSF enters this discussion from the point of view of a practitioner working with young children on a daily basis. Through its quality initiatives and pedagogical principles that describe quality practices, USSF has promoted the crucial role of the practitioner. We argue that while there is a solid amount of research findings, quality is still a concept that needs to be explored, developed, agreed upon, and implemented according to the cultural background and needs of the learning community, rather than presented as a universal solution for all situations and people. USSF believes that democracy forms the foundation of the preschool, and for this reason, early years activities should be carried out in accordance with fundamental democratic values.

Competent Educators of the 21st Century Principles consists of seven focus areas that reflect ISSA's main beliefs about quality pedagogy and identify ways to aspire to excellence:

Interactions
Family and community
Inclusion, diversity, and values of democracy

Assessment and planning
Teaching strategies
Learning environment
Professional development

USSF believes these areas are crucial to ensure high-quality support for children's development and learning. The seven areas promote practices that are guided by humanistic and socio-constructivist principles, emphasizing developmentally appropriate practices, individualized approach, and the idea that learning occurs in interaction and is a dialogue between children and adults, as well as between children, which is marked by respecting each other, stimulating and giving autonomy to the learner, and assuming that children are competent citizens even while they need support from adults. ISSA's principles of quality pedagogy recognize and promote the important role of the professional as a knowledgeable, sensitive individual who guides and scaffolds children in their journey of exploration and learning and works in close partnership with families as the first teachers of their children and communities as a natural resource for learning and inquiry.

In recent years, the Ukrainian Step by Step Foundation has been implemented in collaboration with Fontys University (Netherlands), a project aimed at the development of professional competencies of educators and leaders of preschool institutions (covered about 1,000 participants from each target group).

20.7 The Program "Learning to Think," Lviv, Ukraine

One of the projects focused on the development of new content and methods of early childhood education is implemented in three preschools in Lviv in collaboration with the Moscow City University and Moscow State University in Humanities. The main aim of this project is development of thinking in preschool children and implementation of the new methods of teaching and professional development of the preschool teachers.

Experimental preschool program implemented in the framework of this project has been designed on the basis of Lev Vygotsky's doctrine on development of higher mental functions and on psychological means of this development[18].

This program is focused on development of dialectical thinking (N.E. Veraksa) of preschool children and its application for solving controversial situations and productive creativity. The authors regard dialectical thinking as a system of dialectical mental acts[19]. Experimental works have confirmed the possibility of activation of dialectical thinking at the preschool age. Dialectical mental acts are formed and

[18]Vygotsky L.S. Mind in Society: The Development of Higher Psychological Processes. Harvard UniversityPress, 1978. 159 p

[19]Veraksa N.E. Structural approach to dialectic thinking. 14th International Conference on Thinking, 2009–210 p

used by children while discussing fairy tales, exploration of wild and inanimate nature, etc. Dialectical visual scheme appears to be one of the means of dialectical thinking.

Collaboration and work with preschool teachers is a special part of the project. During the seminars and webinars, the main emphasis is put on the development of professional reflection, the ability to work in the zone of proximal development, the creation of problematic situations during the lesson, and the ability to challenge children.

One of the methods used in the framework of seminars for the teachers is a group discussion on the video records of their lessons, planning of the next steps on the way of interaction between children and teachers.

The inertia of the system of training and in-service training of preschool teachers limits the spread of the new “child-centered” philosophy of early childhood education. Educational technologies and new content, developed in innovative projects, are implemented just partially.

The idea of education for life (lifelong learning) forms the basis of European education policy, forcing a new look at the importance of preschool education for further development. In this regard, the relevant competence development of teachers of preschool education is becoming a critical problem of educational policy in general.

Chapter 21
Pedagogical Center "Experiment": The Peculiarities of Preschool Education in Holistic Developing Education (HDE)

Bronislav Zeltserman, Margarita Dubina, Margarita Dragile, Maria Pekarskaya, Irina Maluhina, and Inta Baltina

Abstract The article represents best practices and inventions of preschool developmental approach in content, technology, and educator-child relationship carried out in the Educational Center "Experiment." It is based on the main principles of the holistic developmental education (HDE) having its ground in the theoretical teaching of L.S. Vygotsky, B.D. Elkonin and V.V. Davydov.

The article covers the following themes and issues: (1) particularities of the psychological guidance of the students as well as training of psychologists and educators. It presents some examples of learning tasks from lessons on math and logic for preschoolers.

This material is of a methodological character and is rather a recommendation for educators and psychologists working with preschool-age children.

It is highly recommended especially for those educators and psychologists who are interested in professional development, as well as in implementing innovational approaches for reaching netter qualitative results.

This could also be useful for parents, in order to organize a creative free time of their children or provide them with additional developing training at home.

Keywords Holistic Developing Education • Pedagogical center "Experiment" • Pre-school education

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This chapter describes the peculiarities of preschool education in Pedagogical Center "Experiment," an authentic (authorship) school of Holistic Developing Education (HDE), situated in Riga, Latvia.

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21.1 The Historical Context

Pedagogical Center “Experiment” was established in 1987 on the peak of discussions of the new school concept, which was developed into a project within the center during the next 2 years (till 1989). In the beginning the project was meant to be implemented within the school educational system, although already in 1989 new approaches were developed as an attempt to implement the concepts of the developing education system by Elkonin-Davydov for the preschool curriculum.

In 1991 the first class was formed mainly from children, who, at the age of 5, came to the studio of development by Pedagogical centre “Experiment.” In 2002 this class graduated after 12 years of school education. During the period two preschool institutions were run by the Pedagogical centre “Experiment” at the same time: the studio of development (for children from the age of 2 to 7 years old) and the kindergarten groups. At the beginning the main aim of working with preschool children was to prepare them for the developing education school; consequently, it had become the basis (core) of the preschool education.

The background for the process of development of new approaches and the implementation of the new content was the serious shifts of Latvian education system, which partly consisted of changes in public preschool and school education curriculum and standards, and transition from education in Russian to the state language. Moreover, the specification of Latvian inner policy also had its impact: the implementation of new approaches took its place during the period of general transition of the public preschool and school education system toward the Western standards, though, meanwhile, it had been changing its direction several times. Some of these changes related to the preparatory school and other innovations did not fit into our pedagogical and psychological perception of preschool-age children’s development.

Despite the fact, during the time period of formation and implementation of the Holistic System of Developing Education, we have successfully established institutions based on the main concepts of Russian psycho-pedagogical thought and Russian language.

The institution provides education for children of the age 15 months till 3 years old, as well as training for competence improvement for educators and psychologists.

The experience of establishment and development of the Pedagogical centre “Experiment,” especially of its preschool education, had proved that if the education system is grounded in main philosophical, scientific, and psycho-pedagogical ideas, high-quality results could be achieved, despite any outward circumstances. The outstanding achievements of personal and professional becoming of our graduates, who already are holding degrees from Latvian or any other universities of Western or Eastern countries, provide clear evidence that the stream of the developing education, emerged in the 1980s, had its scientific basis, methodological support, and successful implementation.

The system of HDE and its implementation are based on:

– Theoretical concepts of scientific school of L.S. Vygotsky (Выготский 1984, 1996; Veresov 2004);
– Theoretical, psycho-pedagogical, and methodological formulations of the system of developing education by B. D. Elkonin-V. V. Davydov (РОЭД or Developing Education by Elkonin-Davydov (DEED) (Давыдов 1996, 2000, 2005; Щедровицкий 2005; Эльконин 1989);
– Concepts of systematic thought activity (STA) methodology of G. P. Shchedrovitsky and STA pedagogy (STAp) (Акопова, Иванова 2006; Щедровицкий, Розин, Алексеев, Непомнящая 1993; Щедровицкий 2015);
– Conceptual foundations of preschool developing education project "Tropinki" ("Paths") by V. T. Kudryavcev (Кудрявцев 2007; «Стандартизация» дошкольного образования: путеводные звезды и подводные камни. http://obruch.ru/index.php?id=8&n=76&r=2);
– Author's developments by educators of Pedagogical Centre "Experiment" (Зельцерман 2007, 2002; Зельцерман, Рогалева 2000).

The fundamental difference between traditional and developing education, implemented in the Pedagogical centre "Experiment," is described by V. T. Kudryavcev (Kudryavcev, 2007): "The diagnosis for the traditional preschool education, formulated by B. D. Elkonin and V.V. Davydov, fairly enough describes the traditional preschool curriculum. The content and form of educator's work used in traditional early years education system are not relevant for development of children, because in their essence they are copying the experience that children had already (or were supposed to have) acquired through their everyday activities."

The chapter is based on best experience and practices of methodologists, psychologists, and educators of the center that reflect the developing approach toward content, technique, and relationship with children implemented in preschool education within the Centre "Experiment".

The following would be presented:

(1) the psychological and pedagogical grounds for developing practice (2) certain fragments of methods/instructions of exercises and abstracts of notes from classes and (3) several parts of transcript of classes or exercise

Before describing the practical aspect, we would stop on peculiarities of training for educators and psychologist working in preschool system of HDE.

21.2 Training of Psychological and Pedagogical Professionals

In order to fulfill its duties within the HDE system each educator is ought to participate in a certain advance professional training course to get acquainted with the peculiarities of the system. Moreover, in addition to the basic psychological and

educator's training and understanding of the fundamental doctrines of developing education system, each educator should possess performing skills and a good sense of humor in order to work in the system of HDE. It is necessary first of all because of the technology of the HDE, which perceives the participants of the education process as equal parties (student-educator). An educator should not pass his knowledge to a child, but to play a game with him, during which he would be able to receive new knowledge, tools, experience, etc.

21.2.1 Projecting Study Sessions as Project Workshops

Educators, working in various fields and with different age groups, are taking part in this kind of workshops together. During these workshops common issues of preschool group development are being discussed, and a holistic system of assignments/classes for creativity promotion, or work in pairs or groups, which individual educators systematically implement during their teaching time, is being developed.

The approach of exploring and zooming of an assignment would be described further on by an example of such tasks as "A boy and a drawing easel," "fairy tales," etc.

Another important aspect of these workshops is the development of inter-subject (cross-curriculum) classes, aimed for acquiring communication and group work skills in different age groups (4–6 years old). Leading educators of different similar fields, i.e., math-logics-science (the development of cognitive activity) or dance-music-sport-visual art, are participating in projecting and implementing these kinds of study sessions.

It is also possible to combine other study disciplines, if it is essential for reaching the aim of an educator while working with a certain group of preschool children.

A special attention is drawn to the use of various fragments of STA pedagogy for interdisciplinary classes' development, for an educator ought to have a clear understanding of correlation of aim of his class, psychological and pedagogical challenges, technology, and peculiarities of age psychology.

It is necessary to mention that the principle of "project workshops" applies not only to educators' teamwork on development of interdisciplinary classes but also to individual development and projecting of author's programs of developmental education.

In this case the approach of "master-apprentice," when "a young" (less experienced) educator is working on a project together with "a master" (more experienced educator), is used.

21.2.2 Workshops on Video Analysis of Lessons

During these activities psychological and pedagogical situations of a study session are being discussed in details.

It is an obligatory procedure for any new educator or any new approach for acquiring a competence or for usage of any new technology or an innovation developed in project workshops.

During the workshop on video analysis, extra attention is drawn to the analysis of the lesson's project (its aim, challenges, technology, and planned results), as well as to the actual psychological and pedagogical situation in the class itself. Actions and behavior of an educator and technologies he used are the subject for the analysis, as well as the process of new competence acquired by the students.

A psychological and pedagogical reflection is following the analysis, its goal is to detect the deficits of theoretical approach or model of the study session, and after another interaction a new concept of the study is being developed.

Each educator of HDE system should know the fundamental elements of systemic thinking activity (STA) pedagogy, including the peculiarities of organization and participation in communication, identification of own understanding and correct understanding by the conversation partner, self-reflection and reflection of the others.

During the special training, special attention is given to the acquiring of the competences mentioned above by the psychological and pedagogical professionals.

Only after pedagogical and psychological training educators are granted rights to develop and implement individual author's educational projects and developing games. Thus, a transparent program of visual art (from 3rd to 11th year), creative and intellectual extracurriculum events, etc. were created.

21.3 Psychological Guidance at Preschool Education Level

One of the main peculiarities of the HDE preschool education system is the psychological guidance, which purpose is to provide a psychological support for the subjects, children from 1 year old and educators, during the educational process. It is worthy to mention that the main feature of our psychological accompaniment is that it applies not only to the problem solving within the study process but also provides the management of psychological aspects of education. This kind of management demands a special training for both educational parties, children and educators, on psychological problem solving and personality development. In this case a psychologist is acting as an expert and an advisor.

The object of the accompaniment is the educational process, while its main subject matter is the situation of child development, which is understood as a system of child's relationship with the outside world, his parents, fellows, and himself.

The content of this article is the link from a diagnostic and correction of psychological difficulties to the management of the psychological aspect of the education. The main feature of this approach is the projecting of an activity (Зельцерман, Рогалева, 2000). Thus the first stage of working with a preschool group is the activity diagnosis of a group and individual development of children. The next step is the group division, according to the psychological peculiarities of the individual development situation of each child, based on the results of the diagnostics. This kind of

group division allows to set challenges and to find appropriate approaches for further developing activities in the group.

The desire to work in different groups and its skills are being developed in this kind of psychological activity.

During our classes children are playing various games. The search for the purpose of the game becomes the key aspect of development, which further allows the players to set their own challenges. Thus playing “the train” children of an elder age group define the purpose of the “interesting” game as an opportunity to learn “how to play together” and also “being sensitive to one another.”

21.4 From Socializing to Productive Communication

The shaping of socializing and communication skills takes a special place in the HDE system for preschool education.

Learning of socializing and communication technology is a common meta challenge, i.e., they are universal for any situation of interaction of a preschool-age child both within and outside the study process.

A program for preschool-age children support in the field of social interaction (“the ABC of socializing”) was developed for the preschool education level.

This program allows to guide a child into the sphere interaction, by forming the motivation for socializing, intention for communication, and necessity for socializing, thus removing the problem of child’s adaptation (localization) in the new social world, which expands rapidly for a preschool pupil.

At the early stage of development, it is his family (a mother and a father); later on as he grows up, the sphere of socializing expands to his fellows, new adults, new social conditions, and relations with other people.

Thus during the first classes, children are facing a situation of getting to know other children and their educator. The educator suggests that every child should say his name and that the others would name him in a gentle name. This way a child not only receives an opportunity to get familiar with other children and to memorize their names which are new to him but also to acknowledge (to realize) his own name, which he is able to harmonize, as well as to receive a new experience of socializing in an unfamiliar situation.

Besides the gaming acquaintance with new social world, during the classes a child receives a sense of belonging to a group and forms a positive attitude toward himself and other fellows, which enrich his emotional content. Moreover, these activities develop his skills of social behavior and culture and promote an ability for empathy and compassion.

For example, a game “an animal piano” awakens the sense of belonging to a group, attracts child’s attention to consciousness and comparison of his own emotional feelings, and develops the skill for interaction with other children.

In this game children are sitting in a line imitating the piano keys, which sound as different animal voices. During the activity an educator plays a role of a pianist, and he gives each child its piano key with a certain animal sound. When he presses a key, it should sound as an animal it represents.

During the activities, the juniors also acquire a social experience of communication.

During one of these classes, an educator using toys plays a tale about two hedgehogs, who found a green apple, but could not decide whether it was sweet or sour. Gradually, their conversation turned into a dispute and further into a fight. Children are asked to name the hedgehog’s situation, to predict (foresee) its various consequences, and to solve it in the best manner (by asking questions like: “What is going on between the hedgehogs? What could happen if the fight would not be stopped?”). In the result of the activity, children find their own approaches for conflict resolution (e.g., solving it by letting the hedgehogs to taste the apple or tasting it themselves, describing the taste to the hedgehogs, etc.)

In the process of solving the study situation, an adult assists a child in applying known action patterns in a new context. Frequently a new approach is necessary for the situation resolution; thus a child is testing samples, guided by an educator, who also helps to evaluate appropriate and inappropriate solutions.

Usually it becomes essential for the children to exchange opinions.

One of the possible techniques for the discussion is work in pairs.

In this case an educator asks a question that everyone could answer. Children are trying to do it, and time is given for their negotiations. “Face one another, and if you know the answer, share it with your partner. If he agrees and is nodding, take his hand and show that you are ready to reply the question together. If he disagrees, ask for his opinion, for may be you are not right, and he could help you?”.

For further successful education in our system, already in the preschool age, children are taught to think independently, to discuss, and to stand up for their opinion, as well as to raise questions and to initiate the obtaining of new knowledge.

Consequently an individual work guided by an adult is not sufficient enough for the task; working within a group of children is essential.

A dispute among children offering different approaches for the problem solving is a necessary condition for primal questions toward an educator. But for the disagreement full of content, the bodies involved should be able:

To formulate its own point of view
To find out the opinions of the others
To distinguish between own and other opinion
To solve the contradiction by argumentation, avoiding placing the conflict on the ground of interpersonal relations

In order to establish the primary coordination of actions, the etiquette of fair dispute is introduced:

after expressing your own opinion, ask others: “Do you agree? Do you mind? What do you think?”

If all agree, you can act. If there are different opinions, ask one another: “why do you think so? Can you prove it?”

Here is an example of a work in pairs:

You have infront of you an image of a human being. this man performs an unusual job. Please try both, you and your partner, to negotiate and to dress this man in a particular uniform. Afterwards you will exchange your drawings with another pair and they would try to guess this person’s occupation.

The establishment of a creative dialogue is a necessary condition for any activity. As a common issue for an interaction, implemented in a joint activity of children, we would suggest assignments for imagination development.

In our system the unique dialogues are implemented as an equal dialogue between a child and an educator and also as a specially organized dialogue on creative activity among the children.

21.4.1 Teamwork

A teamwork is being arranged by using special recommendations developed in the center, which, according to the teamwork aims, include socialization skills and tools of STA pedagogy (Цукерман 2000; Щедровицкий 2005; Танцоров 1997).

Various approaches for team building are used to develop a facilitator’s skills, as well as to teach children to work in a group.

Groups (teams) could be formed according to the wish of its participants. Thus, the main aim of the team could be the creative result by the group facilitators.

By the group facilitators. Usually an educator picks up a captain among those children who already by the end of the preparatory training seem to have inclination for facilitation and who are respected by their fellows.

Children are being divided into the groups by playing “a mirror.” It is the most complicated way to do it. A leader turns his back to the class, while an educator points at one of the students. The leader calls out a number. This group is being formed randomly. In this case the main aim of the group is to organize a communication.

According to the gender, girls are in one group and boys in another.

The acquiring of teamwork techniques by children is essential here (Зельцерман, Рогалева 2000; Танцоров 1997).

21.4.2 The Imagination Is a Central in Mental Growth of the Preschool Age

Creative imagination is a central psychological “achievement” of the preschool age (L. S. Vygotsky, V. V. Davydov). Its formation during various childhood activities promotes the establishment of children’s mentality.

During the preschool developing education, it is being actively formed by the means of specialized preschool activities, such as games, various types of artistic creativity, perception of fairy tales, independent creative writing, etc.

According to the hypothesis of V. V. Davydov and V. T. Kudryavtsev, the unity of the productive imagination and creative thinking is the basis for continuity of preschool and school developing education (Давыдов & Кудрявцевб 1997).

Imagination could not be formed from time to time; it demands a constant work and special attention within the study process.

It is being highly emphasized within our system of HDE.

It is not the prototypes of education activity are developed at the preschool level, but its universal psychological suppositions. One of the key suppositions and a priority in developing preschool education is the developed productive imagination, which represents the core of the creative potential of a preschool child and is related to the theoretical thinking of a junior (Кудрявцев 2007).

Imagination is not only the central mental process of the preschool age but also it is a common feature of a consciousness, it is “a universal ability” (E.V. Il’enkov), and consequently it is a backbone (systematically important) attribute of a human personality.

Psychological and pedagogical literature uses different terms to describe the process of development of imagination. In recent years the term creativity is widely used for this purpose in Latvia, and in the chapter we would use it to describe the activity for development of imagination, ability for imagination, creative thinking, dreamwork, and creativity.

In the center we have gathered and systematized more than 300 activities for development of creativity. The selection includes the concepts of J. Ranzulli (Гатанов 1998; Crutchfield 1966; Renzulli 1986; Torrance 1965), O. M. Dyatchenko (Венгер, Дьяченко 1989; Дьяченко 2007), and V. T. Kudryavcev (Кудрявцев 2007), the development of imagination ability (Акопова 2005; Акопова, Иванова 2006), developing verbal games (Зельцерман, Рогалева 2000), and fantasy (Кудрявцев 2012; Родари 2011), which are all different in their technique and mentality, but share the common aim of development of creativity.

The selection is arranged into a system, which allows to use them during activities in any field of knowledge.

The selection “mosaic” consists of several types of tasks and assignments:

Complete the drawing.
Verbal associations.
New ways of using.
Construction.
Unbelievable situations.

During the activity “complete the drawing,” children are intensively involved into the “transformation of a blot.” “What do I see, while transforming a blot into a good/bright/beautiful/ …?”

Verbal developing games are being implemented during the classes for speech development and at the same time promoting not only the speech improvement but also the development of creativity. Fairy tales are the best way to practice both speech and creativity by using different assignments:

misquotation of a fairy tale,
copying a fairy tale,
a new version of an old fairy tale,
a fairy tale upside down,
as well as,
making up a new ending of the story,
creating a new middle of the story,
making up a new beginning of a story.
The game “Misquotation of a fairy tale ”
Aim: Development of imagination and speech.

Instructions:

You all know the fairy tale “The little red ridding hood”. Now listen how it could be told by an old man from J. Rodari fairy tale.

once upon a time lived a little girl, named a Yellow ridding hood.

It is not yellow, it is red!

Oh, you are right! It is a red ridding hood. Once her mother called her saying: “Dear Green ridding hood …”

No! She is a Red ridding hood!

Sure! She has a red hood.

“Go to aunt Dionmira and bring her potato peels …”

It is obvious that he had misquoted the fairy tale completely. Please also try to misquote the fairy tale, i.e., to tell it with some changes of events and names of the heroes or even by mixing them. Meanwhile, others should sit and listen attentively and should correct the storyteller.

The following well-known Russian fairy tales could be used for the misquotation:

A speckled hen
A palace (“Teremok”)
A ginger bread
A rabbit’s house
Gooses-swans
The three bears

The following assignments are used for different age activities as a warm-up procedure.

Instructions: the activity could be divided into several stages: during the first one, an educator turns to children with a question “What do you see while looking at the figures (a circle, a triangle, a rectangle, a curved line)?” (Fig. 21.1).

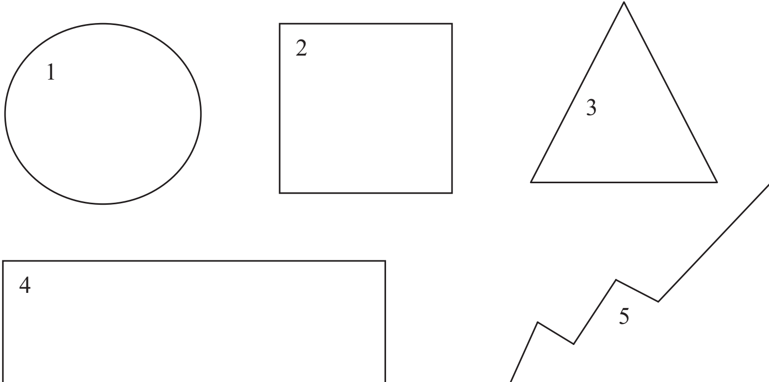


Fig. 21.1 Examples of figures 1

During the next classes, he might ask participants to complete the figure, or for advanced or elder group, he could suggest to make up something what no one else could draw.

This exercise is used for diagnostic.

Instruction: You have 2 min to draw a maximum amount of figures or to draw a comic strip (a cartoon) (Fig. 21.2).

This exercise is implemented within different age groups, and the sequence of assignments is based on the level of a group and its situation.

Instruction: Look at the picture, reflect for a while, and tell us what the boy is thinking about? If objects were able to think, what would be the thoughts of an easel, a sheet of paper, paints, a brush, toys, and birds behind the window? (Fig. 21.3).

All mentioned above gives a helicopter view of how various activities include exercises on various aspects of creativities being suitable for different age groups.

Some of the exercises are given to children of different age in a broader context, thus allowing us to follow the individual and group development dynamics.

Development of new activities for different age groups and knowledge fields is a special trend within the educator’s activity.

One of the main characteristics of the creativity development activities is the inclusion of elements of school education curriculum for the elder juniors, thus training them for the school studies.

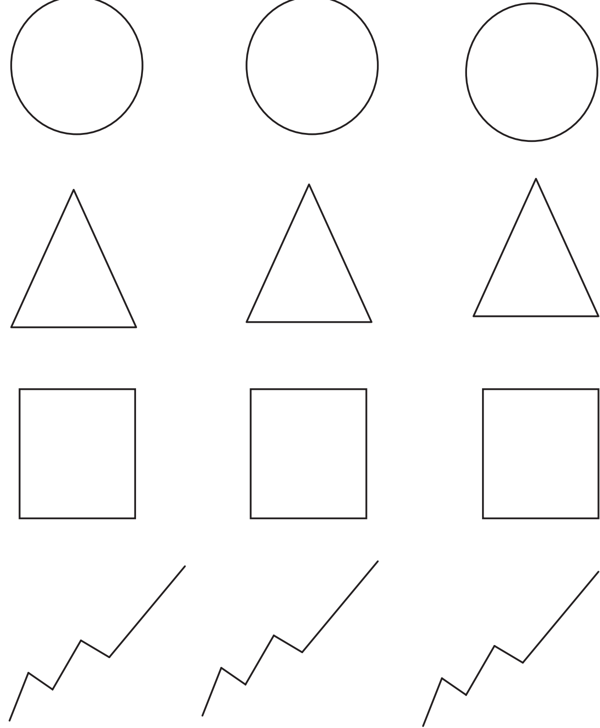


Fig. 21.2 Examples of figures 2

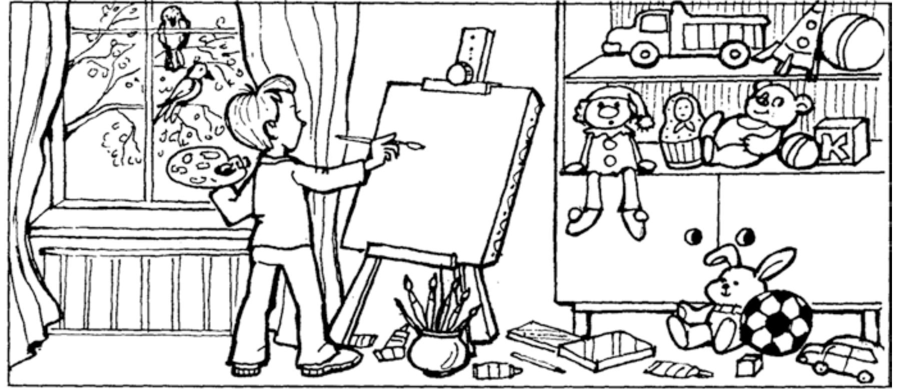


Fig. 21.3 What the boy is thinking about?

21.4.3 Development of Elements of Study Activity for the Preschoolers

One of the most important tasks is to develop certain technical procedures for introduction of study activity within different knowledge fields among the elder preschoolers.

Their aim is not only to facilitate the transaction from the preschool to school study activity for the elderly preschoolers, but it is mainly made to analyze psychological and pedagogical conditions, which allow to pass from play activity to the study activity and to teach "studying skills."

The ability to learn is an ability to self-transformation, implemented in a child's ability to put forward a certain aim for himself (this means that a child is able to acknowledge his ability limits), in his ability to find independently his own tools for problem solving, as well as in his ability to take a consequence of a certain steps and to acknowledge of its results.

The elements of study activity are being developed within a series of our preschool programs. One of these programs is the program for development of creative thinking, which includes various elements of study activity, such as planning, analysis of assignment conditions, action planning, modeling, control, and evaluation of self-taken activities.

Individual and collective forms of activities, as well as games, are being used during the program.

We would define the main approaches for development of study activity during classes:

– During the classes an educator is being attentive to formulate the assignment in such a way that he could test it if it was understood by the preschoolers and also that they would be able to transform it into an individual task.
– In all cases an educator is supposed to use various modes, modeling, and transformation by using various sign systems.
– Different types of work organization (work in pair or groups) should be used during an activity, in order to develop skills of productive communication among the preschoolers.
– For the course research assignments, various elements of research techniques of developing education should be used.
– Every class should end with an attempt to develop among the preschoolers an ability to reflect on the results of their thinking and activity.

The Evaluation of Understanding of an Assignment:

– Please draw in your notebooks a small triangle and a big circle under it. Now please add to the drawing several details in order to complete the picture. Please explain what it is and name it.

Action (or Story Plot) Planning:

Children, here are three images. Please look at them carefully and try to make up and to write down a story (you can ask you parents, who are present in the class, for an assistance). And now please tell us your story.

A Model Construction:

– Please imagine that today is a sunny day and it is a summer time (or a rainy day and it is fall time). Now please draw in your notebooks your desired activities during the season or weather.

Defining the Groups of Characteristics While Creating an Image or an Action

– Today we are going to fly to a fairy planet inhabited by children only. On this planet everything is meant and done for them. What do you think we can find there and how would it look like?

21.4.4 Evaluation and Self-Evaluation

Evaluation and self-evaluation are being formed during classes where the results of child's creative activity are finding their final shape in drawings, models, and texts.

Creative assignments have no wrong answers; all responses are accepted by an educator with a gratitude; he is to encourage a child for the independent evaluation of his own results, for an ability to see benefits and deficits of his work, for his courage, for fidelity to his principles, etc.

By implementing the approaches, one could practice various aspects of development of elements of study activity, such as planning, analysis of an assignment's suppositions, action planning, simulation, control, and self-evaluation. In this case a child's imagination and its development become the content.

All activities are developed preserving the main activity of preschoolers, thus learning through playing games.

21.4.5 The Peculiarities of Cognitive Activity Development

Our experience in working with pre-schoolers in HDE system proves that the development of the cognitive activity is the basis for successful studies at the school level. The organization of the study process within the school would not be effective if a child did not reach the appropriate level of cognitive activity maturity for his age group. Consequently, in our system of education, we start to develop the cognitive activity from the very early age of 1 year old, when mothers are required to transform their child's chaotic attempts to explore the surrounding world into a meaningful, thoughtful, and cognitive process. This approach is based on the peculiarities of the age-dependent development; for exactly at this early age, a child begins to show

curiosity for the outside world, seeing colorful objects, hearing different sounds, etc. This way a child acquires a primary orientation activity which is a physiological basis for the development of the cognitive activity.

Our main innovation in the development of cognitive activity among the preschoolers is the implementation of program "Together with your mother." In this case the aim of an educator is to transfer the approaches and tools for the development of child's main age-dependent peculiarities and skills, such as movement, sensor, inner speech, physical development, etc.

An activity with a different color pyramid is useful in this case. A mother is placing a pyramid in front of her child and draws his attention to the aspect that it has different colors. Rings of different colors, red, yellow, green, blue, etc., are being placed on a stick. A mother is to encourage her child to name the colors of the rings. If it is difficult for him, an adult provides an answer and asks from a child to repeat it after him. Afterward a mother encourages her child to place the rings in descending order on the stick. "Please show me the largest ring!" asks the adult and offers to place it on the stick. Further a child picks up another largest ring left and puts it on the stick. While collecting both a parent and a child name the color of a ring. As the result they create a pyramid, where in the bottom there is the widest ring and at the top the narrowest.

The development of cognitive activity begins at the early age by a child's interaction with different objects. This age-dependent peculiarity is taken into a serious account, while we are planning our developing activities with the early age group. During the activities children are learning how to differentiate shape, color, size of an object, as well as their quantity and orientation in the space.

In early childhood the cognitive development is build on the child's interest toward the outside aspects of the surrounding world.

Already by the age of 3 years old, a child is becoming more interested in hidden sides and connections of the world around him. It is a meaningful and active perception of the new aspect of the world; a child is taking his toys into pieces to investigate the unknown, he analyzes the objects and its purpose, and the more he finds out during the activity, the more he wants to stay in the situation of research and exploring. This consistent pattern is used during our classes and also for the individual child's playing activity. This developmental peculiarity enables us to create a field for research and experiment during our activities. Moreover it also enables a child to construct its own world view based on his own experience and observation.

At one of the activities, an educator presents a number of closed boxes to a group of children and explains that the three of them contain different objects, but one is empty. He asks them to find the empty box. He provides them with a clue of how to do it: "Shake the box to hear the sound." Children find the box that makes no sound, and thus the educator explains that "it means that it is empty." In the second part of the activity, children have to define the content of the box according to its sound. Which of the boxes contains a ringing bell or a rattle or stones? During the experimental activity, children learn that they can define the content of the box by the sound it makes.

According to our experience with preschoolers, using toys familiar to the child could also be productive. These kind of toys are used for playing activities for simulation of cognitive situations.

During the class the children are being visited by a familiar doll Masha and a teddy Mitya. The doll sees a mirror and wonders: “What is the shining object?”. A reply to the question could be given by children or by the teddy Mitya, who knows everything: “It is a mirror.” The doll goes on wondering: “Is it showing me?” “No,” replies a child or the teddy, “it is just your reflection!” Afterward, children are looking at themselves in the mirror, exploring the peculiarities of their appearance, and come to a conclusion that all people differ from one another.

By the end of the preschool age, it is possible to trace the features of self-consistency, self-control, and self-regulation of the cognitive activity within a child, which could be seen in his ability to set up goals, to find an approach, and to control the process of his activity and for an independent evaluation of his own result. The child begins to show his own initiative and conation in fulfilling assignments or in control of his own behavior. Our experience with preschoolers proves that at this age a child is already able to define his own activity and creativity, as well as to implement his own conation, interests, and necessities.

Elderly preschoolers are interested not only in the new object itself. Four-, 5-, and 6-year-old children want to know its structure, its purpose, its function, and its background. The cognitive interest becomes the motive for child’s manipulation with the object. This cognitive attitude is revealed in the peculiarities of childhood questions. A 4–5-year-old child always asks “why?” Thus an attitude of questioning the outside world is being developed. This age-dependent developmental peculiarity could be effectively used for activities arranged in a form of an independent research demanding from a child to explore its own way of fulfilling the assignment.

Two images obtaining two different objects are being presented to children during the class. One of the pictures contain the image with two kittens sitting by the table. There is a bowl on the table containing a branch of mimosa. The kittens are drawing a greeting card for their mother. Behind their backs there is a window with an icicle and the sun shining through it. The second image shows two kittens playing on the grass field full of dandelions. An educator explains that these two images are about spring and asks the group to name the features of the spring they see from the pictures. Children are usually surprised, because they see that the two images are completely different. They are divided into two groups in order to discuss and to find out the characteristics of the spring. At the end of the class, children discover that the images contain different stages of the spring season: at the beginning in March, the snow is melting and there are icicles and in the end in May, dandelions are blooming. Thus they reveal that each season consists of 3 months.

It is essential to mention that by the way of questioning and receiving an answer from his fellows or an adult, a child analyzes familiar facts and learns to generalize from the facts. Preschoolers are usually dismissed from any concrete problem specification, and thus they turn to its logical and generalized solution in their minds.

The most effective factor for the cognitive activity development for the age group is the providing of such conditions which enable a child to reveal himself as an actor of his own activity and his interaction with adult and fellows. The practical experience received enables him to acknowledge his own abilities, and this provokes his initiative in the cognitive activity and creativity.

21.4.6 The Development of Intellectual Abilities

Five – to – six year old children’s intellectual abilities are being developed by practicing various types of developing games:

Games developing manual dexterity by using methodological and didactic selections of Montessori materials (Материалы Монтессори n.d.)

Author’s development of verbal games consisting of various developing games, such as games for speech and speech skills development (Зельцерман, Рогалева, 2000)

“The Dragon” game:

For 5-year-old children.

Aim: To develop imagination and to form an ability to analyze information provided in the text and to use it for further development of its content and form.

Once upon a time there lived a bellicose rooster. He was very proud of his strong nib and sharp heels. Due to his qualities other birds in the yard called him a Bellicose. Every day he was offending someone by nibbing a duck, or by tearing a flock from a puppy’s tail, or by pushing aside hens from their meal bowls … The yard inhabitants were tolerating it for a long period of time. Although once they have gathered under the person and had decided to ….

21.4.7 Games for Mental (Thinking) Development

The cause game

Aim: To develop the ability to define cause-and-effect relations and to reflect them by syntactical structures, as well to promote open mind, creativity, and speech.

Instruction: Here I will describe the situation (an event that has already occurred), and your task would be to explain (or guess) why it happened.

An assignment for 5-year-old children:

1. A girl or a boy asked her or his grandmother for a forgiveness …
2. A boy or a girl got ill …
3. All birds flew away …
4. It is cold outside …
5. There is a rain of flowers …

The Link Game

Aim: To develop the ability to analyze and to make a synthesis, as well as an ability to define and to compare different characteristics of an object, and also to promote creativity.

Here I would bring up two objects. Your task is to find a similar object according to the similarities of one or more of its characteristics. It is a link between the two objects, e.g., a car and a spade. The missing link is an excavator (a digger), for it is a car and at the same time it is used for digging as a spade.

An assignment for 5-year-old children:

Shoes and an umbrella
Shoes and a rope
A printing machine and a calculator

21.4.8 The Development of Intellectual Abilities by the Means of Developing Computer Games

Already at the preschool level, computer technologies are being widely used by the center. Children of 3–3,5 years old are starting to learn how to use a computer. It is being used for learning of a selection of developing games, based on the methods of child's intellectual abilities' development and implemented as computer games (Зак, 1994, 1996).

Our long experience proves that the use of computer games and a process arrangement technique suitable for the age group provide the individualization of the development.

By playing computer games even at the early stage, a child realizes that objects on the screen are not real and that they are just symbols of the existing objects. It enables the development of symbolic function of child's consciousness, i.e., the understanding of different levels of the outside world as real (existing) objects, images, schemes, etc.

Computer practice provokes children's interest toward playing and consequently studying activity. This interest serves as a ground for development of such important structures as cognitive motivation, arbitrary memory, and concentration. All these features are essential for psychological (mental) maturity of a child to begin a study process.

The implemented approaches provide conditions for development of child theoretical thinking and problem solving:

Development of basic PC skills and spatial models and understanding of object characteristics (for 3–4-year-old children)
Development of abilities to comprehend the assignment, to question raising skills on the presupposition of an assignment and an ability to plan own activities, to analyze the results received as well as provide with skills for a constructive dia-

logue building, listening, and hearing the other (the partner), and to defend its point of view with arguments (for 4–6-year-old children)

A general approach for a problem description and an activity technique, from its collective problem review (explanation) for a group to individual guidance for typological problem solving, are methodologically tried and tested.

After the approach of problem solving is reviewed, explained, and written down on the blackboard, it is necessary to clarify to children the ways of “telling” the solution to the computer.

An educator has to show those ways on the computer while explaining.

All the solutions offered by the children, whether they were right or wrong, are being reviewed.

It is necessary to make sure that the child who had given an incorrect answer realizes his mistake.

Every child completes the assignment on the computer at his own pace.

If a child is experiencing difficulties fulfilling the task, an educator could provide him with clues by a chain of appropriate questions.

Starting from general questions (e.g., What could be the right solution? What has to be done?) and gradually going into the problem solving (What have you done so far? What should be done now? Is it possible to do it this way?)

At the end of the class, it is recommended to make a reflection (a feedback) on the activity, which should result in child’s comprehension of his acts and his record of understanding or misunderstanding.

For example, a developing game “how a caterpillar and an ant were visiting one another” (Зак, 1996)

Aim: To develop skills to explore statement of a problem and to plan and to control own activities.

To start the first activity one could say:

> once upon a time there lived a caterpillar and an ant. They loved visiting one another and also to riddle children. Today we will meet the caterpillar and we will try to solve some of her riddles.

The following drawing is to be provided on the blackboard (Fig. 21.4):

> Here is the house inhabited by: a Stick, Two Sticks, A circle and Two Circles. The caterpillar walks through the house visiting each of its inhabitants. To solve the riddle, you should always remember that the caterpillar walks by following straight lines only, i.e., it can move to a next square, up, down, to the right, and to the left. Here is the first riddle (Fig. 21.5).
>
> I, says the caterpillar, visited the Stick. Where did I go afterwards? What figure should we draw in an empty box? whom is the caterpillar visiting? The first square on the scheme above shows where the caterpillar was, but the second (the empty one) shows where she went afterward. Which figure we should draw in the empty square? Where did the caterpillar go to?

All children’s suggestions are being written down on the blackboard and later on discussed. If they wish, students could come out to the blackboard, in order to explain why this or that solution is right or wrong. The educator could move to

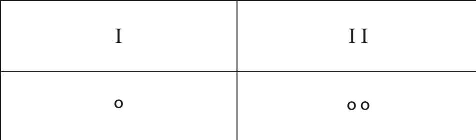
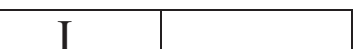


Fig. 21.4 Caterpillar riddles 1

Fig. 21.5 Caterpillar riddles 2



another type of problem solving, only after the educator makes sure that all children have understood the way of solving the previous problem.

Afterward, a student could move to the second and third type of the task resolution. In this case, it is known where the caterpillar has been and whom she had visited. A child should find the correct answer and mark it with ”+” or “-” if it is wrong. At the third stage, a child independently creates caterpillar's rout. There are similar tasks for an ant; however, he is not only able to move to the next cell but also diagonally. At the fourth type of tasks, the caterpillar and the ant act at the same time. This is a diagnostic to make sure if a child had accepted the rules of the game and if he is able to analyze the acts of the problem, as well as planning his actions for its resolution.

While solving the problem, an educator should watch the process and provide an assistance if it is necessary. He could help by asking certain type of questions: what is going wrong?, what should be done?, what are you doing?, why?, what are the rules?, etc., thus assisting a child to find his “own” solution.

By the end of the class, we ask children if:

They have learned something new during the activity
It was difficult to find the solution and why?
They have enjoyed the problem solving and why?

As result of regular activities of this kind by the age of 3–6, children are already able:

To accept and follow a study problem
To construct a discourse
To plan their activities according to the task given and the condition of its implementation
To include rules in their action planning and controlling
To compare, by choosing independently the basis and criteria for the logical operation

To correct their actions after its accomplishment, according to the evaluation and mistakes made
To provide argumentation for their position
To question (ask questions)

The main outcome of including developing computer games in the curriculum is that they provide the individualization of the learning process.

21.4.9 Development of Mathematical Concepts During Preparatory Training for the Developing Education

The peculiarities of the math learning, including elements of logic, and aim to development of logical thinking and understanding of mathematical concepts, are emphasized in the 6–7-year-old children curriculum.

According to our research data, a certain preparatory training is necessary in order to facilitate the child's introduction into the developing education system.

The technique for preschoolers' training in math consists of a specifically structured activities suitable for the preschoolers' age peculiarities, which stimulate the development of his thinking.

The program for introduction of mathematical concepts includes such topics as "Inverted divisor" ("Amount"), "A form," "Spatial orientation," and "Time knowledge."

Here we would like to discuss the main issue in the math preparatory according to V. V. Davydov (2000).

The beginning of learning of the concept of "Amount" as the basic concept of the math curriculum could be divided into three stages:

- Introducing to children the approach of measuring of an amount. At this stage the main concepts of dimension, measurement, and its functions, as well as finding an appropriate measurement of an object, are being developed. In this case children use the method of application and laying.
- Teaching children the indirect matching and the comparison of objects' sizes. In this case children compare objects that could not be necessarily compared to one another.
- Providing the development of concept of a number as the basis for measurement and relying on their own abilities to measure according to the conventional measurement, children are learning to form groups of objects on a certain ground, as well as unity and separation of different elements of plurality beginning with the counting foundation.

During an activity children learn how to compare two different objects by using a third one (a measure, a standard).

An educator places a piece of paper on the blackboard. This paper contains Christmas trees: one of them is found in the upper left corner, the other in the right lower corner, and the third one – in the right lower corner. The trees differ in their height for 1–1,5 cm. The educator asks children to determine whether the trees are of an equal height or one is higher or lower.

After hearing their responses, he is telling them a fairy tale: “Once upon a time a treasure was hidden under one of the Christmas trees. Two kind dwarfs would like to help a prince to find the treasure. A fairy revealed them a secret that the treasures are hidden under the highest tree. But the dwarfs can not decide which of the trees is taller than the others.” Children are getting involved into the process, but all their methods of determining the height (application) are not applicable in this case, for the trees are glued to the blackboard. Consequently, they understand the necessity of finding a new way to measure them. After a long discussion, they agree on introducing new subjects as substitutes. They reach the conclusion that if it is impossible to apply or attach, a size could be determined by the measure.

During another activity, children learn to use measure, equal to a part of an object, being able to fill it in several times. They are having on their tables two stripes of paper of equal width, but different in their length – one of them is as twice shorter as the other. The educator says: “We are all tailors. We have to cut into patterns and to sew napkins. Each of us has a piece of a material and it is the stripe, each measure is one napkin. We have to measure how many of the napkins we could make out of the material we have.” It is important that the children would be able to determine the sequence of the measurement rules and implement it correctly.

Since after a common discussion children usually are working independently or in pairs, they are unable to follow the rules, i.e., inarticulately applying the edges of the measure and the material, incorrectly marking the size of the measure and making measurements they forget to mark it with a sign. Consequently, after manipulating with the same objects, they receive different results. And that very moment is crucial for the development, because now they have an opportunity to analyze their activity by finding out what happened and why.

Consequently, the organized process of development of mathematical concepts enables children to pass successfully from the math course of the preschool level to school math course within the developing education.

21.4.10 Development and Artistic Activity Among the Elder Preschoolers

One of the innovations of the center is the complex thematic creative activities.

By playing a game, a child not only simulates the social behavior of adults but also makes experiments with their imaginary positions. V. T. Kudryavcev in his works (2007) defines two main mental growths of preschool age which are strongly connected and shaped by playing games, and they are an orientation toward position

of the other and creative imagination. It can be said that they are the two different faces of one of the same child's inclination as creativity.

In the history of the mankind, the universal ability to perceive the whole and general before its details had always been cultivated primarily by the means of art (E. V. Il'enkov).

Each child perceives the world through three main channels for perception, analyzing and keeping the information. All children see what is going on around them and could imagine various images, to hear different sounds and to experience a diversity of feelings, smells, and tastes. What matters is which of the three channels (visual, audial, or kinesthetic) he uses more often, because he primarily perceives the information received through the channel. What would be more important for a child: first to see, imagine, and then to hear and to taste, or the other way around, first to "try it on" and only then to imagine how it looks.

Our experience shows that during the first step of developing creativity, it is essential to "provide" a child with an opportunity and a tool for creative activity through his main perception channel.

What conditions should be provided according to the specification of each child? How to provide for the miscellaneous creative child development? How to transmit the tools to the creation of a holistic creative product?

In search for the reply to the questions stated above, the psychologists and educators of Pedagogical centre "Experiment" had developed its own methodology of complex thematic creative activities, which include classes of music, art, arts and crafts, move and dance, as well as of different similar types of creative activity.

The main aim of the complex thematically creative activities is to create presuppositions for development of individual creative skills, as well as for the acquirement of tools for individual and group creative product development, such as a dance, a drawing, a text, a handicraft, etc.

If an educator has a culturally rooted concept of the development process of individual creative skills by enriching a child through his experience of different art fields and interaction with other children, he would be able to achieve unique team and individual results in his professional activity.

It is essential to offer each child an opportunity for individual development.

Further, in this part, various elements of the activities for 5–6-year-old children would be provided. These children were already familiar with the main modalities of imagination and creative thinking. They already have a certain experience and an understanding of the process going on in the outside world, which they could use as a ground for imagination and creativity in order to supplement existing patterns and to construct their own models and views.

The technique for planning and implementation of the complex thematic activities:

> for planning the complex thematic activities it is important to pick up the correct thematic vector suitable for the imagination development of the age depending group. On the one hand it depends on the average level of development of the group and its type (logics, empirics, creators and etc), an, on the other, on the educator's understanding of psychological process within the child during the accomplishment of different creative tasks.

There are a few logical approaches to the issue-related activities:

if the group of children is able to follow the content/plot, the thematic activities could be based on fairy tales or well known stories. In this case the educator may offer to transform (to change) the original plot of the famous fairy tale or a story, or even to suggest to make up own plot/story/fairy tale.

Choosing the path, one should be aware of the fact that an imagination could possibly be substituted by memory and restoration of the original plot. During the activity, children are supposed to use their imagination, and memory, they are requested to create their own images and to express them orally, but not to reproduce the images and plot created once by an author.

If the majority of children in the group possess the visual thinking, they could be asked to reflect on the outside world filled with unpredicted and unique natural phenomena. Such topics as "an underwater world," "a magic forest," "a celestial adventure," "white and snowy winter," etc. could be used for the activity.

In this case the opportunity for children to involve their creativity is much higher, for they will use their experience and imagination to complete the missing parts of their perception (comprehension, feeling, cognition) of this or that natural phenomena. Moreover the risk that they would turn to their memory instead of the imagination is much lower than in the first case.

One of the main features of the complex content (thematic) creative activity planning is that it is based on a modified scheme of thinking activity by G. P. Shchedrovitsky (Щедровицкий 2005). The scheme is widely and often used by the educators and psychologists of the center in order to organize a productive communication within a group or just for producing a common creative product (Fig. 21.6).

According to the scheme, the particular role of an educator is to create a special and safe space for the teamwork, where he would be able to trace the culture of the content development and also to facilitate the group in order to receive a common creative product. In this case, both educator and children should go through three different stages:

At the first stage (thinking activity) – as we named it "creation and facilitation of a common space for the group work" – the educator is expected:

To introduce the norms of communication and teamworking process
To formulate the creative assignment (task) for the group
To motivate and to involve children in the problem solving

The second level (thinking-communication) is meant for communication, i.e., for exchange of opinions among children and their discussion on the problem solving and common creative product development. Here the educator should follow and examine the logic and the culture of the content and concepts used. At the same time he has to keep in mind his aim that the productive communication on the development of the creative product should result in acquiring a new knowledge by its participants.

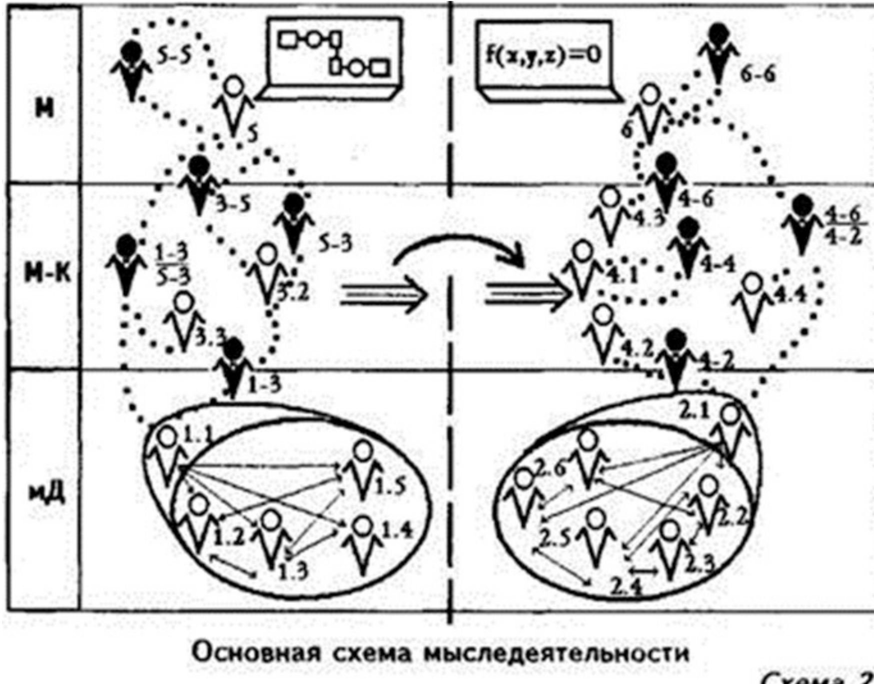


Fig. 21.6 General model of systematic thought activity (STA) methodology

The third level (thinking) is the final stage of discussion and development of the common creative product, as well as the right space for the record of collective and individual results.

Here is an example of planning and implementing of the complex thematic activity on the topic of the underwater world. It consists of several autonomous but at the same time connected thematic modules, such as:

> the main goal of the dancing module (containing music and movement) is to develop the ability to transmit the content (message) through movements. While accomplishing a thematic assignment given at the complex activity, children are able to discover an opportunity to express themselves through music (or special selection of music in order to create or play an image or natural phenomena) and movement (creation of an image or a hero through various motions).

A few examples of an activity assignments presented as an element of a facilitation technique of the first stage (the providing of a creative space):

> Greet children and invite them on a trip to an underwater world … Ask them to close their eyes, because in a few seconds they would hear music and each of them would go on his own trip. Also kindly ask them to remember the most interesting and exciting sight, events

and creatures they would meet in the underwater world, so that later on they would be able to share it with their fellows.

Choose a gentle fragment of the classical music that has changes in its flow, and put it on for 15–30 s. Depending on the reaction of children, you can use either compositions of Paul Moriah or classical music played by the symphonic orchestra for the children. Children often report on seeing fish, stones, shells, plants, etc. After the first immersion and its reporting, suggest for the children to immerse themselves into the underwater world for the second time, but this time to ask them to pay attention to the mood of the underwater world. The educator has to put on alarming music, which might remind a storm or a rapid flow.

After the second immersion, the children would report on being worried because of the waves. Follow the topic of the waves and suggest for the children to dance like ways, so they could play how the waves and the general mood in the underwater world changes because of the music. Provide them with the demonstration of certain wave movement and guide them through the activity …

One could also prepare an additional (supportive) material for the group, like giving each child “a wave” (a blue silk scarf attached to a stick that in a motion looks like a wave). If you see that each and every child is doing well, simulates waves, and follows the music, offer them to become a one big wave (a large piece of blue silk material which children hold and move to create a wave).

Only after the educator made sure that all children got involved into the general topic, he could suggest them to make up their own imaginary underwater world, thus passing from the first stage to the second. At the second stage, children have to discuss and create a collective creative product, based on the shared mood and thematic and creative space created. Invite them to discuss the mood of the underwater world, and put up the music according to their choice. Also ask them to pick up characters since they already have an experience of immersion and encountering there stones, shells, plants, etc.

After the second stage, and discussion before moving to the third one, in order to sum up (to close) the activity, invite children for another collective immersion into the underwater world in order to become a part of it. Everyone should turn into a being according to his taste and like. Also remind children that the mood of the sea and all its inhabitants depends on music and waves.

If you see that children are willingly going through the transformation and immerse themselves in the space of the underwater world, try to change the flow of the music. Watch and test how deep children could feel (experience) the mood and to reflect it in motion.

After the development of the collective creative product, in our case it is an underwater world’s dance, suggest to the children to discuss the common and individual results. What do they like or dislike, and what would they like to try next time? This is the third stage – the development of a common product – a new result of a group work. These reflections are useful for the educator to understand the level of the results and to prepare assignment for the next class.

The dance block promoted development of child’s:

Ability (sense, feeling) of transmission of a message-text through music or motion

Ability to use music and motion as additional strengthening means for an expression of a hero or the creation of a whole image or character

This music and dance development is a powerful tool for a deeper understanding of a natural image or phenomenon. Thus it provides more opportunities for self-expression. Children acquire tools for creating of an image through dance or motion. They could transform themselves into a created image or to assist the other to develop his image.

A creative perception of music and movement is being developed with a child, and it reveals itself in the following product sequences:

image – message (text) – music
music-message – motion

The creative block (consisting of visual art and handicraft) is aimed to provide tools for development and understanding of an image or a natural phenomenon through the means of visual art and handicraft.

The exploration of the underwater world could be followed by a drawing activity, when children are requested to describe their underwater world by the means of the visual art. The whole procedure is accompanied by the music.

One of the branches of the block is the activity of transformation of the space – decoration activity aimed on development of the ability to reflect the theme into spatial design.

Suggest children to transform the classroom space into the living underwater world by using materials on hand.

The creative activity of the block enables children to create a platform for a more holistic perception of the common theme of an image or natural phenomenon. Children express themselves and develop their perception of space, decoration, and interrelation of text, message, mag, character, plot, etc. Children learn to view and perceive message and space as a whole. Thus a creative perception of space is being developed and linked as a product from message (theme, subject, content, idea, image text) – creative design (a product of creative activity).

The main feature of the complex activities is the lack of time limit. Our experience proves that it is almost impossible to predict the pace of the creative activity both for the individuals and a group. It is completely unacceptable "to pull children out" of the process of creating the imaginary.

The complex activities could be arranged by using various techniques:

Synchronous – a common assignment is provided for the whole group and later it is divided into individual tracks according the child's inclinations, but providing an opportunity to change tracks.

Consistent – a group takes each block of the complex activity,e.g., every second day, children have "creative workshops" on the certain blocks of the complex activity.

The important factor of the complex thematic activity (or series of activities) is the final creative product.

The results of the complex activities:

Each of the thematic blocks mentioned above creates its own creative space, where each and every child could find himself an opportunity for individual development of his own

creativity. Although by immersing himself into a collective creative activity he is able to acquire tools for development of creative products from various creative spheres.

It is worth mentioning that the products received in the result of each block could also be viewed independently, e.g., a dance, a text, or a drawing.

They could be joined into one "perception" as a common collective product of the age-dependent group. For example, 5–6-year-old children played the fairy tale of "A palace" ("Teremok") by transforming themselves into different animals (according to their wish and taste), making up motions to distinguish them (gait, manner); they have also complemented the original text, and guided by the educator of design, they have decorated the stage for the performance.

All mentioned above shows clearly that a modification of the thinking activity could be used by an educator of a specific field, i.e., for developing a creative product both in the case of a certain subject and in a complex of subjects.

It is an absolute fact that in order to receive a higher quality of creative development of a child, it is necessary to implement the scheme for the creative activities more often.

21.5 Conclusion

The implementation of practices and methodological recommendations for the various aspects of preschool education described above are:

Training for psychological and pedagogical personal
Psychological accompaniment (tracking) of a preschool-age pupil
Usage of computer games
Development of creativity

All of them allow to prepare a child of 5–6 years old for study process in the DEC system (first year), but also promote the development of his skills of education activity that are essential for the success of his educational process in the future.

Despite the majority of "old" concepts and the establishment of new schools and traditions of child preschool training, the preschool education system still remains a disagreement battlefields for many scholars, educators, and psychologists. Recently, parents, as the main subjects and customers of education, had joined the discussion. Our 25-year-long experience, envisaged above, could promote the increase of quality of preschool education and the level of maturity for school study process.

References

Акопова, Э.С. и др. Развитие способности воображения в дошкольном и начальном школьном возрасте. – Москва, 2005

Акопова, Э.С. и Иванова, Е.Ю. Развитие способности воображения в дошкольном и начальном школьном возрасте. Сценарии занятий и уроков. – М., 2006.

Афиногенова, М.А. Освоение способов мышления и деятельности детьми младшего школьного возраста. – М., 2007

Венгер, Л.А., Дьяченко, О.М. «Игры и упражнения по развитию умственных способностей у детей дошкольного возраста». 1989

Выготский, Л.С. Детская психология. /Собр. соч.: в 6 т., – М., 1984, Т.4.

Выготский, Л.С. Педагогическая психология /Психология: классические труды. – М., 1996.

Гатанов, Ю.Б. Курс развития творческого мышления.- Санкт-Петербург, "Иматон", 1998.

Давыдов, В.В. Теория развивающего обучения. – М., 1996.

Давыдов, В.В. «Виды обобщения в обучении», – М., 2000.

Давыдов, В.В. «Деятельностная теория мышления» – М., 2005.

Давыдов В.В., Кудрявцев В.Т. Развивающее образование: теоретические основания преемственности дошкольной и начальной школьной ступени. Вопросы психологии, 1997, 1, p. 3–19.

Дьяченко, О.М. Развитие воображения дошкольника. – М., 2007.

Зак, А.З. Методы развития интеллектуальных способностей у детей 6–7 лет. – М. 1994.

Зак, А.З. Развитие интеллектуальных способностей у детей 6–7 лет. – М. 1996.

Зельцерман Б. «Эксперимент»: вчера, сегодня, завтра …. – Рига, 2007.

Зельцерман Б. Время «Эксперимента» – Рига, 2002.

Зельцерман Б., Рогалева Н. Учись! Твори! Развивайся! (игры для развития мышления, речи, общения, творчества. – Рига, 2000.

Кудрявцев В.Т. Концептуальные основы проекта развивающего дошкольного образования «Тропинки». – М., 2007.

Кудрявцев В.Т., «Примерная основная общеобразовательная программа дошкольного образования «ТРОПИНКИ» – М. 2012.

Родари Джанни. Грамматика фантазии., Москва, 2011

Эльконин, Д. Б. (1989). Избранные психологические труды.Москва. Педагогика - 1989

Танцоров, С.Т. Групповая работа в развивающем образовании. Рига. ПЦ "Эксперимент"., 1997.

Цукерман, Г.А. Виды общения в обучении. Рига, 2000.

Щедровицкий, Г.П., Мышление, понимание, рефлексия. – М. 2005

Щедровицкий Г., Розин В., Алексеев Н., Непомнящая Н. Педагогика и логика. – М. 1993.

Crutchfield, R.S., Creative thinking in children: Its teaching and testing. In Brim, O. G., Crutchfield, R. S., & Holtzman, W. H. New York. New York: Harcourt/Brace.

Renzulli, M. J., Ford, B. G., Smith, L., & Renzulli, J. S. (1986). *New directions in creativity*. Mark A. Mansfield Center: Creative Learning Press.

Torrance, E. P. (1965). *Rewarding creative behaviour: Experiments in classroom creativity*. Englewood Cliffs: Prentice-Hall, Inc..

Veresov, Nikolai. Zone of proximal development (ZPD): The hidden dimension? http://nveresov.narod.ru/ZPD.pdf, 2004

«Стандартизация» дошкольного образования: путеводные звезды и подводные камни. http://obruch.ru/index.php?id=8&n=76&r=2

Материалы Монтессори http://www.montessori-piter.ru/

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Australasian and South Pacific*

Susan Grieshaber

Chapter 22
Introduction: Early Childhood in the Australasian Region

Jane Bone

Abstract This section of the handbook has contributions from authors who identify as part of Australasia as it extends from Australia and New Zealand to the Indian subcontinent. This area is characterised above all else by its variety. This introduction outlines changes and affiliations that characterise early childhood education in Australasia.

Keywords Australasia • Early childhood education • Quality • Curriculum

This section of the handbook has contributions from authors who identify as part of Australasia as it extends from Australia and New Zealand to the Indian subcontinent. This area is characterised above all else by its variety. The chapters written here reflect this, coming as they do from Bangladesh, Australia, New Zealand and Brunei.

Australasia is an exceptionally diverse area and this makes most generalisations about the region redundant. In most instances, areas of the world are linked to geographical location but at other times may be connected through ethnic links across borders or by political affiliations. Sometimes political decisions infiltrate education and are a deliberate way of strengthening ties, for example, Australia's wish to have stronger affiliations to Asia is made explicit through the school curriculum. In current curriculum documents, Asia is seen as a region with "cultural, religious, historical and language boundaries or commonalities" (Australian Curriculum 2014).

This diversity is evident in the chapters presented here, and of course even within each country, the authors do not claim to be representative but rather want to give a perspective from a particular direction. This might be seen most clearly in a country like Bangladesh, featured here in this handbook. Bangladesh is a country with a population of 153 million inhabitants and clearly it is impossible to represent the views of so many people. It may be assumed that Bangladesh would have little in common with New Zealand, population 4.5 million. In both countries, however,

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there are contributions to be made and different agendas when it comes to early childhood education (ECE). This is the point made about Brunei, population 415,000 (approx.); despite being a small country, there is also a definite contribution to make in terms of international interest. The writers do not claim to be saying the last word but their chapters give historical background and represent contemporary viewpoints and as such are a valuable aspect of this handbook.

Professors Pramling-Samuelsson and Fleer (2009) suggest that despite differences "it appears, that all over the world, there are intentions to give children a good start in life…" (p.173). In an earlier handbook, they acknowledged "commonalities and distinctions" (Pramling-Samuelsson and Fleer 2009), and the important thing here is also to recognise that a multiplicity of perspectives will be addressed. The notion of difference and commonality can be equally applied to the chapters that follow. They give a unique and particular insight into early years' education from a part of the world that is seen by some to represent the future and to be key to future power relations in the world.

The role of children and childhood in these places is itself sometimes privileged and is also too often characterised by poverty and discrimination. In some countries in this vast region, for example, one might see children going into kindergarten in smartly pressed uniforms next to another child experiencing extreme poverty. It is a challenge for early years' education, and the policies that support it, to make it equitable and not a contributor to privilege and inequality. In Bangladesh the minimum wage per month is approximately the same as that for an Australian per hour (Minimum Wages by Country, np). In Australia the pay rate for many early childhood educators is nevertheless seen as discriminatory and marginalising. This is a reminder that all is relative to context and expectations, and despite these disparities, very different places in Australasia are interested in the potential of early childhood education. It is worth being aware though that in terms of rights and participation in education, there is still a drive to give all children a primary education in many countries, and in many places early childhood education is an unimaginable luxury. However, the goal is there and it may be possible one day to include all children in the benefits that flow from a quality early years' education (see, Smith and May).

The chapters here do not focus on the political context. Instead they try to give a current overview of the direction in which ECE is heading right now and there is an obvious emphasis on aspiration for the future. Grieshaber and Nuttall advocate for more research to support the comparatively mature field of early childhood education in Australia. Mohamed, Yaakub, Pearson and Sim describe the national vision put forward for Brunei, especially for the children and grandchildren who will be the recipients of this vision. They note that Brunei Darrussalam is the smallest country in Australasia, and like the curricula of other countries, there is an emphasis in the early years on developing a strong sense of identity. In early years' education, there has to be a broader understanding of education and as the authors note, an emphasis solely on the traditional three "r's" is too limiting. Brunei is focusing on increasing holistic approaches to early years' education.

A holistic approach and inclusive curriculum framework has always been a feature of early childhood education in Aotearoa New Zealand. Smith and May

chart advances made over time in New Zealand, and their analysis underlines that change and recognition of the importance of the early years do not happen quickly. Unhappily, since 2010, the attributes that made New Zealand early years' education an international leader have diminished due to changes in the government. This does highlight the importance of having a supportive government with a strong vision for the nation's children and a propensity for forward thinking. They make the point that a positive investment in the future through ECE is not the same as putting economic benefits before children's well-being. Smith and May show clearly that a respectful approach towards early years' education creates change plus a recognition that early childhood educators need to be well qualified, and they stress that it is not (as the Brunei authors mention) acceptable for teachers from primary education or with low-level qualifications to be educators of young children.

This is most obvious in international studies about quality and teacher qualification is a key contributor to quality early childhood education. Grieshaber and Nuttall review ECE in Australia and make the important point that "teachers can be either agents of cultural change or perpetuate inequality. This has particular implications for the preparation of early childhood teachers". Clearly this is something that deserves attention internationally as more and more children enter places of early learning, some as private clients and some as publicly funded citizens. Peter Moss (2014) has recently written about the old and new stories that underpin discussions of quality. Perhaps the attention given to preparing well-qualified teachers is part of the new story waiting to be given priority in terms of what young children deserve and the outcomes that are identified here by Smith and May.

In support of this contention, Sikder and Banu make the strong statement that in Bangladesh, too often, "in teaching, quality is absent". They identify the practices of teachers in pre-primary classrooms who educate in a way that does not acknowledge the developmental requirements or the strengths of young children in terms of play and imagination. Banu's (2012) research found that only too often "pre-school teachers focused on teacher directed teaching, coaching, memorising of facts through rote learning, and frequent testing to prepare children to pass primary school entrance examination". The argument made by all the chapters here is that when dealing with children in complex situations and when trying to foreground sound educational approaches, then the emphasis on well-qualified early childhood teachers has to be a focus.

All chapters have a historical perspective and take a long view of early childhood education in each place. These chapters will be a resource for future researchers and may influence policy makers who wish to review the state of early childhood education in these times when as Moss (2014) suggests, the emphasis remains on "high returns for social investment". Teachers, as Grieshaber and Nuttall emphasise, deal with cultural diversity in a changing world; they deal with health and well-being under challenging circumstances (Sikder and Banu); they deal with aversive changes in government support (Smith and May). When government support is forthcoming, then countries like Brunei may realise the "ambitious aims" that according to Mohamed, Yaakub, Pearson and Sim have the potential to support harmony and balance different beliefs and values.

References

Australian Curriculum. (2014). Accessed http://www.australiancurriculum.edu.au/crosscurriculumpriorities/asia-and-australias-engagement-with-asia

Banu, M. S. (2012). *Exploring the quality of classroom teaching practices in preschools in Bangladesh*. Unpublished PhD thesis. Monash University, Australia.

Minimum Wages by Country. Accessed https://en.wikipedia.org/wiki/List_of_minimum_wages_by_country

Moss, P. (2014). *Transformative change and real utopias in early childhood education: A story of democracy, experimentation and potentiality*. Abingdon: Routledge.

Pramling-Samuelsson, I., & Fleer, M. (2009). Commonalities and disstinctions across countries. In I. Pramling-Samuelsson & M. Fleer (Eds.), *Play and learning in early childhood settings*. New York: Springer. doi:10.1007/978–1–4020-8498-0_9.

Chapter 23
The Historical Emergence of Early Childhood Education Research in Australia

Joce Nuttall and Susan Grieshaber

Abstract This chapter of the handbook raises the question of whether early childhood education has reached the status of a mature field of research in Australian universities. It is organised around the discussion of three historical 'moments' between the 1930s and 2014. The authors argue these moments constitute turning points in the emergence of early childhood education research and scholarship in Australia, as distinct from research about children's learning and development that draws on medical and psychological perspectives. A glimpse of the present moment is provided through an analysis of the recent contents of two prominent international early childhood education research journals edited in Australia. The chapter concludes by reflecting on the conditions under which early childhood education researchers in Australia presently conduct their work and the relationship between these conditions and the implications of higher education policy for the continuing emergence of the field.

Keywords Research • Early childhood education • Historical moments • Higher education policy • Cultural diversity • Teacher education

23.1 Introduction

Visitors to Australia are often unprepared for its vastness. Australia is an island continent that ranges from its near neighbour, Indonesia, in the north to almost the sub-Antarctic islands in the south. Laid over the continent of Europe, it would spread from Portugal to Moscow. Yet its population is only around 23 million. The vast majority cling to the coastal edge where each of its state capitals is located.

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Only the federal capital, Canberra, is inland. Most of these capitals are less than 200 years old, yet Australia is home to the world's oldest continuous indigenous culture, stretching back at least 50,000 years. Australia is also one of the most multicultural of countries. It has hosted successive waves of colonisation and migration since the late 1700s, including large numbers from Southeast Asia, New Zealand, the UK and the Pacific.

Within the last three decades, the advent of fast, regular air travel and reliable Internet-based communication has allowed scholars of early childhood education to communicate and collaborate across this vast geographical space. Our purpose in this chapter is to pause and take stock of these research endeavours and reflect on the extent to which early childhood education research in Australia displays the characteristics of a mature research field. By 'mature', in relation to research, we are interested in questions not only of scale and scope but questions of theoretical and methodological informants. We also understand early childhood education research to be situated within the broader field of education research, and early childhood academics as agents who understand the rules of the field and bring to it their own cultural and social capital (Bourdieu 1993). Furthermore, we understand it as a field distinct from other fields that pay attention to young children, such as medicine and psychology, a distinction that has not always been as evident as it is today.

In recent times, the field of early childhood education research in Australia has undergone rapid expansion. By tracing these developments since the first half of the twentieth century, we hope to show the richness and plurality of these research efforts in the early years of the twenty-first century. We do this by describing three 'moments' that we argue have been pivotal in this emergence. These moments were not necessarily characterised by dramatic events. At each of these moments, however, important trends emerged to the point where they could not be ignored. In tracing this historical story, our intention is to give a sense of development over time. In paying special attention to the contemporary moment, we use two main entry points to reflect on the extent to which early childhood education research in Australia has achieved the conceptual and methodological plurality expected of a mature research field. Our first entry point is via a convenience sample of research outputs from recent early childhood education research journals published in Australia, and edited by Australian academics. Our second entry point relates more specifically to the distinctive demands being placed on early childhood education in the early years of the twenty-first century as a consequence of contemporary policy moves. We have chosen to focus on the demand for the field to support and respond to Australia's cultural diversity. By taking this focus, we are able to give a sense of the wide variety of angles Australian early childhood education researchers are taking in engaging with this challenge, as well as the wide range of theories and methodological standpoints being brought to this important work. This is by no means the only challenge facing early childhood education researchers in Australia. We have selected it, in addition to reflecting on recent research publications, in order to illustrate the main claim of this chapter: that early childhood education research in Australia is now a mature field.

Our overall theme is one of emergence. We aim to show how research in early childhood education in Australia has developed as a culturally and historically accumulating phenomenon and how this emergence continues today. In the final part of the chapter, we reflect on the conditions under which early childhood education academics conduct research in Australia today and the implications of higher education policy for the continuing development of the field.

23.2 The Historical Emergence of Early Childhood Education Research in Australia

Research in early childhood education in Australia has both reflected and been influenced by the development of early childhood education services. Most services now called early childhood education had philanthropic beginnings in the early years of the twentieth century. This philanthropy aimed to provide 'necessary education and social training to compensate for poor environmental conditions' (Ashby and Grieshaber 1996, p. 131). There were close ties to the kindergarten movement in Europe, particularly the ideas of Friedrich Froebel. From these modest beginnings, and for the purposes of discussion in this chapter, we align research in early childhood education in Australia with three 'moments of discontinuity' or the emergence of 'something new' (Kendall 2001, p. 36). This discontinuity creates tension between what is and has been and what is new: 'between memory, fidelity, the preservation of something that has been given to us, and, at the same time, heterogeneity, something absolutely new, and a break' (Derrida 1997, p. 6). The success of what is new relies on whether and how it contradicts or is aligned with existing and established ways.

The 'first moment', itself an outgrowth of early philanthropy, occurred from 1939 to 1940. At this time, the Commonwealth Government made its first major investment in early childhood education. This paved the way for the services – and the research – that followed. The second moment saw pre-service early childhood teacher education move into universities in the early-to-mid 1990s. The third is the early childhood reform agenda, which began in 2007 and continues today. In the following sections, we discuss these three moments, focusing on how these points of cultural and historical discontinuity, and the subsequent emergence of something new, stimulated the development of early childhood education research in Australia.

23.2.1 The First Moment: Early Childhood Education Research as the Study of Growth and Development

The first moment begins in the late 1930s and ends in the 1980s. In the introduction, we identified early childhood education as a field distinct from, but historically related to fields such as psychology. This separation is recent. Fields with research

traditions such as medicine, health and developmental psychology characterised the first moment of early childhood education research. This was seen most emphatically in the establishment of a Lady Gowrie preschool centre in the capital city of each state in the late 1930s.

The Lady Gowrie centres were the first major investment by Australia's Commonwealth Government in early childhood education (Brennan 1994). The six centres were opened in 1939 and 1940 and located in industrialised inner-city areas where there was concern about the poor living conditions of families (Pendred 1964). These centres included major programmes of research into physical development: they were charged with the 'double purpose of the care and instruction of the young child and the study of growth, nutrition and bodily development' (Cumpston and Heinig 1945, p. iii). This focus reflected ongoing concern about the effects of the economic depression in Australia (1929–1933) on children's health. Details of individual children's age, weight, height, and other physical features were recorded for research and monitoring purposes. These practices are no longer featured in Australia's early childhood education services but remain a focus of Australia's field of maternal and child health.

As further evidence for this early reliance on medicine, health and psychology, in her account of the first 40 years of the *Australian Journal of Early Childhood*, Waniganayake (2001) noted the 'predominance of articles written by psychologists and medical practitioners' (p. 3) in the journal's predecessor publication, the *Australian Pre-School Quarterly*. This journal became the *Australian Journal of Early Childhood* in 1974 and is now the *Australasian Journal of Early Childhood* (AJEC). By the time the first group of external reviewers of submissions to the journal was established in 1988, the journal was attracting submissions from a wide range of disciplines beyond medicine and psychology, including sociology, anthropology and politics. We return to this journal later in this chapter as an entry point for understanding the third (contemporary) moment of emergence of early childhood education research in Australia.

Few early childhood education academics were employed in universities during this period. On the rare occasion that this occurred, their likely area of expertise was child development rather than early childhood education, and the sources of their ideas came from overseas, principally the USA and UK. Dr Anne Silcock, employed during the 1980s as a senior lecturer in education at The University of Queensland, is one example. Child developmentalists such as Silcock applied ideas from research in education and child development to early childhood education. In an article published for teachers in 1981, Silcock discussed the qualities of a responsible teacher. These included professional and personal qualities, influences on teacher-child interaction, and authoritarian and democratic teachers and teaching styles and their effect on academic progress. She cited eight references, none of which were Australian, ranging from 1946 to 1980. These included the now well-known Brophy and Good (1972) paper on 'Behavioral Expression of Teacher Attitudes', two articles published in the journal *Child Development* (in 1965 and 1968), and Lillian Katz's (1980) 'Mothering and teaching – some significant distinctions'.

Silcock's paper exemplified the lack of Australian research about early childhood education from the first historical moment in the late 1930s up until the early 1980s. Overall, the field during this time was characterised by reliance on overseas ideas, influences and practices, predominantly from the USA and UK. The paper by Silcock does foreshadow, however, the coming 'second moment', characterised by movement beyond ideas drawn principally from child development.

23.2.2 The Second Moment: Early Childhood Education Research Joins the Academy

The second moment covers the years in the 1990s. In the early 1990s, state-owned and state-controlled colleges of advanced education (CAEs) were amalgamated with federally funded and independent universities. This stimulated a second pivotal moment in the emergence of research in early childhood education in Australia and accelerated the growing discontinuity between the first and second moments. These amalgamations were part of a series of reforms of higher education instigated by John Dawkins, Commonwealth Minister for Employment, Education and Training from 1987 to 1991. The reforms included expansion of the Australian university sector and reintroduction of university fees. With the movement of early childhood pre- and in-service teacher education courses into universities, the focus of early childhood academics was no longer solely the preparation of teachers. They were now required to research and publish, as well as teach undergraduate and postgraduate students, and contribute meaningfully to their educational and professional communities. In their commentary at the time, Knight et al. (1994) contextualised these reforms within a wider post-war program of neoliberal reform, noting the shift from Keynesian economic principles to 'a new post-Keynesian competitive state approach' (p. 453).

This political and policy shift had important implications for early childhood education research. Up until the amalgamation of CAEs with universities, limited funds were available for research in early childhood education, and applications for competitive research funding depended upon employment in universities. An increasing number of doctoral dissertations in early childhood education appeared throughout this decade, and although the research base was small, it was growing. However the requirement to rapidly increase qualifications and up-skill research practices meant there were still only a few specialist early childhood researchers with the capacity to develop new research projects. A complicating factor was that research funding within universities and externally was (and still is) highly competitive. Time was needed to learn the genre of research grant writing and, if successful, how to lead and manage a research project alongside teaching, publication and engagement with the professional community. With a small number of recent postgraduate degree completions and little research experience, it was very difficult for early childhood education researchers to be competitive. During the 1990s,

postgraduate programs in early childhood education were also being developed, often as part of generic master of education programs. As well as the demands of completing higher degrees, researching and publishing, early childhood academics were now required to learn the skills of postgraduate teaching and research supervision.

Expectations of research participation and output by university academics continued to intensify during the 1990s. This second moment saw a steady growth of early childhood education research in Australia located firmly within education rather than related fields. The history of the content of the *Australasian Journal of Early Childhood*, noted above, is one way to trace the emergence of distinctively Australian research in early childhood education. A second important journal, *Contemporary Issues in Early Childhood*, appeared in 2000 with the aim of providing:

> …a context for presenting work that engages in alternative perspectives from those used traditionally in the field. As editors, we are delighted to have the opportunity to make available online and fully-refereed, current research and thinking that has emerged over the last decade. What makes this journal unique is that it contains current research and thinking that utilises different theoretical perspectives from those most frequently adopted in early childhood education. Some of the articles and colloquia published in *Contemporary Issues in Early Childhood* critique issues that many early childhood educators have accepted as unquestionable. We view this journal as an opportunity to showcase current challenges. It will exemplify the disquiet of some with traditional approaches and voice the reasons for such concern. It will also present some of the creative approaches that are being used to provide theoretical and practical ways ahead. (Grieshaber and Yelland 2000, p. 1)

The emergence of this journal, with its aim of presenting 'alternative perspectives', marked a maturing of early childhood education research in Australia and internationally. The conceptual frameworks available to researchers in early childhood education had multiplied and diversified since the dominance of the psychological and medical models of the 1970s seen in the *Australian Pre-School Quarterly*.

This diversification was further reflected in two scholarly conferences in early childhood education established during this second moment. The first, the Australian Research in Early Childhood Education (ARECE) conference, was established by Marilyn Fleer at the University of Canberra in 1993. ARECE (now International Research in Early Childhood Education) remains an important meeting ground for early childhood education researchers adopting sociocultural and cultural-historical perspectives on early childhood education, and its accompanying journal is a key outlet for doctoral candidates in ECE to begin dissemination of their work (Power 2010). By contrast, the other conference to emerge in the second moment – the annual conference of the Centre for Equity and Innovation in Early Childhood Education (CEIEC), established by Glenda MacNaughton in 2001 at the University of Melbourne – became known for its emphasis on postmodern and poststructuralist perspectives on research in early childhood education. These journals and conferences underscore the emergence of early childhood education as a field in Australia in this second moment, alongside (and not necessarily rejecting or subsuming) related fields such as child development. These examples of the work of Professors Fleer, MacNaughton and others also reflect the growing presence of early childhood academics among the professoriate in Australian universities during this period.

From its beginnings as an outgrowth of medicine and psychology in the first moment, a distinct educational strand in early childhood education research had emerged, focusing on curriculum, pedagogy and the education of early childhood teachers.

The transition to a research and teaching culture invariably took some time, but early childhood education research momentum grew steadily in Australia in this second moment. An important stimulus was the 2001 OECD report *Starting Strong*. This multi-country review of early childhood education provision recommended that countries create a stable framework for early childhood education research. As an OECD member country, the report had important implications for research in Australia. It could be used to leverage policy makers, politicians and funders. This was the opportunity for the field to identify long-term research agendas and necessary funding and training opportunities. The recommendations of *Starting Strong* included establishment of a long-term research agenda emphasising the connections between research, policy and practice. In keeping with changes already emerging in Australia in the second moment, the report recognised the dominance of methodologies associated with program evaluation and developmental psychology and suggested wider perspectives were needed. The disciplinary areas of anthropology, sociology, public policy, gender studies and learning theory were identified as appropriate theoretical bases from which policy and practice could be developed.

These recommendations came at the right time for early childhood education researchers in Australia. Several reviews of research in early childhood education had been undertaken locally (Centre for Community and Child Health 2000; Fleer 2000; Raban 2000; Yelland 2000). Three of these reviews were supported by the Australian Government Department of Education, Training and Youth Affairs (DETYA) (Fleer 2000; Raban 2000; Yelland 2000), an acknowledgement by the Commonwealth Government of the lack of research in early childhood education until that time. All four Australian reviews highlighted specific research directions for the field, and each recommended that the government fund longitudinal research. These reviews also positioned early childhood education, by the end of the second moment, as an emerging subfield of education research. By the early 2000s, researchers were adopting new conceptual informants such as post-structuralism and socioculturalism, or continuing to draw from established fields such as child development, or newer fields such as family studies and the sociology of childhood. There was also a growing body of Australian early childhood education research being reported in Australia. Early childhood education research in Australia was now well positioned for the third moment.

23.2.3 The Third Moment: Early Childhood Education Research as a Mature Field

In our description of the previous two moments, we have shown how the development of early childhood education research has co-evolved with government initiatives in early childhood education and developments in education policy, particularly

the reforms of higher education policy of the late 1980s. This co-evolution has been particularly noticeable since 2007, when the Council of Australian [state and federal] Governments (COAG) began implementing a large project of policy reform in early childhood education. These reforms, underpinned by theories of human capital (Heckman and Masterov 2005), are designed to improve access to services, increase rates of participation and raise the quality of early childhood programs (COAG 2009). They also break with Australia's history of state-based regulation of early childhood education and funding splits between state and federal budgets.

The COAG reforms present multiple entry points for research in early childhood education in Australia. Australia's early childhood education researchers are actively responding to these opportunities. A brief summary of the contents pages of recent issues, one from each of two major early childhood education research journals edited in Australia reflects the wide range of early childhood education research now being conducted and reported in Australia. Of particular interest in the context of this chapter is first, the wide range of topics being addressed by Australian researchers; second, the range of research approaches reported; and third, the growing range of theories informing early childhood education in Australia. A fourth feature is the publication of the work of overseas authors, a feature of the first and second moments but now drawn from a much wider geographical range beyond the USA and UK.

The contents of the two journal issues summarised here are from *Contemporary Issues in Early Childhood* [CIEC], 14(3), 2013 and the *Australasian Journal of Early Childhood* [AJEC], 38(3), 2013. The first of these contained seven papers, all original research articles; the second contained 25 papers, including those in its online supplement. All of the articles in both issues are firmly located in the field of early childhood education but the diversity of topics is considerable, including:

Professionalism
Professional development
Play
Research ethics
Transition to school
Early literacy
Programme evaluation
Early childhood policy
Leadership
Autism
Breastfeeding
Emotion regulation

Some of these topics are represented by two or more papers. Equally diverse is the range of methods and methodological choices made by authors, which include:

Ethnography
Literature review
Meta-analysis

Narrative
Oral history
Action research
Photo voice
Case study
Questionnaire
Clinical interviews
Content analysis via text analysis software

Again, several of these approaches (case study, content analysis) are reported in two or more of the papers across the 32 drawn from these two journal issues, and many articles report two or more methods. However, not all of these studies were conducted in Australia or by Australians. What is notable about the geographical reach of these journals in this 'third moment', when compared with pre-1980 publication patterns, is that the published overseas research is not confined to the USA and UK. Articles included in these two issues are principally by Australian authors but authors also come from New Zealand, Greece and Hong Kong.

Perhaps of greatest interest in the context of this chapter is the range of theories informing early childhood education research in Australia. These include those emerging in the second moment, principally post-structuralism, and continuing evidence of psychologically oriented developmental theories. However, an even wider range of theories of learning, development, education and society is evident through the inclusion of reports of research informed by activity theory, phenomenography, theories of policy formation and ecological theory. We acknowledge that this probe applies to only a small and very partial sample of research outputs among Australian early childhood education researchers in the contemporary moment. Nevertheless we argue that diversity of theory and method evident in this small selection reflects the emergence of early childhood education as a mature research field in Australia. This diversity has been both stimulated and enabled by the co-evolution of early childhood education policy (e.g., the COAG reforms), higher education policy (e.g., the amalgamation of universities and CAEs) and structures created by the field itself (e.g., the ARECE and CIECE conferences).

In the next section of this chapter, we accentuate this argument by focusing on one key element of the current policy reform program, that of responding to the cultural diversity of children and families in Australian society. This research focus is closely interwoven with contemporary policy moves. For example, *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (Department of Education, Employment and Workplace Relations [DEEWR] 2009), advises early childhood educators to respond meaningfully to diverse cultural backgrounds. An exhaustive review of current research on this topic is not the purpose of this chapter. Instead we point to selected examples, drawn from recent research, to demonstrate how early childhood education researchers in Australia are taking up a range of concepts, theories and methods in their attempts to understand and analyse cultural diversity.

23.3 Australian Early Childhood Education Research and Cultural Diversity in the Contemporary Moment

Concern with supporting the diversity of cultures, ethnicities and cultural and ethnic backgrounds of children and families in Australian society has been the focus of much recent research and policy work. Some of this research has been prompted by policies such as Investing in the Early Years – A National Early Childhood Development Strategy (the Strategy) (COAG 2009); *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (the Framework) (DEEWR 2009); and the Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA] 2008). All three documents are premised on human capital theory, with the strategy aiming to ensure that 'by 2020, all children will have the best start in life to create a better future for themselves and for the nation' (COAG 2009, p. 13). Specific policy objectives in the Strategy are directed towards '… greater social inclusion; improved outcomes for the majority of children but specifically Indigenous children and the most disadvantaged; and increased productivity and international competitiveness' (p. 13). All three documents exemplify the idea that education can transform society, making it more equitable and just. Moreover, early childhood education has a 'critical role' to play in 'closing the gap in educational achievement between Indigenous and non-Indigenous Australians within a decade' (DEEWR 2009, p. 6).

Early childhood educators in Australia have a long-standing philosophical and practical commitment to such principles of equity and social justice. Writing in 2007, Potter neatly encapsulated the field's commitments in the third moment of early childhood education research:

> With globalization, increased mobility of families, and the resultant changes to the social and cultural profiles of many countries, early childhood education is in an exciting, challenging, and, in some ways, uncomfortable position. For many years, teachers have been influenced by developmentalists as they have tried to respond to the diverse needs of individual children. They have been concerned with developing and implementing developmentally appropriate curriculum. While these goals are still important, we now face some harder questions in relation to children's sociocultural contexts and the many societal influences impinging on their lives and learning. (p. 64)

Early childhood education researchers have adopted a variety of entry points for interrogating these 'uncomfortable' questions. We touch on two of these here. First, we consider research about how parents experience practising teachers' responses to the cultural diversity of families; second, we draw from research concerning the preparation of early childhood teachers for working with culturally diverse families. As with our exploration of recent journal articles, our aim here is to reflect on the variety of foci, theoretical informants and methodological preferences that are evident even within a small sample of studies in just one area of early childhood education research.

23.4 Researching Teachers' Responses to Cultural Diversity in Early Childhood Education

One aspect of the policy directives aimed at greater social inclusion taken up by early childhood education researchers is the experiences of families and communities. Effective partnerships among parents, teachers and the community are idealised in the literature but can be difficult to achieve. Harris and Tinning (2012) report data from a study informed by feminist perspectives that used semi-structured in-depth interviews to seek the views of 49 parents and carers accessing childcare in northern regional Australia in 2009. Results revealed several concerns, including that parents worried about the difficulty of finding childcare, that the quality of care would be less than expected and that it would be culturally inappropriate. Similar concerns are found in many other regional and remote areas of Australia. However, an example of successful community consultation and collaboration aimed at providing culturally appropriate services is related by Lee-Hammond (2013), who described the processes involved in developing an integrated children and family centre for Aboriginal families in Western Australia. Ecological theory framed the study which involved data collection techniques of semi-structured interviews, focus groups and informal 'yarning'. Key elements of successful service delivery are identified and accompanying descriptions of these key elements illustrate what community members consider to be features of a culturally appropriate centre. Another success story in a remote Indigenous community resulted from creating a jointly constructed 'yarning space' as a way for parents (mostly mothers) to 'build and lead a literacy learning community' (Harris and Tinning 2012, p. 53). This case study used narrative inquiry and portraiture techniques to gather data. However, concerns about culturally appropriate environments are not limited to regional and remote parts of Australia. The supported playgroup initiative provides culturally safe environments for children and families from migrant backgrounds, specifically those whose first language is other than English and who are experiencing 'the 'triple jeopardy' of disadvantages associated with household, neighborhood and cultural circumstances' (Warr et al. 2013, p. 47). Data gathered through semi-structured interviews revealed barriers to families accessing early childhood services and strategies for supporting family engagement.

Disturbingly, several studies also reveal evidence of social exclusion. A project involving interviews with 30 sub-Saharan migrant parents living in Melbourne, Australia, confirmed that these parents felt their children were 'othered, labelled and denied citizenship' (Agbenyega and Peers 2010, p. 46). Parents related instances of children being treated differently from others such as not being provided with a blanket and pillow at rest time, runny noses not being wiped, and nappies not being changed frequently enough. Examples of labeling are alarming, with one parent reporting that her child was called a monkey by a teacher, and others upset by the failure of staff to recognise the heritage of children born in Australia, with children frequently told '…you are not Australian you are African, you are Sudanese because you are black' (p. 52). Parents were also anxious about their children's future in

Australia because of the racism the children experienced at preschools they attended. Other research with mixed findings involved a study that interviewed six migrant parents from India about their perspectives on Australian early childhood practice (Patel and Agbenyega 2013). While the parents generally preferred Australian early childhood education settings because of features such as small child-teacher ratios and holistic approaches, mothers favoured direct instruction and considered play 'a waste of time' (p. 52). The parents expressed concern that the Australian curriculum 'distanced their children from their culture' (p. 52) and reported 'mixed feelings' (p. 53) about the effectiveness of a curriculum that is supposed to be based on principles of diversity.

Being able to communicate effectively is significant in matters related to transition to school. Interviews with ten Bangladeshi parents in Sydney, Australia, confirmed that friendships with children of similar cultural and linguistic backgrounds and support from teachers helped create constructive transition experiences (Sanagavarapu 2010). Transition was more challenging for those children with limited English. Language barriers also prevented parents from communicating with teachers and from accessing written information about transition and the school curriculum. A project by De Gioia (2013) that investigated communication processes and expectations of continuity of care between home and early childhood settings drew on interviews with families from six childcare centres from 'macro culturally diverse parts of metropolitan Sydney, Australia' (p. 111). These families purposely chose a service that was different from their own culture because they wanted their children to improve their English and to 'benefit from learning the traits of the dominant macro culture of society' (p. 118). The importance of staff moving beyond basic information giving to developing meaningful relationships with parents was also emphasised.

These small-scale studies indicate that while some progress has been made, social justice matters about ethnicity, culture and diversity require further attention in early childhood education in Australia. One way of opening possibilities for change is a move from multicultural to intercultural approaches (Miller and Petriwskyj 2013). This would involve addressing the 'cultural understanding of Australian early childhood educators, particularly those who identify as Anglo-Australian, deeper policy enactment in pedagogic practice and negotiation with diverse families and communities' (p. 251).

23.5 Researching the Preparation of Early Childhood Teachers to Respond to Cultural Diversity

Implicit in efforts to understand the development of early childhood teachers in response to cultural diversity is the idea that teachers can be either agents of cultural change or perpetuate inequality. This has particular implications for the preparation of early childhood teachers. Research about the overlap between cultural diversity

and teacher preparation draws on a variety of conceptual informants. One set of related concepts includes notions such as 'self', 'identity', 'beliefs' and 'values'. These are broad psychological concepts that focus on the intra-mental worlds of early childhood teachers and which feature in the teacher education literature more widely. For example, Sims (2004) drew on concepts of beliefs and values in a study that sought to effect and evaluate change in the values held by students in pre-service children's service (childcare) programs through a specific model of early childhood teacher education pedagogy based on communities of practice. Likewise, Stamopoulos (2006) used a questionnaire and focus group or individual interviews with 101 pre-service early childhood teacher education students to show an increase in student teachers' acceptance of diversity through internships in community-based settings. A further example of an attempted intervention in student attitudes via practicum experiences is drawn from Lewis et al. (2006) in their account of a student undertaking a practicum placement in Cambodia. They adopted a poststructuralist theoretical perspective and a range of associated strategies to describe how the student was forced to confront the inadequacy of the normative discourses of child development she had encountered in her teacher preparation program, when faced with issues such as child trafficking and children's previous experience as beggars. In a chapter written for pre-service teacher education students, Martin (2012) explained the idea of relatedness that is at the centre of Indigenous peoples' ways of being and knowing, and which is 'critical to the formation of identity' (p. 27). She connects relatedness to all aspects of childhood and lifehood, making links to teaching and learning and in the process critiqued the western notion of schooling and all that it encompasses.

As an alternative to psychological models for understanding development, some early childhood education researchers are influenced by more broadly sociological concepts such as power and discourse. Diaz (2004) described working as an early childhood teacher educator in the context of her university's commitments to equity and social justice, adopting a method akin to self-study. A feature of the course Diaz described is the incorporation of post-structural theoretical perspectives to increase candidates' awareness and understanding of difference, inequality and social justice (thereby also signalling the close relationship between the conceptual informants of teacher education curriculum and the concepts being taken up by early childhood education researchers). However, in an earlier report about the course, Robinson and Jones Diaz (1999) showed how the course nevertheless had a strong emphasis on candidates' attitudes and values, how those values originate and can change, and how personal values connect with issues of inequality in the broader social context.

There is increasing evidence in early childhood education research in Australia that teacher education candidates themselves are also becoming more diverse. An important focus for early childhood education researchers in Australia, as distinct from studies of beliefs and values per se, is the experience of Aboriginal early childhood teacher education candidates. The work of Fleet and her colleagues (Fleet et al. 2012), grounded in a socio-constructivist framework, has made an important contribution to understanding these experiences. The assessment of diverse teacher

education candidates is a particularly complex area and, as Fleet and Kitson (2009) point out from focus groups with students and teaching staff, and interviews with graduates, 'good intentions' are not enough when working with Aboriginal students. Ortlipp and Nuttall (2011) also focused on assessment of culturally and linguistically diverse early childhood teacher candidates using a Foucauldian-inspired discourse analysis, with special emphasis on assessment of the teaching practicum. In a subsequent paper (Nuttall and Ortlipp 2012), they described the case of Sue, a highly successful Singaporean Chinese student, who almost failed her final practicum placement due to serious cultural misunderstandings between Sue and her supervising teacher, and the university's difficulty in accounting for issues of cultural difference when assessing Sue's practicum teaching.

Although unified by an interest in cultural diversity, these studies present a range of substantive foci including student beliefs, student experiences, evaluation of interventions in higher education and the experiences of teacher educators. A further unifying feature of these studies is their methodological similarity. Although these studies show some attempts to engage in quantitative methods (e.g., content analysis of university documents undertaken by Ortlipp and Nuttall (2011)), they are overwhelmingly qualitative in approach and rely heavily upon participant self-report. Both Lewis et al. (2006) and Nuttall and Ortlipp (2012) describe single-subject case studies, with interviews as the primary mode of data generation. We reflect further on this potential limitation in the final section of this chapter.

23.6 Future Directions

In this chapter, we have argued that early childhood education research in Australia has reached an important moment, reflected in the maturity of the field. The availability of fast technologies has enhanced this emerging maturity, particularly by supporting collaboration across vast distances. These technologies also offer the possibility of rapid developments in scale. This would address the most noticeable gap in the examples we have selected above, which is the consistently small sample sizes reported across a wide variety of studies. Small-scale and single-subject studies have considerable value in their own right. However, to claim that the field has reached maturity, these studies should perhaps be complemented by large-scale studies and research that allows researchers to compare the effects of specific interventions against non-intervention groups.

We have also argued that there is a close relationship between the realisation of this increased capacity and higher education policy (not just early childhood education policy), particularly exemplified in the second moment. As Rees et al. (2007) argue:

> …the starting point for developing new and perhaps more imaginative strategies for research capacity building is a much better understanding of the conditions under which educational researchers do their jobs and of the wider social relations within which these are situated. (p. 776)

It is to these 'wider social relations' – which in part explain the lack of large-scale and multi-site research – to which we turn in the last part of this chapter.

Most early childhood education researchers in Australia work in universities, with just a small number working in stand-alone institutes such as the Australian Council for Educational Research and the Australian Institute of Family Studies. Ideally, there should be a positive dialectical relationship between early childhood education research and university work: a co-evolution of research capacity and the development of practice across the early childhood education field. For university-based early childhood education researchers, however, the relationship between research activity and the realities of working in university environments is highly contradictory. These tensions are experienced by all university researchers in applied fields to some extent, but the rapid and simultaneous shifts in early childhood policy and higher education in Australia during the last four years have resulted in a particularly intense time for early childhood education researchers.

In 2009 the Australian government laid out an ambitious plan for the growth, credentialisation, re-credentialisation and professional development of the early childhood education workforce, driven in part by a desire to minimise risks to human capital (Productivity Commission 2011). The National Quality Framework for Early Childhood Education and Care (COAG 2009) increased expectations for qualified staff so that by January 2014, 50 percent of childcare staff were required to hold a diploma-level qualification (or higher), with a degree-qualified teacher employed by 2019 in all child care services with 25 or more children. These aims explicitly acknowledge the proven relationship between teacher qualifications and educational outcomes for young children, particularly those from diverse backgrounds. Although the present government has rolled back these target dates somewhat, an immediate result of these policies has been rapid growth in early childhood teacher education programs. With this has come an urgent need to increase the number of academic staff in early childhood education by at least 100 within a 3-year period (Nuttall 2012), and these staff need to be qualified to doctoral level. This level of qualification is important because higher education policy has simultaneously increased demands on universities for higher-quality research output through its Excellence in Research in for Australia (ERA) policy (Australian Research Council 2011).

The convergence of these two policy programs is creating a 'perfect storm' for early childhood education academics in Australia. At a time when unprecedented attention is being paid to the early childhood education field, related research should be flourishing, enabled by increased opportunities to collaborate. In reality, the pressures of meeting increased demands on early childhood teacher education, while also responding to the competitive and anti-collaborative nature of the ERA process, has the potential to work against capacity building in the early childhood education research field, which is principally located within the already stretched research field of teacher education. The reasons for these challenges have been described elsewhere (see, e.g., Nuttall et al. 2006) and include the number of education academics for whom academic work is a second or third career after teaching elsewhere. This means they often come to doctoral study late in their working lives

so that, in turn, the number of experienced researchers available to mentor early-career researchers is proportionately small (Cumming 2010).

Despite these pressures, early childhood education researchers in Australia continue to look beyond their immediate settings for research collaborators. A recent cross-institutional initiative in Australia was the creation of a Collaborative Research Network (CRN) in early years of education (involving Charles Sturt University, Queensland University of Technology and Monash University), which was specifically designed to build research capacity in early childhood education: in research supervision, leadership, administration, management and training. An important feature of the CRN was the wide range of research foci, methods, and theories adopted within its suite of projects. Recent work by the Australian Productivity Commission (2011) suggests Australia is learning from the experience of countries such as New Zealand and the UK about the need to address policy programs in an integrated way. One current large-scale Australian project, the E4Kids study, is another example of what can be undertaken when national and international collaboration, supported by substantial funding, is enacted. E4Kids is a 5-year study following approximately 2,600 children aged three and four years as they participate in childcare, kindergarten and preschool programs in two Australian states (E4Kds National Brochure 2014). It assesses the impact of participation in these programs as well as outcomes for children who do not attend programs. Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC), which includes a longitudinal study of Indigenous children (LSIC), is a nationally representative study of child development that commenced in 2004. Data are being collected from children and their parents, carers and teachers. With these large-scale and longitudinal initiatives, researchers are ideally placed to take advantage of increasing opportunities to reach out to potential collaborators within early childhood education, across disciplines, and across national borders, not only to build research capacity but to contribute to the learning and development of young children, their families and their teachers in important ways. While we have suggested that early childhood education research in Australia has reached a stage of maturity, the progressive release of findings from these large-scale and longitudinal studies indicates that the field is currently poised for a fourth moment, a 'coming of age', where these results can be used to inform policy and practice, link with other state and national data and possibly make international comparisons.

References

Agbenyega, J. S., & Klibthong, S. (2012). Transforming selves for inclusive practice: Experiences of early childhood preservice teachers. *Australian Journal of Teacher Education, 37*(5), 65–77.

Agbenyega, J., & Peers, C. (2010). Early childhood inclusion: A silver lining in the dark clouds for African migrant children? *International Journal of Whole Schooling, 6*(2), 46–58.

Ashby, G., & Grieshaber, S. (1996). Culture and early childhood curriculum in Australia. *Early Child Development and Care, 123*, 127–141.

Australian Research Council. (2011). *The excellence in research for Australia (ERA) initiative*. Accessed 21 Oct 2011 at http://www.arc.gov.au/era/

Bourdieu, P. (1993). *The field of cultural production: Essays on art and literature*. New York: Columbia University Press.

Brennan, D. (1994). *The politics of Australian childcare: From philanthropy to feminism*. Cambridge, UK: Cambridge University Press.

Brophy, J. E., & Good, T. L. (1972). Teachers' communication of differential expectations for children's classroom performance. In U. Bronfenbrenner (Ed.), *Influences on human development* (pp. 474–483). Hinsdale: Dryden Press.

Centre for Community and Child Health. (2000). *A review of the early childhood literature*. Canberra: Australian Government Publishing Service.

Council of Australian Governments [COAG]. (2009). *National quality framework for early childhood education and care*. Canberra: Author.

Cumming, J. (2010). *Renewing the academic and research workforce in education: Challenges and opportunities*. Deakin: Australian Council of Deans of Education.

Cumpston, J. H. L., & Heinig, C. M. (1945). *Preschool centres in Australia: Building, equipment and programme, the Lady Gowrie Child Centres*. Canberra: Commonwealth Department of Health.

De Gioia, K. (2013). Cultural negotiation: Moving beyong a cycle of misunderstanding in early childhood settings. *Journal of Early Childhood Research, 11*(2), 108–122.

Department of Education, Employment and Workplace Relations (DEEWR). (2009). *Belonging, being & becoming: The early years learning framework for Australia*. Canberra: Author.

Derrida, J. (1997). *Deconstruction in a nutshell: A conversation with Jacques Derrida. Edited and with a commentary by John D. Caputo*. New York: Fordham University Press.

Diaz, C. J. (2004). Difference and diversity at the University of Western Sydney. *Teaching Education, 15*(1), 97–101.

E4Kids. (2014). *E4Kids national brochure*. Accessed 23 July 2014 from http://web.education.unimelb.edu.au/E4Kids/news/pdfs/E4Kids_National_Brochure.pdf

Fleer, M. (2000). *An early childhood research agenda: Voices from the field*. Canberra: Commonwealth Department of Education, Training and Youth Affairs.

Fleet, A., & Kitson, R. (2009). Rethinking assessment in an indigenous specific program. *Alberta Journal of Educational Research, 55*(3), 397–413.

Fleet, A., Wechmann, K., & Whitworth, R. (2012). Professional pathways of Aboriginal early childhood teachers: Intersections of community, indigeneity, and complexity. *Australian Journal of Teacher Education, 37*(9), 128–143.

Flückiger, B., Diamond, P., & Jones, W. (2012). *Australasian Journal of Early Childhood, 37*(3), 53–59.

Grieshaber, S., & Yelland, N. (2000). Editorial. *Contemporary Issues in Early Childhood, 1*(1), 1–2.

Harris, N., & Tinning, B. (2012). Hearing parents' and carers' voices: Experiences of accessing quality long day care in northern regional Australia. *Australasian Journal of Early Childhood, 37*(3), 14–21.

Heckman, J., & Masterov, D. (2005). *The productivity argument for investing in young children*. Accessed 20 May 2013 from http://jenni.uchicago.edu/human-equality/papers/heckman_final_all_wp_2007–03-22c_jsb.pdf

Katz, L. G. (Ed.). (1980). *Mothering and teaching – some significant distinctions. Current topics in early childhood education Vol. 111* (pp. 46–65). Norwood: Ablex Publishing Corporation.

Kendall, G. (2001). Normality and meaningfulness: Detailing the child in eighteenth-century England. *History of Education Review, 30*(2), 26–36.

Knight, J., Lingard, B., & Bartlett, L. (1994). Reforming teacher education policy under labor governments in Australia 1983–93. *British Journal of Sociology of Education, 15*(4), 451–466.

Lee-Hammond, L. (2013). Integrated services for Aboriginal children and families. *Australasian Journal of Early Childhood, 38*(1), 55–64.

Lewis, T., Macfarlane, K., Nobel, K., & Stephenson, A. (2006). Crossing borders and blurring boundaries: Early childhood practice in a non-Western setting. *International Journal of Early Childhood, 38*(2), 23–35.

Martin, K. (2012). Aboriginal early childhood: Past, present, and future. In J. Phillips & J. Lampert (Eds.), *Introductory indigenous studies in education: The importance of knowing* (pp. 27–40). Sydney: Pearson Education.

Miller, M., & Petriwskyj, A. (2013). New directions in intercultural early education in Australia. *International Journal of Early Childhood, 45*(2), 251–266.

Ministerial Council on Education, Employment, Training and Youth Affairs MCEETYA). (2008). *Melbourne declaration on educational goals for young Australians*. Retrieved 14 April 2013 from http://www.mceecdya.edu.au/verve/_resources/national_declaration_on_the_educational_goals_for_young_australians.pdf

Nuttall, J. (2012). Challenges, opportunities, and capacity building in early childhood teacher education research in Australia and New Zealand. *New Zealand Journal of Educational Studies, 47*(1), 65–78.

Nuttall, J., & Ortlipp, M. (2012). Practicum assessment of culturally and linguistically diverse early childhood pre-service teachers. *European Early Childhood Education Research Journal, 20*(1), 47–60.

Nuttall, J., Mitchell, J., & Seddon, T. (2006). Changing research contexts in teacher education in Australia: Charting new directions. *Asia-Pacific Journal of Teacher Education, 34*(3), 321–332.

Organisation for Economic Co-operation and Development [OECD]. (2001). *Starting strong: Early childhood education and care*. Paris: Author.

Ortlipp, M., & Nuttall, J. (2011). Supervision and assessment of the early childhood practicum: Experiences of pre-service teachers who speak english as a second language and their supervising teachers. *Australasian Journal of Early Childhood, 36*(2), 87–94.

Patel, S., & Agbenyega, J. (2013). How we view Australian early childhood education practice: Indian migrant parents' perspectives. *Australasian Journal of Early Childhood, 38*(1), 49–54.

Pendred, G. (1964). *Pre-school centres in Australia. review of education in Australia, 1955–1962*, *Australian Council for Educational Research* (pp. 387–416). Victoria: Hawthorn.

Potter, G. (2007). Sociocultural diversity and literacy teaching in complex times: The challenges for early childhood educators. *Childhood Education*, *84*(2), 64–69.

Power, K. (2010, September). *Global and local storylines of early childhood in a valued Australian national research journal. Paper presented to the annual conference of the European early childhood education research association*. England: Birmingham.

Productivity Commission. (2011). *Early childhood development workforce: Productivity commission draft research report*. Melbourne: Author.

Raban, B. (2000). *Just the beginning….* Unpublished Report. Canberra: Commonwealth Department of Education, Training and Youth Affairs.

Robinson, K., & Jones Diaz, C. (1999). Doing theory with early childhood educators: Understanding difference and diversity in personal and professional contexts. *Australian Journal of Early Childhood, 24*(4), 33–39.

Rees, G., Baron, S., Boyask, R., & Taylor, C. (2007). Research-capacity building, professional learning and the social practices of educational research. *British Educational Research Journal, 33*(5), 761–779.

Sanagavarapu, P. (2010). Children's transition to school: Voices of Bangladeshi parents in Sydney, Australia. *Australasian Journal of Early Childhood, 35*(4), 21–29.

Silcock, A. (2012). The qualities of a responsible teacher. *Journal of the Helen Vale Foundation*, *3*(2). Published on the website of The School of Total Education in May, 2012. Retrieved 4 October 2013 from http://www.sote.qld.edu.au/articles/qualities-of-a-responsible-teacher.html

Sims, M. (2004). Making values matter: Training in difference and diversity. *Australian Research in Early Childhood Education, 11*(1), 75–90.

Stamopoulos, E. (2006). Empowering preservice teachers to embrace diversity. *Australian Journal of Early Childhood, 31*(4), 30–39.

Waniganayake, M. (2001). Transient times and nurturing the pride of the profession. *Australian Journal of Early Childhood, 26*(1), 1–5.

Warr, D., Mann, R., Forbes, D., & Turner, C. (2013). Once you've built some trust: Using playgroups to promote children's health and wellbeing for families from migrant backgrounds. *Australasian Journal of Early Childhood, 38*(1), 41–48.

Yelland, N. (2000). *A discussion paper*. Canberra: Commonwealth Department of Education, Training and Youth Affairs.

Chapter 24
Connections Between Early Childhood Policy and Research in Aotearoa New Zealand: 1970s–2010s

Anne Smith and Helen May

Abstract This chapter summarises five eras of early childhood policy and research development in Aotearoa New Zealand. In the 1970s, there was a divided system of care and education, and the dominant view that childcare was primarily custodial and sessional care educational was questioned by research. In 1980s, policies moved towards integration, maintaining diversity and improving quality (especially through teacher education), while research explored the nature and long-term impact of quality. The 1990s saw the introduction of bicultural socioculturally based early childhood curriculum guidelines, *Te Whāriki*, and a wave of qualitative research followed to evaluate and support the curriculum and its implementation. During the 2000s, a strategic plan, *Nga Huarahi Arataki* (2002–2012), prioritised increased participation and quality and collaboration between services. In 2003, teacher-researcher partnership projects embarked New Zealand on an action research journey to explore, document and disseminate innovative teaching. In the recent era coinciding with a world economic downturn, a more conservative government approach to early childhood policy and cut backs to funding and programmes, research has, by political necessity, focused on the efficiency and effectiveness of taxpayer investment in the sector, increasing cost-effectiveness and promoting the participation of 'disadvantaged' children. The goal of improving quality has been put at risk by cutting funding for fully qualified staff.

Keywords New Zealand • Early childhood education policy • Early childhood education research

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Early childhood education (ECE) in Aotearoa New Zealand has been shaped by strong partnerships between academic researchers, advocates for children and women, practitioners in the field and government agencies. The alliances are not always neatly aligned. Researchers have been proactive in shaping new policy directions for early childhood provision and pedagogy, interrogating its consequences and broadly defining uniquely New Zealand pedagogical directions. Themes of equity, social justice and the rights of children characterise the research agendas. The authors bring some shared and separate perspectives to this overview. Over several decades, we have both been engaged in policy advocacy and participated in a variety of committees, working parties and a task force during periods of major policy change. Anne Smith began her involvement in ECE by setting up a community childcare scheme in Dunedin in the 1970s (Smith 1980). Her observational research has focused on children's lived experiences in early childhood centres (Smith and Haggerty 1979; Barraclough and Smith 1996; Smith 1988, 1996, 1999), as well as children's rights and agency (Smith et al. 2005; Smith 2007, 2009). In the 1970s, Helen May was working in childcare and began documenting the New Zealand policy story as a research task itself (May 1985, 2001, 2009, 2013, 2014), later collaborating on the development of a national early childhood curriculum (Carr and May 1999).

This chapter summarises five eras of early childhood policy and research, from its fledgling beginnings in the 1970s when there were few doctoral scholars in ECE and no university early childhood programmes to the current time when New Zealand researchers have become a presence and voice in various world forums. New Zealand is a small country with 4.4 million people. Consequently, there is only a small research community spread thinly across seven university sites and several other providers of teacher education and, in earlier years, the New Zealand Council for Educational Research. Characteristic of this research community is its close personal relationships and collaborations and ongoing engagement in professional endeavours, policy development and advocacy. This overview chapter is also illustrative of expanding participation in ECE, from 1973 when 46% of 3- and 4-year-olds attended an early childhood service to 2012 when the comparable figure was 93% (Education Counts 2013).[1] Each era has shaped and/or been a catalyst to new research agendas and is illustrative of a particular configuration of the interwoven partnerships cited above. The political philosophy of successive governments also shaped each era, which in New Zealand swings between the left-leaning Labour Government and a right-leaning National Government. In global terms the political parties would be characterised as centre left and centre right. In broad terms, the significant advances for ECE have occurred under Labour Governments, whereas National Governments have tended to contain and sometimes curtail earlier development. The research cited in this chapter cannot be not comprehensive, but the examples are illustrative of the changing emphasis of the connections.

[1] The 1973 figure can only be indicative based on a census at the time. The latter figure is broadly accurate based on enrolment data but does include some dual enrolments. The school entry census showed 95% of 4-year-olds had attended ECE.

24.1 Early Policy and Research Beginnings: 1970s

In the 1970s, there were 'haves' and 'have nots', both in terms of types of ECE that received government support and accessibility for families. Despite a groundswell of advocacy for change supported by rafts of conference remits and reports, there was, however, no inclination by government to rethink its policy agenda (May 2001). Despite expanding coverage and funding support for part-day preschool programmes for 3- and 4-year-olds, under the Department of Education, a growing number of children attending childcare services under the umbrella of the Department of Social Welfare were excluded from government funding. This divided administration across government departments meant that childcare was the poor relation of early childhood services, both in terms of reputation and funding. Childcare was seen as suitable only for single parents where mothers 'had to' work or for other 'disadvantaged' families. The research cited in this section is indicative of the beginnings of changing understandings of the provision and role of ECE.

Early research questioned the dominant view that childcare centres offered primarily custodial care, and sessional preschool centres, kindergartens that were established in the late nineteenth century and staffed by teachers, and play centres, established in the 1940s and staffed by parents, provided educationally enriching experiences. Anne Smith and Heather Bain (1978) compared the type of interactions children from childcare centres and play centres had with each other and with staff. The study showed that there were similar interactions in both types of centre but that children attending childcare were engaged in significantly more interactive play (talking about an activity, questioning, planning or co-operative play) than children attending play centre, perhaps because the longer hours allowed those attending childcare to get to know each other better. Another observational study evaluated a high-quality early childhood centre (a Dunedin community childcare centre) and established that the centre incorporated high process quality in its programme – warm, sensitive and responsive interactions and joint involvement in meaningful activities – despite being under the auspices of the Department of Social Welfare and providing longer hours (Smith and Haggerty 1979).

Both of these studies helped support the argument that all ECE can and should provide both education and care, which was reflected in the reforms of the 1980s and 1990s and is outlined in the latter sections of this chapter. The research took a sociocultural and ecological perspective on ECE in New Zealand, viewing children's engagement in social interaction with others in cultural contexts as crucial for learning and development (Bronfenbrenner 1974; Vygotsky 1978). Urie Bronfenbrenner's visit to New Zealand and keynote address at a large cross-sectoral gathering of the ECE sector in 1979 (the Second Early Childhood Convention) were influential, emphasising the importance of the ecological context and the value of connections between children's worlds, and support for those who cared for them (May 2009).

Equity of access to early childhood services by children and families across class and ethnic divides was another issue that arose in the 1970s. This concern was

influenced by the War on Poverty in the USA, which lead to research suggesting that participation in high-quality early childhood programmes could break the cycle of poverty and underachievement for poor minority families (Lamb and Sternberg 1992). The study Who Gets to Preschool? (Barney 1975) provided evidence of the impact of geography, social class and ethnicity on the attendance of children across both childcare and preschool services in New Zealand. He showed that children from lower income and Māori families were less likely to participate in preschool programmes. During the 1960s and 1970s, there were various government-led policies to encourage the attendance of Māori children at preschool, which were based on a deficit rationale of 'compensatory education' and intended to redress the perceived poor home environment of Māori children (May 2001). Two projects illustrate the landscape of early childhood research in the 1970s. They were shaped around concerns for children missing out and touched upon questions concerning the best kind of early childhood programme for so-called disadvantaged children.

Geraldine McDonald's book Maori Mothers and Preschool Education (1973) documented the outcome of Māori community initiatives to establish preschools for Māori children, with a particular focus on the role of mothers and the kind of infrastructure support needed to maintain their viability. She showed that Māori cultural patterns were easily lost when preschool programmes were dominated by Pakeha (European New Zealand people) and suggested that Māori leadership and self-determination would encourage more Māori families to participate. The subtext of McDonald's findings was that community enthusiasm had been undermined by government political rhetoric louder than political action and by solutions that favoured the attendance of Māori children in mainstream preschool programmes.

In 1974, Jane Ritchie established Te Kohanga, a preschool for Māori children that operated as a research project until 1976 and in the same genre of compensation for 'cultural deprivation' as the US War on Poverty initiatives (Irwin 1989). In A Chance to be Equal, Ritchie (1978) challenged established notions of play-based ECE as the best preparation for school. These early research studies are significant in providing insights into the mix of culture, class and ECE of the era. Each study had longer-term policy implications. Smith and Swain (1988) later wrote: "There was little or no questioning of whether Pakeha (European NZ) institutions were appropriate or positive for Māori families" (pp. 117–18).

In 1983, with lessons learned from previous initiatives through both research and the experience of Māori participants, the first Kōhanga Reo, Māori language immersion ECE programmes, were established by Māori themselves, outside of the Department of Education whose preschool institutions were deemed to have failed Māori children and overridden aspirations for tino rangatiratanga [self-determination]. Similarly, government tardiness in addressing the issues of childcare funding and provision radicalised many women with childcare being a key plank of the 1970s women's movement (May 1985). A raft of community and national organisations emerged in support of childcare users, childcare workers and providers. This was the research and policy milieu in which the activism and research of the authors was seeded.

24.2 Before Five: 1980s–Mid-1990s

Characteristic of this second era is the imprint of different government philosophies on ECE policy and that the years of conservative cutback and curtailment sparked new research questions but also yielded an opportunity for a radical rethink of ECE curriculum. The 1984–1990 Labour Government initiated reforms across the education sector. Prior to the 1989 reforms, detailed for early childhood in the Before Five report (Lange 1988), the government shifted childcare from the Department of Social Welfare to unify all early childhood services under the Department of Education in 1986 and introduced an integrated early childhood teacher education qualification (combining the previously separate childcare and kindergarten training) in 1988. On the industrial front, the older Kindergarten Teachers' Association and the Early Childhood Workers Union for childcare formed the Combined Early Childhood Union of Aotearoa. Cumulatively, these changes were significant as a blueprint to remove entrenched divides between care and education. Before Five was premised on ideals of equity, addressing the interests of children, of women and of cultural survival, the latter being of particular importance to Nga Kohanga Reo [2] and the emerging centres for migrating Pacific Islands people. Overall, the reforms were intended to acknowledge the diversity of services in terms of philosophy, culture, structure and ownership, improve participation, address affordability, integrate care and education, support quality for children, improve the status of teachers and enable women to work in paid employment with improved childcare support. Despite resistance from the Treasury, ECE won additional funding to implement the new policies. Anne Meade, a significant architect of the reforms and a leading researcher, celebrated that the reforms enabled "Women and young children [to] gain a foot in the door" (1990, p. 96). Disappointment followed as the 'door' did not open fully (Dalli 1993). A National Government elected in 1990 curtailed the funding package. A shift towards deregulation and right-wing market ideals undermined some of the tenets of Before Five. Research projects of this second era reflected political concerns in a shifting policy landscape, with researchers seeking to provide hard data to convince policy makers about the best policy for quality ECE. The New Zealand research was influenced by US longitudinal intervention studies showing the lasting effects of participation in high-quality ECE (e.g. Schweinhart et al. 1993) and studies on the aspects of quality ECE that had an impact on children's development such as ratio, group size and training (Lamb and Sternberg 1990, 1992).

The Competent Children study, initiated by Anne Meade, helped persuade government that it was worthwhile investing in ECE. The study followed 307 children from 4 years of age and looked at the contribution that quality ECE and other variables (such as family and school) made to children's competence (Wylie et al. 1996). Participation in quality ECE influenced children's later competency in literacy and mathematics achievement at school as well as perseverance, communication

[2] Nga Kohanga Reo are language immersion early childhood centres for under 5-year-olds, designed to strengthen cultural and Māori language knowledge.

and logical problem-solving (Wylie and Thompson 1998). Better literacy and numeracy scores were associated with teachers asking open-ended questions, providing a print-saturated environment, engaging in children's play and providing age-appropriate resources and opportunities for co-operative activities (Wylie and Thompson 2003).

The visit of American researcher, Bettye Caldwell (1967) in the late 1970s, and her research on infant childcare had suggested that rich childcare settings for infants could be a particularly powerful positive influence on their development but that infants were very vulnerable to poor quality. Anne Smith's research in the early 1990s was influenced by Caldwell's work. Smith wanted to know what sort of quality was offered for infants in New Zealand early childhood centres and what its influence was. Her observational study of 200 under 2-year-olds in 100 childcare centres throughout New Zealand examined the influence of staff training qualifications and other aspects of structural quality (staff-child ratios, staff turnover, working conditions, salaries) on process quality, as measured by the nature of the interactions between staff and children (Smith 1996; Smith et al. 1995). The study showed an association between 3-year staff training and measures of quality (Smith 1996, 1999). Highly trained staff were more likely to be engaged in joint attention episodes with infants, suggesting that a more advanced level of training directly influenced quality processes (Smith 1999). The study also showed that the strongest predictor of high quality within centres was the wages of the staff and that working conditions were also important. The findings of this research fed directly into later debates and forums, fuelling calls for improved funding for early childhood (particularly childcare) centres, for better regulations to maintain quality and for widespread reforms towards a qualified early childhood workforce, a career structure and appropriate salaries for staff.

The first half of the 1990s was a time of extended debate and discussion about an appropriate philosophical and curriculum approach for ECE in New Zealand. This debate was particularly pertinent to the development of New Zealand's early childhood curriculum guidelines, Te Whāriki (Ministry of Education 1996), which began with Helen May and Margaret Carr from the University of Waikato winning a Ministry of Education contract, and their partnership with Māori leaders, Tilly Reedy and Tamati Reedy, in developing a bicultural, holistic curriculum (Smith 2010a). Sociocultural theory (Rogoff 1995; Vygotsky 1978; Wertsch et al. 1995) was becoming increasingly influential internationally because of the quiet revolution that had been taking place in developmental psychology. The rediscovery of Vygotsky puts much more focus on the importance of responsive social contexts as the crucible of thinking, in contrast to the traditional Piagetian approach of a free play curriculum with the teacher standing back and allowing children to explore.

A sociocultural approach linked with the ongoing debate in New Zealand about whether it was possible to separate care and education in environments for young children. Sociocultural theory suggested that a key element to promote learning was a shared frame of reference between adults and children (or between children) and that this was facilitated by caring and warm relationships. It reinforced Anne Smith's (1993) critique that there was a false dichotomy between education and care

institutionalized in New Zealand's separate types of early childhood services (child-care centres, kindergartens and play centres). She challenged the separation of education and care, and the laissez-faire free play approach, and suggested that instead teachers should jointly participate in activities and share meanings with children.

A sociocultural framework was also sensitive to the key issues of foregrounding of Māori world views, cultural practices and perspectives in ECE. These issues and many others were discussed and debated up and down the country during many consultations, meetings and amongst a diverse group of practitioners over an extended period between 1991 (at the beginning of the Ministry contract) and the introduction of the final curriculum to all early childhood centres in 1996 (Carr and May 1996). This was an era shaped by sharp political differences, considerable advocacy, turmoil and change in the ECE sector, alongside new theoretical paradigms which began a transformation of ECE policy and practice.

24.3 Te Whāriki: Mid-1990s–2000s

A significant wave of mainly qualitative research arose in the aftermath of Te Whāriki and the development of an associated narrative assessment approach called Learning Stories (Carr 2001; Carr et al. 2004–2009). This body of research was initiated by professional and researcher interests. Government agencies provided funding support, with the Ministry of Education managing the development of resources to support teachers in the implementation of Te Whāriki. This has been a long-term and ongoing process and a fruitful engagement across political and policy interests, research expertise and professional concern. The story of Te Whāriki's development as a bicultural partnership with Te Kohanga Reo Trust and the project co-ordinators, Margaret Carr and Helen May, has been well documented (Carr and May 1994, 1996, 1999; Smith 2010a; Nuttall 2013). This following section summarises the impetus Te Whāriki, as a curriculum document, has had on subsequent research agendas.

The theme of empowerment was important for Māori, and 'empowering children to learn and grow' became a foundation principle. Te Whāriki was about self-determination. A set of parallel Aims for Children in Māori and English were developed, as equivalent aspirations of empowerment in both cultures. Te Whāriki made a political statement about children: their uniqueness, ethnicity and rights in New Zealand. For people from the Pacific Island Nations (and other cultures), Te Whāriki provided a curriculum space where language and cultures could be in the foreground and not an add-on. The curriculum was envisaged as a whāriki, translated as a woven mat for all to stand on, and provided the framework which allowed for different programme perspectives to be woven with many possible 'patterns'. It provided signposts for individuals and centres to develop their own local curriculum through a process of talk, reflection, planning, evaluation and assessment. The aspirational principles of Te Whāriki construct children of New Zealand as both powerful and participating and are premised on principles of the rights of the child and

child agency. Te Whāriki's research journey became a tool to challenge older beliefs and reshape practice according to its ideals.

The curriculum emphasises the critical role of socially and culturally mediated learning and of reciprocal and responsive relationships with people, places and things. Children learn through collaboration with adults and peers, through guided participation and observation of others as well as through individual exploration and reflection (Ministry of Education 1996, p. 6).

Learning is conceptualised in Te Whāriki as arising out of the context of meaningful joint activity in cultural contexts using the tools of culture (language, stories, songs, rituals, family connections). Rather than assuming that there is one developmental pathway, development emerges from cultural goals with the guidance of community practice and expertise. Te Whāriki assumes that children will learn according to the opportunities they are given to participate and the guidance and stimulation provided by adults. The concept of learning dispositions, defined as 'habits of mind that dispose the learner to interpret, edit and respond to experiences in characteristic ways' (Carr 1997, p. 2), underlies Te Whāriki. Examples of learning dispositions are persevering with difficulties rather than giving up and avoiding failure, communicating with others and being imaginative. This approach suggests that teachers should avoid teaching fragmented skills but encourage and provide opportunities to exercise ongoing learning strategies and strengthen children's identities as competent learners in a range of different situations (Cowie and Carr 2009).

Researchers from Waikato and Otago universities (Carr et al. 2010) have investigated how children's learning dispositions are shaped by learning contexts over time (between the ages of 4 and 5 years). They focused on three dispositions – reciprocity, resilience and imagination – in 14 case studies, looking at the affordances offered by educational settings for children to develop learning identities and transfer learning strategies to new situations. The book presents a theoretical analysis of dispositions and the environmental characteristics that support them, illustrated by many learning episodes. For example, David, previously a reluctant writer, engaged in a story-writing session at school, and his teacher responded to his attempts by telling him that he is 'a clever writer' (Carr et al. 2010, p. 94). The teacher reflected that something 'clicked' for him on that day and he became much more eager to participate in writing.

A challenge in the implementation of Te Whāriki was to find a way of assessing its impact on learning, and this resulted in the development of a narrative, holistic bicultural approach to assessment, Learning Stories, which documented significant learning moments in children's everyday experiences (Carr 1997, 1998, 2001). Learning stories allow teachers to gain windows onto children's world views and assumptions, as well as allowing children to retain significant ownership of their stories and to share meaning and power with adults. Teachers documenting a child's learning story focus on five areas related to dispositions – finding something of interest, being involved, engaging with challenge, persisting when there are difficulties, expressing a point of view and taking responsibility – all of which align with the strands of the curriculum. The Ministry of Education contracted a team led by

Margaret Carr from the University of Waikato to capture exemplars in early childhood centres and to produce illustrated books documenting a variety of learning stories. These exemplars, known as Kei Tua o te Pae (Ministry of Education 2004–2009), are not prescriptive but illustrate a variety of ways to implement the curriculum and possible future learning pathways. The stories have been a powerful way of encouraging teachers to have positive constructions of children's competence, share stories with children and families and support teachers' confidence in trying out new ideas. Children also gain a strong sense of ownership and pride in their own learning and enjoy sharing the stories with family, friends and teachers (Carr et al. 2005).

More recent research has focused on developing a Māori approach to assessment, Te Whatu Pōkeka, to enable the assessment of children's learning journeys in their unique cultural contexts (Ministry of Education 2009; Rameka 2012). Te Whatu Pōkeka is a resource for teachers in Māori early childhood centres, produced by Māori researchers Lesley Rameka and Rita Walker, which gives exemplars of assessment that draw on children's history, cultural heritage and Te Ao Māori (Māori world views). Te Whatu Pōkeka is designed to help 'Māori children develop a strong and secure sense of identity that emphasises their connectedness to their ancestors, the universe and everything in it, and the spirit world' (Rameka 2011, p. 254). For example, whakapapa (genealogy and history) is incorporated into early childhood programmes through genealogical narratives layering generations of ancestors into the lifeline of those living today. The importance of whakapapa is the connection to land and other forms of life over time and space, establishing personal and collective identity (Rameka 2011). This section has provided some glimpses into a research agenda shaped by Te Whāriki although the era of 'Te Whāriki', its implementation and research story, is ongoing.

24.4 Early Childhood Strategic Plan: 2000s

In 1999, a Labour Government returned to power with an election platform agenda to recapture the impetus of the Before Five (Lange 1988) policies that had languished. In this era ongoing curriculum research initiatives (cited above) were entwined with policy-focussed research. The small research community was hard at work and supported by a growing number of new doctoral students and graduates.

Between 1999 and 2008, the government introduced equity funding to support participation in 'high-need' centres and services, delivered 20-h free ECE per week for 3- and 4-year-olds across all early childhood teacher-led services, and was on target to have teacher-led ECE centres staffed 100% by qualified teachers by 2012. These policies were embedded in the Labour Government's Strategic Plan, Pathways to the Future – Ngã Huarahi Arataki 2002–2012 and intended to provide a robust infrastructure for delivering high-quality, affordable ECE participation by all children (Ministry of Education 2002).

The Strategic Plan for Early Childhood (Ministry of Education 2002) was well founded in research and informed by the cumulative experience and dialogue of the previous 20 years within the early childhood sector. Immediately after the election in 1999, the Ministry of Education contracted a Children's Issues Centre team at the University of Otago to produce a literature review on ECE (Smith et al. 2000). The review showed that there were high participation rates in ECE (but lower for Māori or Pasifika children), that participation in EC was associated with cognitive gains and improved school performance and that in order to achieve positive outcomes, it was essential that children participated in quality programmes. Quality involves subjective components of what is valued in a society but also objective components linked to positive outcomes like staff training, staff-child ratios and group size, as well as sensitive and responsive adult-child interactions and joint engagement in meaningful activities. This research was used by the Ministry of Education and the Strategic Plan Working Group to develop strategic directions, which included increasing participation, improving quality and increasing collaboration between services.

The scope of New Zealand's early childhood policy directions received international attention. Peter Moss (2007) described New Zealand as 'leading the wave' of early childhood innovation, having 'confronted the wicked issues' (p. 33). Moss (2008) explained:

> New Zealand has developed a national framework, which brings some coherence to the system around issues of equity and access. One Ministry is responsible for all ECEC [Early Childhood Education and Care] services; there is a single funding system for services (based on direct funding of services rather than parents); a single curriculum; and a single workforce, which by 2012 will consist of early childhood teachers, educated to graduate level. Underpinning these structures, and perhaps the most radical change of all, New Zealand has an integrative concept that encompasses all services – 'early childhood education', a broad and holistic concept that covers, children, families and communities, a concept of 'education-in-its-broadest-sense' in which learning and care really are inseparable and connected to many other purposes besides. New Zealand has, in short, understood the need to rethink as well as restructure early childhood education and care. (pp. 7–8)

The Strategic Plan years created a fertile research environment, including evaluative studies addressing the new policy directions. The Ministry of Education contracted an evaluation of the implementation of the Strategic Plan between 2004 and 2009 (Mitchell et al. 2011). The study involved collecting data from 32 services in eight localities varying in geography and ethnic composition. Participation had increased markedly by 2009 (by 19%), children were participating for longer hours, affordability for parents had increased, and services were more viable. Quality was found to be good or very good in two thirds of centres but only fair or poor in about a third. Factors associated with high quality were teachers being involved in professional development, higher proportions of registered teachers being employed and use of Te Whāriki and associated resources. Linda Mitchell and colleagues (Mitchell et al. 2011) commented on the positive shifts on every indicator of teaching and learning associated with high usage of the Ministry of Education resources such as Kei Tua o Te Pae (the exemplars) (Ministry of Education 2004, 2007, 2009), the

Self-Review Guidelines and the Centres of Innovation reports (see later discussion).

In 2003, the government funded two new research initiatives, the Teaching and Learning Research Initiative (TLRI) and Centres of Innovation programme (COI), which have supported a range of early childhood projects around teaching, learning and curriculum (Meade 2010a, b; Nuttall 2010). Both initiatives were premised on the idea of partnerships between researchers and education professionals and encouraged the interrogation of practice towards richer weavings and understandings of Te Whāriki. The TLRI was a cross education sector-wide initiative intended to enhance the links between education research and teaching practices to improve outcomes for learners. A recommendation from the Strategic Plan (Ministry of Education 2002) was to establish early childhood centres that showcased innovation (COIs) that, on a 3-year cycle, would embark on an action research journey in partnership with experienced researchers to enable deeper exploration and documentation of innovative teaching and learning processes. The strategy was aimed at disseminating and showcasing quality practice across the sector. Anne Meade led the COI projects. Her task was to co-ordinate, support and build research capacity within the various COIs. From 2005, the various research journeys were documented and disseminated in a series of publications (Meade 2005, 2007, 2010a, b).

The COIs involved partnerships and collaboration between early childhood teachers and researchers. Meade (2007) points out that traditionally, teachers have been placed in a passive role in relation to research, but the COI projects gave teachers leadership experience and helped them to theorise, reflect and discuss their practice, as well as to disseminate their findings to networks of colleagues. The impact of these projects exceeded all expectations and played a critical role in enabling centres to flourish, improve their practice and engage in critical thinking (Ramsey et al. 2013). The funding for COI projects was terminated in 2008.

One of the earliest COI projects was to strengthen children's agency and increase their competence and confidence using ICT (computers, cameras, photocopier, laminator, etc.) in order to deepen learning and broaden assessment (Ramsey et al. 2005; Ramsey et al. 2013). It was undertaken at Roskill South Kindergarten and attended by mainly 3- and 4-year-old children prior to school entry. The project helped to develop a culture in the kindergarten where the children became competent with digital technology and could produce videos and narratives to incorporate into their Learning Stories. Teachers saw the technology as just another tool that helped them to notice, recognise and respond to children's learning. Teachers ran workshops, held visitor days and developed professional resources to disseminate the findings of the project.

Another project was carried out in a Samoan-language immersion centre in Auckland (Podmore et al. 2007). This innovation placed small groups of children together with their teacher (and primary caregiver) from the point of entry through to school with a strong focus on supporting language immersion and bilingualism. Children in the centre became capable, confident and competent in Samoan and engaged in meaningful conversations with peers and teachers. Children's sense of belonging was also enhanced by their participation in stable groups.

The TLRI recognises the value of involving practitioners in collaborative research with researchers. The programme is designed to strengthen the links between educational research and teaching practice, to improve learning outcomes and to build research capacity and leadership in the early childhood sector. Examples of these projects include a study of the role of visiting teachers in improving the quality of educators' practice in home-based care (Duncan et al. 2009), an investigation of teachers' understanding and recognition of infant learning and an articulation of the specialised nature of infant pedagogy (Dalli et al. 2011) and a project designed to strengthen bicultural strategies in ECE and increase the confidence and competence of teachers in Māori tikanga (cultural practice) in order to support the participation of Māori tamariki and whānau (Ritchie and Rau 2008).

Linda Mitchell and her colleagues were contracted by the Ministry to provide policy makers with a synthesis of research on the impact of ECE on children and their families (Mitchell et al. 2008). Like the earlier review (Smith et al. 2000), it showed consistent evidence of the influence of participation in ECE on short- and long-term cognitive and noncognitive outcomes for children (especially those from low-income families), that the key to achieving positive outcomes was quality ECE and that investing in good quality ECE brought about cost savings and benefits for societies and economies.

This era is illustrative of a particularly close synergy across professional, research and political domains. Research evidence supported policies that drove up the costs of ECE, but political opinion determined that these costs be carried by a supportive state, making quality ECE more affordable for parents. However, an incoming government was soon poised to redraft the policy and research landscape.

24.5 Early Childhood Taskforce: 2010s

The final era sketched for this chapter is illustrative of the division in New Zealand political opinion and policy. The election of a government led by the National Party in November 2008 caused a shift in ECE policy directions (Smith 2013; May 2014). Researchers are still midstream in adjusting to the new ethos. A worldwide economic downturn was used to justify a funding retrenchment. Cutbacks were made to fund for research, training and professional development programmes and the COI programmes. Labour's target of 100% of fully qualified teachers in early childhood centres was cut to 80%. Instead, the government's specific focus was to achieve 98% participation in ECE. There were new initiatives to improve early childhood participation in 'high-need' locations with mainly indigenous Māori children or Pasifika children. The cutbacks around quality were called 'a brutal blow' (Te Tari Puna Ora o Aotearoa -New Zealand Childcare Association 2010). The largest daily newspaper, *The New Zealand Herald* (24 May, 2010), summed up more conservative opinion with the 'Editorial: Preschool Budget cuts right move':

> Plainly National does not regard specialist teaching of pre-school children to be quite as important as Labour did. It is probably right. … Did childcare centres ever need to be fully staffed by trained teachers? Or is this a classic case of 'qualification inflation'. … It is easy to insist little children deserve nothing but the best. … but 'the best' at that level might not require professional training. The Government is right to direct more of its early education support to areas where children are missing out. … Contentious the decision may be but it seems educationally harmless, socially equitable and financially necessary.

The issue remains contentious, reflecting political divides over state interest in the universal funding of quality ECE for all children versus targeting funding towards those children and families deemed to pose risks to the economic and social infrastructure of the country. The focus on targeting disadvantaged children and families was also reflected in the government's welfare policies and especially their Green Paper on Vulnerable Children (Ministry of Social Development 2011) that viewed children in terms of their vulnerabilities and deficits.

Anne Tolley (2011), Minister of Education between 2008 and 2011, justified the government's position:

> Taxpayer investment in early childhood services has trebled over the last 5 years…Despite this growth in funding, too many children that the evidence tells us would benefit most from ECE are still missing out. They are at a disadvantage before they even start school. The economic reality is that money will be tight for the foreseeable future, so more than ever we must invest in the areas that will make the biggest difference to children and their families.

This shifting narrative became a catalyst for research investigating the links between qualifications, quality and outcomes for children and addressing political questions around the effectiveness of early childhood. The policy backdrop to these concerns was the establishment of an ECE Taskforce in 2010 (ECE Taskforce 2011). The terms of reference addressed Government concern over the rising expenditure on ECEC. The phraseology included 'effectiveness and efficiency of the Government's current early childhood expenditure', 'the value gained from the different types of investment' and determining 'cost effective and evidence-based ways to support children's learning in early childhood' (p.13). The report reiterated the evidence that there was a strong case for investment in high-quality ECE especially for low-income children, drawing heavily on economic analyses of benefit/cost ratios (p. 22). The Government asked the Taskforce to propose a new funding model 'without increasing current government expenditure' (ECE Taskforce 2011, p. 176). The funding recommendations were controversial, proposing a shift in emphasis from universal funding mechanisms towards targeting 'priority children'. Taskforce member Anne Smith (2011) released a minority report addressing the matter:

> The argument is that the new funding system will be better for low SES and Māori and Pasifika, but there is little information about how the new scheme will be able to accurately seek out and identify targeted groups. (pp. 2–3)

There were other worrying things in the Early Childhood Taskforce Report including the focus on economic development as opposed to child wellbeing or the rights of children, on getting parents into the paid workforce without

acknowledgement of the value of unpaid parenting work, and support for the unfettered market (Smith 2013). The current government has a strong drive towards coercing beneficiaries back to work, culminating in 2013 with the introduction of a policy to make it compulsory for beneficiaries to enrol their children in ECE for at least 15 h per week, with benefits cut as a sanction for noncompliance. This initiative was also connected to the government's goal of increasing the participation of vulnerable children in ECE.

The Taskforce had noted that 'one of the most important indicators of structural quality of an ECE service is the availability of appropriately qualified staff' (ECE Taskforce 2011, p. 45). The Taskforce, however, did not comment on whether it supported the government's policy of cutting funding for centres with 100% qualified staff, though it recommended increasing the regulated minimum from 50 to 80%. Minister Tolley claimed that there was no research evidence to show centres staffed 100% by qualified teachers were better than 80% of staff being fully qualified teachers. Conversely, Anne Smith (2010b) claimed that:

> Such research would be hard to do. (There are few countries that employ 100% qualified teachers in ECE). There isn't any research either which shows that 100% qualified staff isn't better than 80%. (p. 2, emphasis in original)

Smith said that there was plenty of research demonstrating that 'Qualified teachers provide more sensitive and responsive learning opportunities for children. … Logically the more qualified teachers…. the better outcomes there will be for children's well-being and learning' (p. 2).

Minister Tolley's challenge about the value of all early childhood staff being fully qualified teachers stimulated further research: the Early Childhood Teachers' Work Study (Meade et al. 2012). This research compared staff-child interactions in five centres staffed 100% by fully qualified teachers and five centres with 50–79% of staff who were qualified teachers. In the centres with 100% qualified staff, teachers interacted more and were more responsive to children, were more likely to model and encourage children, participate in children's play and activities, ask open-ended questions, foster language development and provide complexity and challenge for children. Children in the fully qualified centres were more likely to be involved in an education programme, work with symbols systems and to have access to more resources. One key indicator of quality processes is the amount of sustained shared thinking between adults and children, and this was higher in the centres where all staff were qualified teachers. Teachers also had greater pedagogical expertise and were better able to link theory to practice. Children in the centres with 100% of teachers had higher scores on indicators to do with independence and concentration (known to be associated with self-control, one of the strongest predictors of later success in life). The study added to a considerable volume of other research showing that teacher qualifications were a significant component of quality ECE. This final era outlined in this chapter is paused midstream at the time of writing because 2014 is an election year. It was unclear whether the National Government's redirection of ECE policy will become more entrenched or whether,

if elected, a Labour Government will as promised emphasise again the supportive state nudging towards universal provision funded by the state.

24.6 Summary and Conclusion

In almost half a century, radical changes have taken place in our ECE system in Aotearoa, from a divided and unevenly funded system towards a system with a coherent national policy framework, an integrated funding system, widespread improvements in quality, almost universal participation and the implementation of an innovative bicultural holistic curriculum. All of these policy changes have been connected to research agendas and programmes driven by a coalition of researchers, child advocates, parents and staff, concerned with the rights of children and their families to high-quality, accessible and affordable ECE. Initial research was sporadic and initiated by individual academics, but since the 1980s, research funding from government has provided significant support for important policy questions to be addressed by teams of researchers, including collaborative partnerships between practitioners and researchers. There is now a solid body of research evidence supporting the value of investment in high-quality ECE, although debates about the nature of quality continue and the political will to implement accessible and high-quality care have waxed and waned. The 2014 election will determine whether New Zealand's world-class ECE system will remain intact or whether it will be further eroded and move towards targeted funding approaches.

References

Barney, D. (1975). *Who gets to preschool?* Wellington: New Zealand Council for Educational Research.

Barraclough, S., & Smith, A. B. (1996). Do parents choose and value quality child care? *International Journal of Early Years Education, 4*(1), 5–26.

Bronfenbrenner, U. (1974). Developmental research, public policy and the ecology of childhood. *Child Development, 45*(1), 1–5.

Caldwell, B. (1967). What is the optimal learning environment for the young child? *American Journal of Orthopsychiatry, 37*, 8–22.

Carr, M. (1997). *Learning stories. Position paper 5. Project for assessing children's experiences*. Department of Early Childhood Studies, University of Waikato.

Carr, M. (Ed.). (1998). *Assessing children's experiences in early childhood: Final report to the Ministry of Education. Part two: Case Studies*. Wellington: Ministry of Education.

Carr, M. (2001). *Assessment in early childhood settings: Learning stories*. London: Paul Chapman.

Carr, M., & May, H. (1994). Weaving patterns: Developing national early childhood curriculum guidelines in Aotearoa-New Zealand. *Australian Journal of Early Childhood Education, 19*(1), 25–33.

Carr, M., & May, H. (1996). Making a difference for under fives? The early implementation of Te Whāriki, the New Zealand national early childhood curriculum. *International Early Years Journal, 5*(3), 225–236.

Carr, M., & May, H. (1999). Te Whāriki: Curriculum voices. In H. Penn (Ed.), *Theory, policy and practice in early childhood services* (pp. 53–73). Maidenhead: Open University Press.

Carr, M., Hatherly, A., Lee, W., & Ramsey, K. (2005). In J. Nuttall (Ed.), *Weaving 'Te Whāriki': Aotearoa New Zealand's early childhood curriculum document in theory and practice* (pp. 187–214). Palmerston North: Dunmore Press.

Carr, M., Lee, W. & Jones, C. (2004, 2007 & 2009). *Kei tua o te pae. Assessment for learning: Early childhood exemplars* (Books 1–20). A resource prepared for the Ministry of Education. Wellington: Learning Media.

Carr, M., Smith, A. B., Duncan, J., Jones, C., Lee, W., & Marshall, K. (2010). *Learning in the making: Disposition and design in early education*. Rotterdam: Sense Publishers.

Cowie, B., & Carr, B. (2009). The consequences of sociocultural assessment. In A. Anning, J. Cullen, & M. Fleer (Eds.), *Early childhood education: Society and culture* (2nd ed., pp. 95–106). London: Sage Publications.

Dalli, C. (1993). Is Cinderella back among the cinders? A review of early childhood education in the 1990s. In H. Manson (Ed.) *New Zealand Annual Review of Education*, *3*, 226–227. Wellington: Victoria University Faculty of Education.

Dalli, C., Rockel, J. Duhn, I. & Craw, J. with Doyle, K. (2011). What's special about teaching and learning in the first years? Investigating the "what, hows and whys" of relational pedagogy with infants and toddlers. Wellington: Ministry of Education Teaching and Learning Research Initiative.

Duncan, J., Irvine, P., Auld, S., Cross, T., Fagan, H., Seiuli, T., Smith, C., Sutton, A., & Weir, S. (2009). *Homebased early childhood education (family day care)—the visiting teacher's role in improving educators' practices: A summary*. Wellington: Ministry of Education Teaching and Learning Research Initiative.

Early Childhood Education (ECE) Taskforce. (2011). *An agenda for amazing children. Final report of the ECE Taskforce*. Wellington: NZ Government.

Education Counts. (2013). *Annual ECE Census summary report 2012*. Wellington: Ministry of Education.

Irwin, K. (1989). Compensatory education, head start and affirmative action. Implications for Maori Education in New Zealand. In D. Phillips, G. Lealand, & G. McDonald (Eds.), *The impact of American ideas on New Zealand's educational policy, practice and thinking* (pp. 122–132). Wellington: NZ-US Educational Foundation–New Zealand Council for Educational Research.

Lamb, M., & Sternberg, K. (1990). Do we really know how day care affects children? *Journal of Applied Developmental Psychology, 11*, 351–379.

Lamb, M., & Sternberg, K. (1992). Sociocultural perspectives on nonparental childcare. In M. Lamb, K. Sternberg, C. Hwang, & A. Broberg (Eds.), *Childcare in context* (pp. 1–23). Hillsdale: Lawrence Erlbaum Associates.

Lange, D. (1988). *Before five: Early childhood care and education in New Zealand*. Wellington: Department of Education.

May, H. (1985). *Mind that child: Childcare as a social and political issue in New Zealand*. Wellington: BlackBerry Press.

May, H. (2001 & 2009 2nd ed.). *Politics in the playground: The world of early childhood in New Zealand*. Wellington: NZCER Press.

May, H. (2013). *Ngā āhuatanga hurihuri o te tiaki tamariki: The changing fortunes of childcare 2003–2013*. Wellington: Te Tari Puna Ora o Aotearoa-New Zealkand Childcare Association.

May, H. (2014). New Zealand case study: A narrative of shifting policy directions for early childhood education and care. In L. F. Gambaro, K. Stewart, & J. Waldfogel (Eds.), *An equal start? Providing quality early childhood education and care for disadvantaged children* (pp. 147–170). London: Policy Press.

McDonald, G. (1973). *Maori mothers and pre-school education*. Wellington: New Zealand Council for Educational Research.

Meade, A. (1990). Women and children gain a foot in the door. *New Zealand Women's Studies Journal, 6*(1/2), 96–111.

Meade, A. (Ed.). (2005). *Catching the waves: Innovation in early childhood education*. Wellington: NZCER Press.

Meade, A. (Ed.). (2007). *Cresting the waves: Innovation in early childhood education*. Wellington: NZCER Press.

Meade, A. (Ed.). (2010a). *Dispersing the waves: Innovation in early childhood education*. Wellington: NZCER Press.

Meade A. (2010b). *The contribution of ECE Centres of innovation to building knowledge about learning and teaching*. Paper presented to TLRI Early Years Symposium, Wellington, 12 November 2010. Retrieved, 11 February, 2014. http://www.tlri.org.nz/sites/default/files/pages/AMeade-ECE-Paper2010.pdf

Meade, A., Robinson, L., Smorti, S., Stuart, M., Williamson, J., Carroll-Lind, J., & Te Whau, S. (2012). *Early childhood teachers' work in education and care centres: Profiles, patterns and purposes*. Wellington: Te Tari Puna Ora o Aotearoa/New Zealand Childcare Association.

Ministry of Education. (1996). *Te Whāriki: He Whāriki matauranga mo nga mokopuna o Aotearoa. Early childhood curriculum*. Wellington: Learning Media.

Ministry of Education. (2002). *Pathways to the future: Ngã huarahi arataki*. Wellington: Learning Media.

Ministry of Education. (2004, 2007, 2009). *Kei tua o te pae. Assessment for learning: Early childhood exemplars* (Books 1–20). Wellington: Learning Media.

Ministry of Education. (2009). *Te Whatu Pōkeka: Kaupapa Māori assessment for learning: Early childhood exemplars*. Wellington: Learning Media.

Ministry of Social Development. (2011). *Every child thrives, belongs, achieves: The green paper for vulnerable children*. Wellington: Ministry of Social Development.

Mitchell, L., Wylie, C., & Carr, M. (2008). *Outcomes of early childhood education: Literature review. Report to the ministry of education*. Wellington: New Zealand Council for Educational Research.

Mitchell, L., Meagher-Lundberg, P., Mara, D., Cubey, P., & Whitford, M. (2011). *Locality-based evaluation of pathways to the future: Nga Huarahi Arataki Integrated Report 2004, 2006 and 2009*. Wellington: Report to the Ministry of Education.

Moss, P. (2007). *Leading the wave: New Zealand in an international context. Travelling pathways to the future – Ngã huarahi arataki*. Early childhood education symposium proceedings 2–3 May- (pp. 27–36). Wellington: Ministry of Education.

Moss, P. (2008). Beyond childcare, markets and technical practice: Re-politicising early childhood. In N. Hayes & S. Bradley (Eds.), *Proceedings of early childhood care and education seminar series 2* (pp. 5–14). Dublin: Centre for Social and Educational Research.

New Zealand Herald (2010). *Editorial: Preschool budget cuts right move*. Auckland.

Nuttall, J. (2010). *The contribution of the teaching and learning research initiative to building knowledge about teaching and learning: A review of early years projects, 2004–2010*. Paper presented to TLRI Early Years symposium, Wellington, 12 November 2010. Retrieved, 11 February, 2014. http://www.tlri.org.nz/sites/default/files/pages/Nuttall_TLRI_final_paper2011.pdf

Nuttall, J. (2013). *Weaving Te Whāriki: Aotearoa New Zealand early childhood curriculum document in theory and practice* (2nd ed.). Wellington: New Zealand Council for Educational Research Press.

Podmore, V., Wendt Samu, T., Taouma, J., & Tapusoa, E. (2007). U mae'a le galuega/Journey's end: Key findings from the A'oga Fa'a Samoa. In A. Meade (Ed.), *Cresting the waves: Innovation in early childhood education* (pp. 11–19). Wellington: New Zealand Council for Educational Research Press.

Rameka, L. (2011). Being Māori: Culturally relevant assessment in early childhood education. *Early Years, 31*(3), 245–256.

Rameka, L. (2012). *Te Whatu Kākahu: Assessment in Kaupapa Māori early childhood practice*. Unpublished Ph.D. thesis, University of Victoria, NZ.

Ramsey, K., Breen, J., Sturm, J., Lee, W., & Carr, M. (2005). Roskill South kindergarten centre of innovation. In A. Meade (Ed.), *Catching the waves: Innovation in early childhood education* (pp. 25–30). Wellington: New Zealand Council for Educational Research Press.

Ramsey, K., Lee, W., & Carr, M. (2013). Te Whāriki and assessment: A case study of teacher change. In J. Nuttall (Ed.), *Weaving Te Whãriki* (2nd ed., pp. 157–175). Wellington: New Zealand Council for Educational Research Press.

Ritchie, J. (1978). *Chance to be equal*. Christchurch: Cape Catley Ltd..

Ritchie, J., & Rau, C. (2008). *Whakawhanaungatanga—partnerships in bicultural development in early childhood care and education*. Wellington: Ministry of Education Teaching and Learning Research Initiative.

Rogoff, B. (1995). Observing socio-cultural activity on three planes: Participatory appropriation, guided participation, and apprenticeship. In J. Wertsch, P. del Rio, & A. Alvarez (Eds.), *Socio-cultural studies of mind* (pp. 139–164). Cambridge: Cambridge University Press.

Schweinhart, L., Barnes, H., & Weikart, D. (1993). *Significant benefits – the High/Scope preschool curriculum comparison study through age 27* (Vol. 10). Ypsilanti: The High Scope Press.

Smith, A. B. (1980). A community child care scheme in New Zealand. *Australian Journal of Early Childhood, 5*(2), 26–31.

Smith, A. B. (1988). Education and care components in New Zealand childcare centres and kindergartens. *Australian Journal of Early Childhood, 13*(3), 31–36.

Smith, A. B. (1993). Early childhood educare: Seeking a theoretical framework in Vygotsky's work. *The International Journal of Early Years Education, 1*(1), 47–61.

Smith, A. B. (1996, September). *The quality of childcare centres for infants in New Zealand*. New Zealand Association for Research in Education State-of-the-Art Monograph No 4.

Smith, A. B. (1999). Quality childcare and joint attention. *International Journal of Early Years Education, 7*(1), 85–98.

Smith, A. B. (2007). Children's rights and early childhood education: Links to theory and advocacy. *Australian Journal of Early Childhood, 32*(3), 1–8.

Smith, A. B. (2009). A case study of learning architecture and reciprocity. *International Journal of Early Childhood, 41*(1), 33–49.

Smith, A. B. (2010a). Relationships with people, places and things – Te Whāriki. In L. Miller & L. Pound (Eds.), *Theories and approaches to learning in the early years* (pp. 149–162). London: Sage.

Smith, A. B. (2010b). *Position paper on early childhood education to the ECE taskforce and the minister of education*. Dunedin.

Smith, A.B. (2011). *Position paper on Essay 3: Reforming funding mechanisms'*. Dunedin.

Smith, A.B. (2013). *Defining quality, implementing it and holding on to it*. Keynote address to New Zealand Educational Institute conference, Auckland, October 19th, 2014.

Smith, A. B., & Bain, H. M. (1978). Dependency in day care and playcentre children. *New Zealand Journal of Educational Studies, 13*(2), 163–173.

Smith, A. B., & Haggerty, M. (1979). An evaluation of caregiver behaviour in a child-care centre. *New Zealand Journal of Educational Studies, 14*(2), 152–163.

Smith, A. B., & Swain, D. (1988). *Childcare in New Zealand: People, programmes and politics*. Wellington: Bridget Williams Books/Allen & Unwin.

Smith, A. B., Ford, V., Hubbard, P., & White, J. (1995). *Working in infant childcare centres. Final research report to Ministry of Education*. Dunedin: University of Otago.

Smith, A. B., Grima, G., Gaffney, M., & Powell, K. (2000). *Early childhood education: Literature review report to Ministry of Education*. Dunedin: Children's Issues Centre, University of Otago.

Smith, A. B., Duncan, J., & Marshall, K. (2005). Children's perspectives on their learning: Exploring methods. *Early Child Development and Care, 175*(6), 473–487.

Te Tari Puna Ora o Aotearoa – New Zealand Childcare Association (2010). Press release: 'ECE Budget: A brutal blow to children and families', Wellington.
Tolley, A. (2011). *Speech to the childforum Ssminar*. Wellington: Office of the Minister of Education.
Vygotsky, L. S. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
Wertsch, J. V., del Rio, P., & Alvarez, A. (1995). Sociocultural studies: History, action, and mediation. In J. Wertsch, P. del Rio, & A. Alvarez (Eds.), *Sociocultural studies of mind* (pp. 1–34). Cambridge: Cambridge University Press.
Wylie, C., & Thompson, J. (1998). *Competent children at 6: Families, early education and schools*. Wellington: New Zealand Council for Educational Research.
Wylie, C. J., & Thompson, J. (2003). The long-term contribution of early childhood education to children's performance – evidence from New Zealand. *International Journal of Early Years Education, 11*(1), 69–78.
Wylie, C., Thompson, J., & Hendricks, A. K. (1996). *Competent children at 5*. Wellington: New Zealand Council for Educational Research.

Chapter 25
Towards Wawasan Brunei 2035: Early Childhood Education and Development in Brunei Darussalam

Hanapi Mohamad, Rosyati M. Yaakub, Emma Claire Pearson, and Jennifer Tan Poh Sim

Abstract Asia's early childhood education policies and development are still relatively new compared to European countries. Brunei Darussalam is no exception. However, Brunei may be of interest to international readers because of recent developments in the provision of formalised early childhood care and education. Brunei's National Vision, known as Wawasan 2035, is an ambitious national agenda which supports the formal education system, among others, with specific emphasis on early childhood education and care as part of the strategic role of education. Brunei's national goals are unique due to its widespread consultation with the citizens, on which they are built, as well as their attempt to balance modernisation with parallel efforts to retain essential cultural and spiritual values. Government commitment to this particular agenda has been forthcoming both in terms of changes in policy, ongoing supported efforts to upgrade the quality of teaching and learning in existing government preschools and funding for innovative approaches to expanding early childhood care and education.

This chapter provides insight into past and current systems of early care and learning opportunities for young children in Brunei Darussalam, as well as describing future goals and innovative initiatives designed to strengthen and expand early childhood education and care in the nation, with particular reference to a national research and development project that aims to produce a Brunei-specific curriculum for 3–5-year-olds in the country. Part of the government's intention of expanding the current system of state-funded provision is to include children between 3 and 5 years of age.

Keywords Brunei's preschool education system

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Brunei Darussalam is the smallest country in the Southeast Asian region. It is located on the island of Borneo and shares a common border with the states of Sarawak and Sabah in Malaysia. Despite its small size, Brunei Darussalam may be of interest to international readers because of recent developments in the provision of formalised early childhood care and education, resulting from changes in national policy. In the mid-2000s, the Brunei government introduced an ambitious national agenda for economic development, outlined in Wawasan 2035 (Brunei Govt. n.d.), otherwise known as the National Vision. Traditionally a relatively conservative nation with relatively high standards of living within the region, strong spiritual values and high dependency on oil exports for income, Brunei's National Vision is designed to support a strengthened economy by producing an 'educated, highly skilled and accomplished people…' and 'a dynamic and sustainable economy' (Brunei Govt., p. xiii). The formal education system, with specific emphasis on early childhood education and care as part of the strategic role of education, features as a key aspect of the government's framework, in moving towards achievement of the National Vision.

As a small country, there is potential in Brunei Darussalam to achieve ambitious aims. Brunei's national goals are unique due to both widespread consultation with the 'rakyat', or citizens, on which they are built, and their attempt to balance modernisation with parallel efforts to retain essential cultural and spiritual values. An opening message from His Majesty Sultan Haji Hassanal Bolkiah, Sultan and Yang Di-Pertuan of Brunei Darussalam, highlights the importance of connectivity between state and citizenship in achieving the National Vision:

> They (the Council) have looked ahead and recognised the needs of our future generation….. (T)hey have asked our people to describe what kind of country they wish Brunei Darussalam to be thirty years from now, when our children will be competing their careers and our grandchildren will be assuming responsibility for our country's affairs and for its people's fresh hopes…. As a result, they have identified many of the demanding personal, social, spiritual, cultural and economic challenges that will be set in the next three decades by the new world in which our young people will grow and become adults. (p. v)

The unique approach that is being taken to 'manage' the process of modernisation and development is also reflected in the words of His Royal Highness Prince Mohamed Bolkiah, Chairman of the Council for Long-term Development Plan and Minister of Foreign Affairs and Trade, who writes by way of introduction to the same document,

> (W)e have summarised these hopes as follows:
>
> To maintain the political stability Brunei Darussalam continues to enjoy.
> To preserve our social, culture, spiritual and historic values.
> To help our people meet the practical challenges of the modern world successfully.
> To give our families and communities confidence in the future. (p. ix)

As part of the nation's focus on upgrading national education systems, there is a considerable interest in the development and expansion in provision of formalised early childhood care and education. As this chapter highlights, government commitment to this particular agenda has been forthcoming both in terms of changes in

policy, funding for innovative approaches to expanding early childhood care and education, and ongoing supported efforts to upgrade the quality of teaching and learning in existing government preschools. Despite all these opportunities and gains, the country also faces considerable challenges in achieving some of the goals that have been set, most importantly in terms of introducing change to well-established systems that have been relatively untouched for some time, and expanding the current system of state-funded provision to include children between 3 and 5 years of age. This chapter provides insight into past and current systems of early care and learning opportunities for young children in Brunei Darussalam, as well as describing future goals and innovative initiatives designed to strengthen and expand early childhood care and education in the nation.

This chapter is divided into five sections. The first provides background information on Brunei Darussalam, including a brief overview of geography, demographics, people, history, philosophy, culture and values. The second section outlines current national policies that guide provision of formalised early childhood care and education in the country. The third section provides a historic overview and current situation of early childhood education in the country. The fourth section focuses on current challenges and opportunities in the provision of early childhood education and care in Brunei. The final section of this chapter looks at future and ongoing developments that are currently taking place, with particular reference to a national research and development project that aims to produce a Brunei-specific curriculum for 3–5-year-olds in the country.

25.1 Context of Brunei

Brunei is divided into four administrative districts, Brunei-Muara, Tutong, Belait and Temburong. The capital city, Bandar Seri Begawan, is situated in the Brunei-Muara District. The Brunei-Muara District is the most populated district in the country, followed by the Belait District, Tutong District and the Temburong District. As of July 2013, the total population of Brunei was estimated to be 415,717 of which 24.6% were between the ages of 0 and 14 years. The population growth rate is estimated at about 1.67%. Brunei is a multi-ethnic country, where in 2004, it was estimated that 66.3% of the population were Malays, 11.2% Chinese, 3.4% indigenous and smaller groups making up the rest. Islam is the official religion of Brunei, and two-thirds of the population adheres to Islam. Buddhism (13%), Christianity (10%) and other faiths (10 %, including indigenous beliefs) are also practised in the country (IndexMundi 2013).

The nation's official language is 'Standard' Malay, which refers to a formal, standardised version of Malay that is spoken across the Malaysian peninsula; however, English is also widely spoken. In addition to Malay, several other dialects are also widely spoken in the country. Locally, the most widely used local dialect of Malay is Brunei Malay although Standard Malay is used for formal purposes, for example, in government offices. Brunei Malay, Standard Malay and English, as well

as Chinese languages (Mandarin and local dialects), are likely to be encountered on a regular basis, especially in the towns. In government schools, teachers are required to use either Standard Malay or English as the language of instruction, depending on the subjects taught. The reasons for this are both pragmatic and historical (Brunei having been heavily influenced by British government administration in the past); however, this has resulted in a very marginal role for minority languages in Brunei beyond the family and local community (Coluzzi 2012).

Brunei Darussalam attained full independence from the United Kingdom on the first of January 1984. The reigning monarch, His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah, is the 29th ruler of Brunei and occupies positions as Head of State and Head of Government. The Sultan embodies the executive, the legislative and the judicial branches of government. He both reigns and rules, with assistance from a Privy Council on matters concerning the royal household and customs, and by a cabinet and bureaucracy on most other matters. He also serves as the State's Prime Minister, Finance Minister and Defence Minister. Brunei is one of the largest oil-producing countries of the British Commonwealth (Hussainmiya 2002).

Upon independence from the British administration, efforts were made to promote a sense of national identity in the country. Melayu Islam Beraja (Malay Islamic Monarchy also referred in this chapter as MIB) was officially proclaimed as the 'national philosophy' of Brunei on the day of its independence by Sultan Haji Hassanal Bolkiah Mu'izzadin Waddaulah. Melayu Islam Beraja is described as 'a blend of Malay language, culture and Malay customs, the teaching of Islamic laws and values and the monarchy system which must be esteemed and practiced by all' (as cited in Brunei Government 2012). This national philosophy, which is incorporated as a mandatory component of the school and university curriculum, is aimed at forging a strong sense of identity as well as fostering unity and stability. While Brunei's official religion is Islam, the national philosophy is ostensibly one of respectful tolerance, allowing for the practice of other religions and beliefs. Melayu Islam Beraja thus forms the backbone of Bruneian cultural identity.

As an Islamic nation, Brunei observes special days in the Islamic calendar such as Hari Raya Aidil Fitri (a celebration after a month of fasting) and Hari Raya Aidil Adha (a celebration after the month of pilgrimage). Other religious holidays and celebrations observed in the country include the birth of Prophet Muhammad (peace be upon him (pbuh)), Hijrah (the migration of Prophet Muhammad pbuh and his followers from Mecca to Medina), Nuzul Al-Quran (the revelation of the Quran) and Isra' Mikraj (Prophet Muhammad's physical and spiritual journey from earth to heaven). The Brunei government supports staff during the fasting month of Ramadan by allowing all government officers and staff to work only 6 h daily (as opposed to the 7.5 h daily of normal working hours outside Ramadan), while all entertainment and sport activities are temporarily suspended. The government has taken measures to support the practice of Islam in the country, by closing all business premises between 12 and 2 pm during Friday prayers. In addition, 'doa' or prayers are incorporated in all official government functions. His Majesty also encourages the recital of the Holy Quran every morning prior to the start of work. The influence of Islam

extends to the school system, the curricula and the classroom practice, as highlighted by Hanapi (2006). Before classes begin, students assemble to sing the national anthem and recite a special school prayer seeking Allah's blessing for success in their academic and future endeavours. Additionally, daily greetings in Arabic are a common practice, for example, 'Assalamualaikum' (peace be upon you) and then followed by the usual Malay greetings 'Selamat pagi cikgu' (Good morning, teacher). Thus, Islam is inevitably significant in shaping the everyday lives of children in the country (Hanapi 2006).

25.2 Early Childhood Care and Education in Brunei: Current Policies

Brunei is a tax-free country, and its citizens have the privilege of free basic education and health services. The formal school system in Brunei Darussalam adopts the 7-3-2-2 pattern representing 7 years of primary education including a year of preschool, 3 years of lower secondary, 2 years of upper secondary or vocational or technical education and 2 years of pre-tertiary education. In terms of formal provision for young children, Brunei Darussalam's definition of 'early childhood' refers to the period between birth and 8 years of life. Formalised early childhood education and care comprises a combination of medical, developmental and educational services extended to children within this age range. The policies that underpin provision of these services are outlined below. Since 1979, the Brunei government has provided free preschooling for 5–6-year-olds, in the year before formal primary school begins. These state-funded preschools are attached to government primary schools and follow a curriculum that is geared towards supporting children in attaining basic learning skills required for successful entry into primary school. Historically, the majority of children aged below 5 years of age have been cared for at home, either by extended family members or by foreign domestic helpers, who are widely employed by families in Brunei Darussalam. To date, there has been little research to gauge the openness of families to formalised, out-of-home care. However, in response to increasing regional and global awareness of the possible social and educational benefits of high-quality formalised education and care, the government has begun to consider expanding the provision of formal early childhood education to younger children. Current moves in this direction include the development of a national quality framework for children aged between birth and 5 years, and a recent needs and costing analysis to inform the possibility of government provided services for children aged between 3 and 5.

Formal, centre-based early childhood education and care for children between 3 and 6 years of age includes a range of services and programmes provided by various ministries and private institutions. Currently, the Community Development Department (Jabatan Pembangunan Masyarakat (JAPEM)) in the Ministry of Culture Youth and Sports is responsible for services that relate to the social care and

development of children under 3 years of age, and the Ministry of Education is responsible for education and development of children above 3 years of age. In addition to that, the Ministry of Health is the lead agency in providing medical needs for children in Brunei.

In January 1996, Brunei Darussalam ratified the United Nations Convention on the Rights of the Child (UNCRC), indicating its commitment to fulfilling child rights. The Ministry of Culture Youth and Sports holds responsibility for preparing regular country report cards on the situation of children's rights in the country, for submission to the United Nations Committee on CRC. Brunei Darussalam's recognition that early childhood education and care is crucial in providing a strong foundation for building a nation, and its human capital has further strengthened in recent years, with the introduction of a series of legislative mechanisms designed to guarantee children's early education and well-being. In line with world trends on inclusive education, Brunei Darussalam also officially endorsed the concept of inclusion in 1994, with the introduction of the inclusive special education policy. As part of this policy, which is geared primarily towards supporting students who are struggling academically in mainstream settings, the Ministry of Education has in place 'special education' support services attached to primary (and a small number of secondary) schools (Koay et al. 2006). These support services are staffed by Special Educational Needs Assistance (SENA) teachers with specialist education and training.

While government schools offer preschooling for children aged 5–6 years, formalised early childhood education for children younger than 5 years old is currently provided by private, largely profit-making organisations. Cost can range between B$100 and B$200 per month, per child. However, these private organisations are mostly concentrated in the city and the surrounding areas. Only a few of these private schools are available elsewhere. The government provides an education allowance of B$120.00 per month for each child aged 5 years old and above, but only to citizens and permanent residents who are government employees who choose to send their children to private institutions. Citizens with low income can apply for extra support from the government for their children's schooling needs at government schools. These supports include subsidised uniforms, books, stationaries, school bags and so on. Not unlike many other countries (Rao and Jin 2010), ministries in Brunei Darussalam have traditionally functioned in relative isolation; however today there are a number of initiatives (some of which are outlined in this chapter) that are designed to strengthen inter-sectoral partnerships in the provision of early childhood care and education.

Legislation on the provision of early childhood care and education exists in the form of a number of acts or orders, several of which mandate responsibility for the provision and regulation of services. Education Order 2003 regulates the registration, supervision and inspection of all educational institutions for children 3 years and above. These regulations contain guidelines designed to ensure children's well-being, development, health and safety in all schools. The Ministry of Education is the registration authority for all educational institutions and coordinates related processes, in consultation with relevant government agencies.

The Education Order 2003 also mandates the provision of 1 year of free compulsory preschool education in government schools, for children aged between 5 and 6 years. Private preschools that cater for 5–6-year-olds are required to teach Malay and Islamic religious subjects based on the national preschool curriculum. The preschool curriculum framework is based on the Ministry of Education curriculum guidelines of the new twenty-first-century National Education System (SPN-21), which has been implemented since 2009. The Ministry of Education therefore supports private preschools by providing qualified and trained teachers to teach these two subjects (Brunei Government 2012).

Formal, centre-based provision for children younger than the age of 3 years is currently provided by private organisations. At present, there is no approved national curriculum for children aged under 3 years; however the Ministry of Education is currently developing a national quality framework to inform development of such a curriculum. Further details on plans for the development of this curriculum are provided in a later section of this chapter. All child care centres that operate in the country are required by law to obtain licences. The Community Development Department (JAPEM) under the Ministry of Culture, Youth and Sports is the licencing authority for child care centres and coordinates the registration process with relevant government agencies. The Child Care Centre Order 2006 regulates the registration, supervision and inspection of private child care centres that cater for children under the age of 5 years providing guidelines to child care centres on aspects such as hygiene and safety.

Mother and child health care is included under primary health care services provided by the government. Child health services begin at birth, with home visits conducted by midwives for mothers of newborn babies during the early weeks of the confinement period. The confinement period, during which mothers usually stay in the home to avoid exposing themselves or the newborn baby to germs and disease, starts after the mother gives birth and ends on the 40th day. Mothers who are government employees are also eligible for 105 days of fully paid 105 days maternity leave. Growth and developmental assessments are then carried out by health nurses during regular clinic visits. A comprehensive child immunisation programme also takes place during these early years. School health services, including dental services are provided to all children, whether they are in government or private schools. School health personnel from the Ministry of Health pay visits to schools yearly and monitor children's general health status, visual acuity, physical growth and recommend, if necessary, referrals to clinics.

25.3 Early Childhood Education in Brunei Darussalam: Historical Context and Current Situation

Until recently, the provision of early childhood education services in Brunei has been widely associated with the formal preschool settings that are attached to government primary schools, with little attention directed towards education and care services that cater for children below the age of 5. Despite the strong cultural values attached to children and families in Brunei, this has resulted until recently in early childhood care and education being a victim of what Sylvia Opper (1993) once referred to as the 'Cinderella' complex, where policies and programmes at this level are considered relatively unimportant in comparison to the more important business of formal, outcome-oriented teaching and learning that takes place in later school life. Education and training courses for early childhood professionals and practitioners, for example, have been largely geared towards preparing practitioners for this formalised preschooling.

In an attempt to upgrade early childhood education in line with international perspectives on best practice at the time, an 18-month certificate in Early Childhood Education (ECE) was introduced for the first time in 1993. Underpinned by principles of Developmentally Appropriate Practice (DAP, NAEYC 2009), the certificate was designed to upgrade teachers' knowledge of early learning and development in young children aged from birth to 8 years. The certificate aimed also to challenge teachers' tendency to adopt formal, traditional teaching methods and promote child-centred approaches (Hanapi 2006).

In 2009, significant changes to the education system associated with national reforms resulted in this course being discontinued, when the minimum qualification for teachers entering government preschools was upgraded to a Master of Teaching in Early Childhood Education and Care, in line with broader reforms within primary and secondary schooling. While upgrading preschool teacher qualifications in line with similar policies for primary and secondary school teachers is very important in terms of enhancing the status of preschool teachers, this change has presented several challenges. One of these is related to teacher supply, as the system adjusts to the new qualification requirements. A second challenge relates to ensuring that teachers of children under the age of 5 years, largely employed by private institutions, are also required to obtain minimum qualifications. A large number of preschool teachers employed by private institutions are school leavers who only have 'O' levels qualification. Currently in Brunei, 'preschool teachers' are assumed to be working for government as part of the formal education system. Reforms are also needed that address issues related to qualifications and supply of practitioners who are working in private centres with 3–5-year-old children.

A recent report on early childhood education and care in Brunei Darussalam prepared by independent consultants from the International Child Resource Institute (ICRI), representing the first comprehensive review of formalised provision of services for young children, provides valuable insights into areas of both strength and limitation of service delivery in the country. As the report indicates (ICRI 2013),

policies and strategies for the delivery of education for 5-year-olds is 'clear and straightforward' (p. 7). One benefit of having preschools attached to the formalised public schooling system, as outlined earlier, is that a range of standards widely considered as important for achieving quality, such as minimum teacher qualifications (Degotardi 2010) and structural factors (Rao and Jin 2010), are maintained. Hence, the ICRI report concludes that public programmes are, to a large extent, of 'high quality'.

A disadvantage of being closely related to formalised schooling is, as both Bruneian and international researchers have noted (Asmah and Kitson-Charleston 2006; Hanapi 2006; Rao and Jin 2010), the likelihood of both pressure to adopt formalised teaching and learning approaches, and the loss of a unique 'identity' for early childhood. Until recently, as mentioned, attention to early childhood education in the country has been directed primarily towards formalised preschooling. Having been adopted largely as part of the formal education system in Brunei (primary and secondary schooling), for many years, early childhood has operated without a unique set of goals or mandates that might distinguish early childhood from the later years of schooling. For example, until recently, curriculum planning from preschool to the final years of secondary schooling took place within the broader curriculum planning department within the Ministry of Education, with little input from staff qualified in early childhood education. Perhaps due in part to some of these challenges, teaching in preschool classroom has tended to be rather teacher directed (Asmah and Kitson-Charleston 2006). Traditionally, teachers have viewed the end product of learning as more important than the actual process, focusing on preparing children for formal learning in primary school. Until recently, preschools have been staffed largely by teachers with certification in primary school teaching. Their teaching has therefore tended to place strong emphasis on developing basic reading, writing and numeracy (the '3Rs'), rather than reflecting a more holistic, child-friendly approach that includes other areas of development, such as children's creative development (Hanapi 2006).

As part of the raft of reforms introduced in 2009, a new preschool curriculum was also introduced. The new curriculum, designed to align with the broader Ministry of Education curriculum guidelines for the new twenty-first-century National Education System (Sistem Pendidikan Negara Abad ke-21), was officially implemented in January 2009. The broader national curriculum is designed to promote a holistic approach to teaching and learning across the government education system, from preschool to secondary education. At preschool level, the curriculum highlights the importance of five domains of learning and development: self and social development, cognitive development (numeracy, literacy and early science), aesthetic and creative development (arts, handcraft, stories, drama and songs), physical development (safety and health and movement and games), and information and communication technology development (early ICT) in preparation for primary schools. The preschool programme also introduces early language skills in both Malay and English languages. Accompanying the curriculum is a set of early learning standards that covers the expected learning outcomes of preschool children at the end of their 1-year preschool education. These standards are designed to assist

teachers in monitoring children's achievement in five domains of the curriculum stated above.

As part of the National Vision's focus on enhancing and expanding provision of early childhood care and education services, in 2010, the first Early Childhood Care and Education (ECCE) Unit, focused specifically on the early childhood years, was established within the Ministry of Education. Over the past few years, the unit's mandate has revolved primarily around upgrading quality in existing early childhood care and education settings, via steps that are described below. The unit has therefore focused on implementing a range of measures designed to upgrade the quality of teaching and learning in preschool classrooms across the nation, building teacher networks and providing a range of professional development experiences for the 209 government preschool classrooms and 477 early childhood teachers working across the country.

Many of the initiatives taken up by the small, dynamic team of three staff in the Early Childhood Care and Education (ECCE) Unit within the Ministry of Education have been designed to bring formalised early childhood education programmes in Brunei in line with internationally recognised 'standards', as well as raising the profile and presence of early childhood care and education in the country. In the first 2 years of its establishment, these efforts involved the ECCE Unit in launching a nationwide 'Capacity Building Programme' for private and government preschool teachers, as well as introduction and implementation of a Preschool Quality Indicators Checklist. The 'Capacity Building Programme', conducted throughout 2011, aimed at strengthening the quality of teaching and general professional competencies by exposing existing preschool teachers across the country to child-centred philosophies and teaching and learning strategies. The programmes included hosting of workshops across the four districts in the country, as well as the appointment of facilitators and mentors for each catchment area and district across the country. After attending workshops on early childhood teaching and learning, these teacher networks were designed to strengthen and sustain the likelihood of positive change in preschool classroom, by assisting teachers in implementing new teaching and learning techniques (Brunei Government 2011).

A Preschool Quality Indicators Checklist, designed as a guide for teachers to use as a self-evaluation tool following attendance at the workshops, was also developed by the unit. All preschool teachers were advised to work towards achieving the requirements listed in the checklist and submit completed reports at the end of each school term. The checklist covered four key areas: teacher and child aspects (including specialised early childhood teacher's qualification and training, i.e. do teachers have early childhood teaching qualifications or have they followed any early childhood professional development programmes? Reflection on the use of appropriate classroom voices, collegiality and availability of a SENA teacher for special needs students are also found under this aspect), teaching and learning aspects (availability of learning through play activities, study corners, displays of children's work, student portfolios, student assessment and parent involvement), infrastructure aspects, and daily routine aspects. The collection of teacher reports based on the checklist was discontinued once it was felt that practising teachers were able to

recognise important aspects of quality in their classrooms (E. Yacub, personal communication, March 20, 2014).

In 2011, the ECCE Unit also introduced a 'Yearly School Readiness Programme', conducted every November, prior to the January start of preschool. Designed to ease the transition into preschool for new entrants, this programme was developed in response to concerns expressed widely by preschool teachers that many children struggle with the first few weeks of the academic year as they transition into formalised early learning contexts with which they are very unfamiliar. The programme involves children and families visiting schools during the month of November where children are enrolled to begin preschool in January. Children attend sessions in which they meet their preschool classroom and English language teachers, play games and tour the school campus, including canteens and playground areas (E. Yacub, personal communication, March 20, 2014).

In line with the country's focus on retaining essential cultural and spiritual values in the current moves towards upgrading and modernising education, the ECCE Unit has also coordinated preparation and nationwide distribution of a booklet of Bruneian traditional games and songs and children's religious songs for preschool teachers across the country. The launch of the book involved events held in communities across the country, where parents and children were encouraged to participate in and share their memories of traditional games and songs. As well as focusing on local communities, the ECCE Unit has initiated collaborations with counterparts across the region, and in 2011, the country held its first national Conference on ECCE, organised in collaboration with the South East Asia Ministers of Education Organisation (SEAMEO) and other regional partners (ECCE Unit n.d.).

25.4 Future Challenges and Opportunities

Achieving change in education contexts, as Fullan and Hargreaves (1992) have explained, takes time. Shifts in educational practice often require parallel shifts in societal/community perspectives on education. Since many of the teachers who are currently teaching in preschools across the nation are more comfortable with the systems with which they have become familiar, than they are with the new approaches that are currently being promoted, there has been a degree of resistance to change expressed by some (Norsusilawati 2014). This perhaps explains observations noted in the recent ICRI report that indicate the need for continued support to preschool teachers in achieving the shifts away from teacher-directed approaches that have been widely espoused through professional development workshops and teacher support networks:

> The teachers in Brunei public 5-year-old preschool have a role that includes a strong level of teacher direction of activities combined with an understanding that children need time to explore their early childhood environment on their own. Thus, a combination of activities has been selected that place the 5-year-old public programs at a somewhat unusual balance point. That balance point currently includes a level of teacher direction that would be

> beyond a typical emergent curriculum and a level of children's exploration that would be beyond a traditional teacher-directed curriculum approach. For example, teachers were observed to conduct marching activities with children, but for those programs observed, never relinquished control of the marching activity to a child or a group of children to lead or continue the activity. Another example is that excellent singing and music programs take place, led by various teachers, but some control all aspects of the music and movement activities and some allow children to choose songs and dances and begin to carry them out independently. In a similar manner, while the majority of the rooms observed had excellent activity zones within the room, some of the activity zones did not appear related to the teacher directed part of the program and some seemed clearly related. Thus, it is unclear whether a conscious decision has been made to call upon teachers to cede control of certain activities as children become ready for them and, at the same time, assure that children have true mastery over each of the activity zones over the room. (ICRI 2013, p.2)

These observations indicate that, while preschool teachers are open to the benefits of child-centred learning, they have yet to achieve consistency or alignment in their teaching. Similar challenges to achieving shifts in teaching practice for early childhood teachers have been reported previously (Lee and Tseng 2008; Ling 2003). Consistency in support for these teachers, in the form of both professional support and resources, will be key to sustaining the kinds of change envisioned by the ECCE Unit. Although educational policy in Brunei is not subject to the same political swings in priority that some other countries may experience, movements within the Ministry of Education may pose a risk to sustainability of some of the initiatives implemented in the ECCE Unit during the past few years. Maintaining the strong team that currently works within the ECCE Unit will be important for continuing the efforts that are described here.

With its seven native tribes of Malay people (Belait, Bisaya, Brunei, Dusun, Kedayan, Murut and Tutong) and two indigenous communities (Iban and Kelabit), Brunei's diverse population has inevitably resulted in a potpourri of speech communities with their own distinct dialects, languages and cultures, posing an additional challenge to early childhood teachers working with children in the year prior to entry into formal schooling. A significant challenge regularly discussed by students attending courses at the national university, where the authors of this chapter are based, is related to the language of instruction in schools and related implications for preschooling. Brunei is multi-ethnic and multilingual, so many children entering preschool are neither literate in Standard Malay, the language of instruction in government preschools, nor in English, which is the language of instruction in primary schools. By the time they enter primary school, young children are expected to have reached a high level of literacy in English as it is the medium of instruction for most subjects. A large number of children therefore spend their preschool year learning two 'new' languages, English and Standard Malay, as well as concepts and skills outlined in the national preschool curriculum.

In partial recognition of the challenges that both children and their teachers face for many 5-year-olds is their first year of formal learning, there is now a focus in the country on provision of early learning facilities for children aged between 3 and 5 years. The majority of countries across the Asia Pacific region are currently focused on expanding (or enhancing) the provision of early childhood care and education

'downwards' to include 3–5-year-olds (Pearson and Tan 2013). As part of this trend, Brunei is also considering the possibility of expanding current state-funded early childhood education services to include younger children.

Such a move requires careful consideration and planning, particularly since there is a lack of evidence to suggest that provision of formal learning for younger children would be demand driven. Many families in Brunei employ foreign domestic helpers who provide home-based care for young children. In other families, children have traditionally been cared for by extended family members. While it is important to be mindful of, and sensitive to, the possibility that parents are not comfortable with out-of-home, formalised care settings, private child care settings do exist in Brunei, and, for many years, the regulation of these centres has been relatively basic. As the government itself has acknowledged, it is crucial that expansion of formalised provision for younger children proceed with care and caution:

> It is important that Brunei Darussalam ensures that the current quality and standards of the social care and development of children under 3 years at the Community Development Department (JAPEM), preschool education offered to the 3–5 year-olds at the non-Government/private preschools as well as those offered at the Government preschools are of high quality and well-established, well-resourced and well-staffed by highly trained and qualified preschools teachers before attempting to lowering the starting age of preschool education from the current 5 years old to 3 years old. Such caution should be taken so that young children will not be taught by untrained teachers and be hurried to learn academic skills at an early age. (Brunei Government 2012, p. 7)

At present, educational and care services for children under the age of 5 are provided solely by private agencies. Anecdotal evidence suggests that some of the centres have adopted overseas approaches or models in their programmes. For example, some centres are known for offering a Montessori approach. However, due to the past focus on government – supported preschooling – there is currently a lack of research providing information about the types of programmes offered by private centres. According to statistics provided by the Ministry of Culture, Youth and Sports, only a small number of children throughout the country are attending licenced child care centres (a total of 295 children in 2011, Brunei Government 2012). Currently, while there is strong support for developing early childhood care and education provisions that are underpinned by national priorities, values and agendas, there is a need in Brunei for research designed to provide a cohesive national evidence, base from which to build contextually-appropriate, 'high-quality' early childhood education and care programmes. There is no national curriculum framework, for children below 5 years of age, and little data to indicate specific areas of priority or need for young children and families in the nation. The Brunei government has, thus, recently awarded researchers at the national university with funding to conduct nationwide research into national priorities, adopting a careful, measured approach to decisions regarding what types of programmes will be most likely to benefit children in this age group.

25.5 Focusing on 3–5-Year-Olds: Opportunities for Brunei

Following the introduction of the National Vision and its emphasis on early childhood care and education, former Minister of Education, Pehin Abdul Rahman Taib, referred in 2010 to the importance of investing in early childhood education to 'develop a strong foundation early in a child's development so that future learning can be built' (Thien 2010). At the same time, Ministry of Education (MoE) Deputy Permanent Secretary (Core Education) Hjh Suhaila Hj Abd Karim pointed to the need for greater attention to the provision of services for children aged under 5 years old. These sentiments reflect acknowledgment by the Ministry of Education that there is a need for greater focus on providing education and care for children in the younger age ranges. The Ministry of Education, therefore, is at the moment considering the possibility of investing in publicly funded early childhood education programmes for 3–4-year-olds and recently engaged the International Child Resource Institute (ICRI) to conduct a national assessment into the feasibility of including 3- and 4-year-old children in the national system of early childhood education. Among the initial general findings of the ICRI is a recommendation that the Ministry of Education pursue efforts to create high quality, publicly funded early childhood education programmes for 3- and 4-year-olds (ICRI 2013). This recommendation offers exciting opportunities for the country not only to expand and enhance early childhood care and education for children in Brunei but also for it to contribute to international innovations in early childhood care and education provision (ICRI 2013).

A common curriculum framework would help to ensure an even level of quality across different forms of provision and for different groups of children. It would also ensure continuity between early childhood education and care and primary schooling, as well as alignment with national values and customs. International evidence suggests that a strong, cohesive and relevant curriculum can provide the foundation for high-quality early childhood programming (OECD 2013). Indeed, this 'gap', given the current government commitment to expanding and enhancing early childhood care and education, offers opportunities for innovative approaches to development of 'quality' curriculum for 3–5-year-olds.

The importance of quality is widely espoused in international literatures on early childhood care and education. Less common is agreement on what can be seen to constitute 'quality' (Fenech 2011). Robin Alexander's (2008) recent analyses of references to quality in education, based on research conducted across five cultures, highlight current global developments and are relevant to the kinds of advances in early childhood education and care that Brunei is currently interested in. Alexander argues that conceptualisations of 'quality' are too often based on strict measurable inputs and outputs, rather than on broader, diverse social processes that underpin effective learning and teaching. Understanding these processes is necessary not only for high-quality teaching but is also of particular importance for early childhood programmes that seek to engage families and communities in children's early learning and development. As a nation, Brunei is well placed to respond to these

calls for innovative approaches to conceptualising quality. The country is well resourced and has expressed strong commitment to early childhood education and care. It has a rich national and cultural heritage which, as explained earlier, has been acknowledged as an important foundational aspect in the nation's development.

Services designed to support education and care for young children have long been recognised as requiring a holistic approach, and, increasingly, high-quality programming is associated with inclusive approaches that connect services to the specific needs and priorities of 'local' communities, including minority groups (Myers 2004). Programmes and services that are built upon evidence that reflects unique needs, strengths and cultural priorities, as well as documented knowledge regarding best practice, are now widely acknowledged as more effective than those that are shaped simply around a prescribed set of ideals, or by priorities for children that have been identified in very different contexts (Penn 2008). Such an approach, based on contextualised understanding, also contributes to environmental and cultural sustainability, an important priority for Brunei.

In response, a team based at the national university, Universiti Brunei Darussalam, has recently been awarded government funding to conduct nationwide research on Brunian values and priorities. The research is designed to support the development of early childhood care and education programmes and policies by providing a strong evidence – based on the values, priorities and needs that exist in Brunei Darussalam related to the care and education of young children. A final phase of the research project proposes development and field testing of a customised, Brunei-specific curriculum for children 3–4 years of age. Research, development and implementation of a Bruneian-branded curriculum that reflects the cultural diversity of the country would be favourable not only for children and families but would also reflect current early childhood education curriculum trends internationally.

25.6 Conclusion

In the last decade, Brunei Darussalam has seen considerable changes in improving the development of young children in the country. The core of these changes lies in its National Vision, more popularly known as Wawasan Brunei 2035. Brunei sees its education as an asset for the development of its human capital and its nation. Therefore, investing in early childhood care and education has become one of the nation's main agendas. What is unique about Brunei Darussalam is that in setting a national agenda of modernisation, it has also drawn attention to the importance of retaining essential cultural and spiritual values that are deeply rooted in the society. Within the field of early childhood care and education, achieving this combination of 'modernisation' and preservation of the various cultural 'traditions' that makes Brunei unique presents both challenges and exciting opportunities as the country expands and enhances service provision.

As this chapter has outlined, the Brunei government has considerable interest in the development and expansion in provision of formalised early childhood care and

education, with important implications for reviewing current systems as well as developing new innovations. Among the challenges for the current system that are currently under review are the difficulties posed to children as they enter preschool in mastering the Standard Malay language, which is different to the local Brunei Malay dialect that they encounter on a regular basis, as well as becoming literate in English as the medium of instruction in primary school. Related to this challenge, as reflected in the ECCE Unit's efforts to upgrade teaching and learning in preschools, is that the present system of teacher preparation may need to be revised and expanded, especially if the government decides to provide publicly funded early childhood education programmes for all 3–4-year-olds in the country.

Currently, increased focus has been directed in the development of services for 3–5-year-olds. These efforts include conducting assessment into the feasibility of including 3–4-year-old children in the national system of early childhood education. The government has also funded nationwide research on Bruneian values and priorities that will provide strong evidence-based data for the development of context-specific policies and programmes for children aged 3–4 years in the country. These initiatives reflect current international early childhood education trends and should give Brunei opportunities for contributing to important innovations in early childhood care and education provision in the coming years.

References

Alexander, R. (2008). *Education for all, the quality imperative and the problem of pedagogy, CREATE Research Monograph No. 20*. Brighton: University of Sussex.

Asmah, M., & Kitson-Charleston, R. (2006). Are your children psychologically and physically safe in their preschool classrooms? *Journal of Applied Research in Education, 10*, 1–17.

Brunei Government. (2011). *Brunei Darussalam's country report*. Paper presented at the regional consultation forum on early learning frameworks, policies and programs, Brunei Darussalam, 28–30 March 2011. Ministry of Education, Government of Brunei Darussalam.

Brunei Government. (2012). *Brunei Darussalam's country report*. Paper presented at the ASEAN seminar-workshop on Early Childhood Care and Development (ECCD) Systems, Manila, Philippines, 9–13 July 2012. Ministry of Education, Government of Brunei Darussalam.

Coluzzi, P. (2012). The linguistic landscape of Brunei Darussalam: Minority languages and the threshold of literacy. *Southeast Asia: A Multidisciplinary Journal, 12*(2012), 1–16.

Degotardi, S. (2010). High-quality interactions with infants: Relationships with early childhood practitioners' interpretations and qualification levels in play and routine contexts. *International Journal of Early Years Education, 18*(1), 27–41.

Early Childhood Care and Education (ECCE) Unit. (n.d.). *Introducing the early childhood care and education in Brunei Darussalam* [Brochure]. Brunei Darussalam: Author.

Fenech, M. (2011). An analysis of the conceptualisation of 'quality' in early childhood education and care empirical research: Promoting 'blind' spots' as foci for future research. *Contemporary Issues in Early Childhood, 12*(2), 102–117.

Fullan, M., & Hargreaves, A. (Eds.). (1992). *Teacher development and educational change*. London: Falmer Press.

Government of Brunei Darussalam (2012). *Tenth National Development Plan (2012–2017) Brunei Darussalam: Knowledge and innovation, increase productivity, accelerate economic growth*. Department of Economic Planning and Development, Prime Minister's Office.

Government of Brunei Darussalam (n.d.). *Brunei Darussalam long-term development plan*. Wawasan Brunei 2035.

Hanapi, M. (2006). *Promoting creativity in early childhood education in Brunei*. Unpublished PhD thesis. University of Western Australia.

Hussainmiya, B.A. (2002). *Brunei Darussalam: A nation at peace*. Bulletin of the Southeast Asian Conflict Resolution Network, Penang, March–June, pp 14–16.

ICRI (2013). *Feasibility study on the provision of high-quality care and education to children age 3 and 4 years: First progress report: October 2013*. Prepared by International Child Resource Institute for Brunei Ministry of Education.

IndexMundi. (2013). Retrieved from http://www.indexmundi.com/brunei/religions.html.

Koay, T. L., Lim, L., & Sim, W. K. (2006). Learning assistance and regular teachers' perceptions of inclusive education in Brunei Darussalam. *International Journal of Special education, l2*(1), 131–142.

Lee, I., & Tseng, C. (2008). Cultural conflicts of the child-centered approach to early childhood education in Taiwan. *Early Years, 28*(2), 183–196.

Ling, L. I. (2003). What makes a good kindergarten teacher? A pilot interview study in Hong Kong. *Early Child Development & Care, 173*(1), 19–31.

Myers, R.G. (2004). *In search of quality in programmes of early childhood care and education (ECCE)*. Paper prepared for the EFA Global Monitoring Report 2005. Paris: UNESCO. Retrieved from http://unesdoc.unesco.org/images/0014/001466/146677e.pdf.

NAEYC (2009). *Position statement: Developmentally appropriate practice in early childhood programs serving children from birth through age*.

Norsusilawati, M. T. (2014). *Enhancing the collaboration between preschool teachers and teaching assistants in Brunei Darussalam*. Master's thesis. Universiti Brunei Darussalam, Negara Brunei Darussalam.

OECD. (2013). *Quality matters in early childhood education and care*. Sweden: OECD Publishing. doi:10.1787/9789264176744-en.

Opper, S. (1993). Kindergarten education: Cinderella of the Hong Kong education system. In A. B. M. Tsui & I. Johnson (Eds.), *Teacher education and development* (pp. 80–89). Hong Kong: The University of Hong Kong, Faculty of Education.

Pearson, E & Tan, J. (2013). *Fulfilling child rights through early childhood development*. Background paper for High Level Meetings on South-South Coperation, UNICEF.

Penn, H. (2008). Working on the impossible: Early childhood policies in Namibia. *Childhood, 15*(3), 379.

Rao, N. & Jin, S. (2010). *Early childhood care and education in the asia pacific region: Moving towards goal 1*. Background report prepared for the World Conference on Early Childhood Care and Education. Moscow, 27–29 September. UNESCO. Retrieved from http://unesdoc.unesco.org/images/0018/001892/189210e.pdf#xml=http://www.unesco.org/ulis/cgi-bin/ulis.pl?database=&set=4D015C24_0_374&hits_rec=9&hits_lng=eng.

Thien, R. (2010, March 2). MoE to enhance early childhood education, care. *Brunei Times*. Retrieved 04/03/2014 from http://www.bt.com.bn/news-national/2010/03/02/moe-enhance-early-childhood-education-care.

Chapter 26
Early Childhood Care and Education in Bangladesh: A Review of Policies, Practices and Research

Shukla Sikder and Laila Farhana Apnan Banu

Abstract Early Childhood Care and Education (ECCE) in Bangladesh is still in the preliminary stage compared to the significant developments made in the field across the globe. This chapter presents the summary of policies, practices and contemporary research, as well as challenges encountered in relation to ECCE in Bangladesh. Based on analysis of secondary data, the findings show that considerable progresses have been made in the policy arena. However significant gaps remain in implementation of policy commitments, particularly in relation to coverage and quality of ECCE services. More pronounced challenges in the sector are reported in the lack of reliable national dataset, poor service coverage, weak coordination among service providers, noncompliance of minimum quality standards, low parental awareness leading to low demand and utilisation and low research base to guide policy and programmatic decisions for optimum efficiency and effectiveness; which altogether contribute to the nonachievement of universal coverage of ECCE services of good quality for all. The authors argue that government and nongovernment organisations could work in a more harmonised manner for expanding the coverage and improving the quality of ECCE services in Bangladesh, with major emphasis on research to develop, test and scale cost-effective and affordable ECCE models, so that all children in Bangladesh could benefit from a fair start in life and reach their fullest potential.

Keywords Early childhood care and education • Bangladesh • Policy • Practices • Quality • Research

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26.1 Introduction

The importance of Early Childhood Care and Education (ECCE) for optimal child development is now internationally recognised. Coordinated birth-to-age-8 ECCE programmes help to prevent achievement deficits and produce better education, health, social and economic outcomes. Numerous research studies, including Nobel laureate Professor James Heckman's (2011) breakthrough research on early investments in quality early childhood development, have provided ample evidence of its individual, social and economic returns. At the individual level, early investment fosters valuable skills and establishes foundation for lifelong learning. At the societal level, with economically productive and socially responsible citizens, these investments strengthen the nation's workforce, grow the economy and reduce costly remediation and social spending, while increasing the value, productivity and earning potential of individuals. In fact, every dollar invested in quality ECCE programmes for disadvantaged children produces a 7–10% return, per child, per year (Heckman et al. 2010). Most importantly, ECCE interventions serve to create a level playing field for disadvantaged children. Research studies across the globe have proven that disadvantaged children, particularly girls, benefit most from ECCE services, who otherwise would not be able to access services at home and would not have been able to reach their potentials to the fullest (Heckman and Masterov 2007; Heckman 2011). An accumulating body of knowledge shows that ECCE interventions for disadvantaged young children is more effective than interventions that come later in life (Cunha and Heckman 2006).

ECCE means providing comprehensive and integrated supports necessary for a child to realise her/his right to survival, protection, care and education which will ensure optimal development from birth to age 8 (Ministry of Women and Children Affairs [MoWCA] 2009). Throughout this chapter, the term ECCE has been used to refer to activities related to early childhood care, development, stimulation and education that might elsewhere fall into categories referred to as ECD (Early Childhood Development), ECCD (Early Childhood Care and Development), ECE (Early Childhood Education), ECCED (Early Childhood Care, Education and Development) or other variants of this term. This also includes Pre-Primary Education (PPE) to mean the developmental and educational support provided to children of 5–6 years through play and other organised activities to foster physical, socioemotional, cognitive and language development.

Despite its highly beneficial role for economic and human capital development, ECCE has not been the top development agenda for Bangladesh. In a developing country like Bangladesh, awareness of ECCE is still emerging even among professionals, coupled with serious infrastructural and social constraints such as poverty, lack of trained educational and health professionals and resources. As a result, age and developmentally appropriate care, support and early learning opportunities for children, especially for the economically and/or socially disadvantaged ones, have been scarce, even though it has been 25 years since the Education for All (EFA) Goal 1 was adopted by Bangladesh, which highlights that early learning is fundamental to child development and lifelong learning.

Within this backdrop, this chapter aims to take stock of current policies, practices and research in ECCE in Bangladesh; identify challenges and gaps in current policies, programmes and service provisions; and recommend high-impact priority actions needed to address service gaps and quality. While this introductory section provides the rationale and scope of this chapter, the next section elaborates on the methodological approach taken to explore the ECCE context of Bangladesh. Providing a brief on the country context and the status of Bangladesh's children, the next section focuses specifically on the ECCE sector in Bangladesh, including developments in policies and programmes, social norms and practices, challenges and opportunities identified through research. The final section highlights policy and programmatic recommendations informed by the analysis in coverage and quality gaps.

26.2 Methodological Approach

The chapter is written based on a desk review of secondary data. Data were collected from published and unpublished academic research papers, programmatic research studies, government policy documents and other relevant grey literature available in the public domain. Thematic analysis was done to summarise key synopsis of the nature, scope and quality of policies and service provisions in the ECCE sector in Bangladesh. The analysis also incorporated authors' reflections of first-hand professional experiences to identify progresses made, challenges encountered and continuing gaps in service coverage and quality.

26.3 Bangladesh: The Country Context

Bangladesh, officially named as the 'People's Republic of Bangladesh,' is a South Asian country that appeared as a liberated nation in 1971 after achieving independence from Pakistan in the Bangladesh Liberation War (Raghavan 2013). Surrounded by India to its west, north and east; Myanmar to its southeast; and the Bay of Bengal to its south, it is divided from Nepal and Bhutan by the Chicken's Neck corridor (Islam 2003). The country's largest ethnic group Bengalis makes up 98% of the population, with 2% indigenous peoples such as the Khashea, the Jaintia and the Chakmas in northern and southeastern districts (Guhathakurta and Schendel 2013). Geographically, the country is ruled by the fertile Bengal delta, which earns the country the name of 'The Green Delta' and 'The land of rivers' (Iqbal 2010).

According to the Population Census 2011, the proportion of children under 18 in Bangladesh is about 40% of the 149.8 million population (Bangladesh Bureau of Statistics [BBS] 2011). A Child Poverty study indicated around 26.5 million of 63 million children in the country are living below the national poverty line, while 32 million are living below the international poverty line (UNICEF 2009). About one

quarter of them face persistent poverty and are typically deprived of four out of seven of the basic services of water, sanitation, nutrition, education, health, information and shelter. In terms of deprivation, 41% of children are deprived of shelter, 64% are deprived of sanitation, 71% of information, 57% of nutrition, 16% of health and 5% are deprived of education (UNICEF 2009). A recent survey by BBS and UNICEF (2014) reports that about 42% of children under five are stunted and 32% are underweight. Almost one-fifth of the children of primary education age (6–10 years) are deprived of formal education. About 40% of girls up to 18 years of age are already married. Among all children aged between 4 and 14 years, 13% are engaged in child labour and 97.5% of them are unpaid labourers (BBS and UNICEF 2014). Child malnutrition is almost twice as high in the poorest than in the wealthiest quintile (UNICEF 2009), which in linked with short adult stature and later in poor educational performance (Mason et al. 2014).

26.4 The Evolution of ECCE Concepts and Policy Developments in Bangladesh

Primary Education is compulsory in Bangladesh under the Compulsory Primary Education Act 1990 and is provided free of charge to children between the ages of 6 and 10 years (Islam 2003). Achievements in primary education have been impressive; however, ECCE is still in the emerging stage in Bangladesh. According to the Multiple Indicator Cluster Survey 2012–2013, only 43.5% of Bangladeshi children in primary grade 1 attended preschool during the previous year, and there are significant disparities in the participation pattern (BBS and UNICEF 2014). Gender disparities have nearly disappeared in PPE enrolments; however, children from ethnic minorities, children with disability or difficulty in learning and children from isolated communities or difficult geographies lag considerably behind their socially advantaged peer group in accessing quality preschool services. Only 13.4% of children of 3–5 years are receiving an early childhood education of any kind. Around 8.8% of children under 5 have three or more children's books at home, while playthings are available at 60.3% of households. Fathers' and mothers' role vary substantially when it comes to supporting their children in learning. While 40.8% of mothers provide support to children in learning, only 10.1% of fathers provide such support (BBS and UNICEF 2014).

26.4.1 The Evolution of ECCE in Bangladesh

ECCE as a comprehensive concept is fairly new in Bangladesh, though opportunities for early childhood education have existed in an informal and unstructured form. PPE has been an integral component and the most common form of ECCE service available in Bangladesh, which is defined as:

> The developmental and educational support provided to the child in the age range of 3 to <6 years in order to ensure the child's right to protection, care, survival and preparation for school education through play, amusement and introduction to literacy and numeracy, irrespective of the child's physical, mental and social status. (Ministry of Primary and Mass Education [MoPME] 2008, p. 8)

Baby class, permitted in 1994 in the Government Primary Schools (GPSs) of Bangladesh, was the first kind of ECCE service implemented by the government, although the National Curriculum and Textbook Board (NCTB) took the initiative to open baby classes in all rural and most urban GPSs in 1981–1982 (Education Watch 2013). For over 10 years, the private sector, nongovernment as well as government organisations have been implementing various PPE services with their own curricula, teaching-learning materials and methods, teacher training programmes, own monitoring and evaluation systems and support services to parents and community (Rich-Orloff 2010). Some nongovernment organisations (NGOs) run preschools on a large scale. BRAC, the largest NGO in Bangladesh, had 20,000 PPE centres (Shahjamal and Nath 2008) which enrolled both genders, minority groups, disadvantaged children from poor families, ethnic groups and children with disabilities (Ahuja and Ibrahim 2004). Apart from BRAC, numerous NGOs are operating learning centres that offer early learning and PPE. Privately, the Kindergartens and the English medium schools also provide PPE (Nath 2006), which are expensive and mostly serve the affluent segment of the society.

26.4.2 The Development of Policy Tools

Even though many NGOs are providing ECCE services for disadvantaged or excluded children (Ahuja and Ibrahim 2004), it was not part of the mainstream education provision. As a result of continued advocacy done by MoWCA and Bangladesh ECD Network (BEN), the Operational Framework for Pre-Primary Education was the first MoPME-endorsed policy tool that came into action in 2008. This set out the goal for universal PPE with quality. After this PPE framework was approved, the MoPME took systematic initiatives to implement PPE, such as starting a PPE class in all GPSs, initially on a pilot basis in 13 districts, with an interim curriculum, teaching-learning materials and teacher training programmes (MoPME 2011). The Operational Framework also provides guidelines for how parents and caregivers could provide age-appropriate care (MoPME 2008). The 2010 National Education Policy also called for putting a 1-year PPE programme in place with minimum quality and gradually moving onto offering a 2-year PPE programme.

Generally there is widespread sociocultural understanding and widely held social customs that view the infant and young children's need for development as more in terms of health and nutrition aspects relating to physical development. The comprehensive and complementary nature of holistic child development that recognises that children need balanced developmental readiness in different domains to be able to seize their fullest potential has come to the forefront only recently. There is a growing understanding that the first decade of children's lives is the most crucial

period for shaping their bodies and minds to help them become healthy, productive and functional human beings in terms of social, emotional, intellectual and physical development. These are the years, particularly the first 3 years, when the fastest development occurs, but they receive the least attention from service providers, policy planners and duty bearers. This is primarily because children have no voice, they cannot express their opinions and adults tend to interpret things from their own perspective. Primary attention is given to the physical development, as that can be seen and measured, but the socioemotional, linguistic and cognitive developments are subtle and not tangible enough to measure easily. To support caregivers, service providers, policy planners and practitioners alike to know what developmental milestones children should reach at certain age points, Early Learning and Development Standards (ELDS) are being adopted in Bangladesh context. Currently, the cultural validation process – which includes content as well as age validation – is going on under the leadership of MoWCA (2013). Once adopted, these developmental milestones will serve as development targets for children and assessment target for the service providers.

In November 2013, the Comprehensive Early Childhood Care and Development (CECCD) policy was approved, which lays the foundation for more concerted efforts guided by a set of priorities and principles across sectors relevant to ECCE (MoWCA 2013). Currently an implementation plan is under way under the leadership of MoWCA, which will guide practices and services and hold duty bearers accountable for children's holistic development.

26.4.3 The Development of Pre-primary Education National Curriculum

With sustained advocacy by MoWCA, the MoPME recognised the importance of organised PPE classes that provide children with necessary developmental readiness to cope with the formal academic environment of primary schools. After the pilot initiative kick-started in 13 districts with an interim curriculum arrangement, NCTB started to develop a competency-based national PPE curriculum in 2011–2012 that took a domain-based approach in organising the activities and the instructional process. It took the ELDS as a core-guiding tool to define domain-specific learning outcomes for the PPE age children. While most of the previous services were predominantly academic and therefore, not age-appropriate, the national PPE curriculum embraced the play-based approach, with some preliteracy and pre-numeracy skills to be provided at the later end of the 1-year programme. The curriculum is comprehensive, activity based and developmentally appropriate and addresses all necessary domains such as physical, cognitive, emotional, language and social needs.

The curriculum development process was unique in a way. In developing the primary curriculum, the NCTB usually did not consult NGOs for their experience and insights into running primary education services. However, development of the PPE curriculum involved all NGOs and other government bodies that had experience

and expertise in running PPE services. All the curriculum and materials of NGOs were collected and reviewed and served as entry points for the development of the national PPE curriculum of Bangladesh. All available best practices were integrated into the newly formed curriculum. Based on the curriculum, a learning package was developed by the NCTB that includes eight items: a primer, an exercise copy, a teachers' guide, vowel chart, consonant chart, a flip chart, flash cards (alphabet and number cards) and storybooks.

Though the curriculum was in place and materials were printed and distributed in bulk in 2013, the readiness on the ground for implementing the curriculum in classrooms using the newly designed materials package was considerably delayed. The DPE developed a 7-day Training of Trainers (ToT) in 2012 to train district level resource pool on concepts of ECCE; the goal, objectives and principles of the national PPE curriculum; the learning domains and expected learning outcomes defined in the competency framework; PPE materials, methods and standards; the daily, weekly and yearly lesson distribution plan; and expected roles of teachers and parents. Around 30% of the training time is dedicated to simulation sessions where trainers get a sense of how the learning sessions are to be organised and facilitated in the classrooms. The resource trainers then train teachers using a 15-day training manual. The training was rolled out in 2013 and 2014, reaching approximately 30,000 teachers (MoWCA 2013).

26.5 The ECCE Services in Bangladesh

The last two decades have seen tremendous growth in innovating and expanding cost-effective ECCE models and services through family-focused, centre and school-based programmes, with gradual endorsement of necessary policy and advocacy tools. The country has seen steady growth in organised ECCE services available to communities; however, the coverage is still inadequate, and policies, laws, legislation and minimum quality standards are yet to be put in place to hold the service providers and duty bearers accountable for quality services. The positive side is that noteworthy progress in the policy arena is under way as it relates to early education, though the issue of care and development is not yet a priority agenda in the national development scheme in terms of budgetary resource allocation. Table 26.1 exhibits what services are available in Bangladesh for various ECCE age groups from conception to age 8.

Table 26.1 Age-wise ECCE services available in Bangladesh

Age range	Services
0–3 years	Parenting education
3–5 years	Early learning
5–6 years	Pre-primary education
6–8 years	Early primary education

Adapted from MoWCA (2013)

26.5.1 Services for the 0–3 Age Group

Children up to 3 years are the most ignored group, both in the policy arena and services available on the ground. 'Parenting Education' is the only ECCE service available for reaching this age group (MoWCA 2013); however, current programming has a very limited coverage and suffers from low quality. Innovative approaches are required to reach parents and other primary caregivers to disseminate vital child care and development messages and particularly to reach semi- or nonliterate parents, speakers of minority languages and hard-to-reach (HTR) communities.

26.5.2 Services for the 3–5 Age Group

There are centre-based early learning sessions for the 3–5 years age group, which are known as 'Shishu Bikash Kendras (SBK)', mostly run by NGOs taking a play-based approach. While the NGO-run services have successfully reached some of the most HTR communities and have developed low-cost SBK models, these are heavily external aid dependent and are not sustainable in the long term. As a result, each year the number of centres and children reached vary as the aid flow varies. MoWCA and the Ministry of Chittagong Hill Tracts Affairs (MoCHTA) run some early learning centres that are comparatively more sustainable, as financing of these centres is shared with the government (MoWCA 2013). However, both government agencies and NGOs are in need of technical as well as financial support to run the early learning services.

26.5.3 Services for the 5–6 Age Group

Currently PPE is the most widely available ECCE service targeting the children of 5–6 years (6+ is the official age for enrolling in primary grade 1). With sustained advocacy and successful modelling by MOWCA, the MoPME finally recognised PPE to be a high-impact intervention for children's school readiness, which can increase school retention and lower dropout rates (MOWCA 2013). Accordingly, the Directorate of Primary Education (DPE) introduced the 1-year PPE programme for 5 year olds in all GPSs in 2010, with an interim arrangement for curriculum and teacher training. Introducing the organised PPE class in the mainstream primary schools was a major breakthrough, as this resulted in the lion's share of children being reached with PPE services. The national PPE curriculum materials are provided free of cost by MoPME to all eligible children/schools, including NGO-run centres. Also, each GPS is provided with a PPE grant of BDT 5000 per annum to buy play and other necessary materials to make the PPE classroom functional. However, anomalies are reported on the yearly allocation of PPE grant to schools and all providers' access to the MoPME provided PPE learning package in a smooth and efficient manner.

26.6 Research on ECCE in Bangladesh

ECCE has recently been receiving increasing attention worldwide (Education Watch 2013). However, there is very limited attention on research on ECCE, as most of the international research focuses on child psychology (Johanson 2011). Research on ECCE in Bangladesh began after 2000 (MoPME 2008). There is a long tradition of research on children's health, nutrition and wellbeing in Bangladesh from 1980s to present: Bairagi and Chowdhury (1994), Bhuiya et al. (1986), Black et al. (1984), Chen et al. (1980), Mitra et al. (1997), Roy (2000), Ardt et al. (2005), Black et al. (2007) and Islam (2010). The researchers mostly focused on how rural Bangladeshi children's malnutrition impacts their health and wellbeing. However, very little research has focused on the ECCE context in Bangladesh. The studies that have been done in this field so far are undertaken albeit sporadically.

26.6.1 Research on the Quality of Preschools

A small number of studies focused on the improvement of the quality of PPE programmes in Bangladesh. For instance, Aboud (2006) examined a preschool programme in rural Bangladesh in terms of cognitive and social outcomes. The children attending preschool performed better on measures of vocabulary, verbal reasoning, nonverbal reasoning, school readiness and the social aspects of play, whereas no difference was found on the cognitive aspects of play. This study provided knowledge for supporting implementation of preschool programme in rural areas for children's early years' development. Another experimental study (Moore et al. 2008) suggested to improve quality preschool programmes in developing countries such as Bangladesh. This study found that improved quality preschool programmes made a significant difference in the early years of children's development than the regular preschool programmes.

In 2011, Aboud and Hossain investigated how early years' education impacted on primary school achievement in the Bangladesh context. It was evident from the experimental study that children who attended preschool did better in all competencies (reading, writing, listening and speaking) than children who did not go to preschool. This study, including many others, recommended expanding high-quality preschool programmes with age-appropriate curriculum to support children to succeed later in primary education (Nath 2006; Shahajamal and Nath 2008).

26.6.2 Research on Teaching Practices in Preschools

Banu (2012) explored the classroom teaching practices in preschools in Bangladesh. Collecting data from three types of preschools: government, private and NGO-run preschools, the study found that the preschools were encouraging

memorising of facts and rote learning through teacher-directed teaching, coaching and frequent testing to prepare children to pass primary school entrance examinations. In teaching, quality was absent. There was no involvement of teachers and community members in developing curriculum and materials. Children's wellbeing was not prioritised, though this is one of the significant indicators in preschool education.

26.6.3 Research on Children's Language and Literacy Development

Few studies examined children's language and literacy development. A study conducted in formal and informal settings in Bangladesh found that picture dictionaries support young children's vocabulary and knowledge of the real world (Sharif 2012). A longitudinal research by Khanom et al. (2013) investigated the effectiveness of a comprehensive child development package, including children's (3–5 years) cognition, growth, school readiness and general health and hygiene practices in rural Bangladesh. The study found the implementation of the package through preschools as useful for certain areas such as maternal knowledge and children's language development. They emphasised on programme sustainability and improving quality of the package to gain benefits in all areas, including school readiness and parental engagement.

26.6.4 Research on Play Pedagogy

Play provides a vital role for children's holistic development in the early years (MoPME 2008). Play pedagogy is well recognised in the Western world for enhancing children's early years' education but yet to be optimally utilised in developing country contexts. Chowdhury and Rivalland (2011) examined how play as a pedagogical concept is understood, incorporated and practised in the ECCE practices of Bangladesh. The researchers conducted a sociocultural study to discover the understandings, views and perceptions of families and teachers of semirural public preprimary classes in Bangladesh. Play was defined as 'young children's active and interactive joyful activities, such as working with learning apparatuses, physical exercises, singing, acting, rhyming, games, outdoor plays and drawing' (p. 181). It was found that children did not get sufficient scope to learn through play activities in the class as it was directed by teachers who mainly focus on achievement and academic skills. Since the classroom environment is unfavourable, and there is limited access to play, play is reconceptualised in the Bangladesh context 'as joyful activities that involved young children in active and interactive behaviours with the

teacher and peers as a way of developing academic skills through imitating the teacher's steps in a correct way' (p. 184).

Chowdhury and Rivalland (2012) further explored the value of play in early learning in Bangladesh context. The qualitative study, based on the understandings of parents and early childhood educators in semirural Bangladesh, found that parents consider play to be a leisure activity and did not encourage children to play. On the other hand, teachers acknowledged that play accelerates children's early years' learning and supports young children's readiness for school. However, both teachers and parents emphasised play as a tool of achieving academic skills and neglected children's holistic development through play.

Concept formation can occur through play in children's everyday context (Fleer 2011), as emphasised in developed countries, such as Australia, European countries, the UK and the USA. Research has confirmed that infants-toddlers learn concepts, such as concepts of shapes, application of materials and rules of games through their everyday life. Small science concepts such as understanding of push, pull, floating-sinking, spinning and rolling can be understood by infants-toddlers through everyday activities and play. Sikder and Fleer's (2015a) case study research on concept formation, conducted in Bangladeshi family contexts for young children (10–36 months), found that there are possibilities to develop everyday concepts and scientific concepts through family practices in infants-toddlers regular activities and play. The same extended project found that these everyday concepts and small science concepts can be developed with the conscious collaboration of parents and infants-toddlers in the small science moments of their everyday life (Sikder and Fleer 2015b). Parents' perspectives on infants-toddlers' development of scientific concepts was also researched by Sikder (2015) which revealed that parents can create the environment for young children to learn everyday concepts and scientific concepts without any extra effort as part of children's everyday social situation of development. These research projects (Sikder and Fleer 2015a, b; Sikder 2015) contributed to the development of theoretical, pedagogical and empirical understanding in early years' education and how family as a first institution (Hedegaard and Fleer 2008) can create conditions for young children to learn everyday concepts and scientific concepts through play and regular activities.

Sharif (2014) explored the impact of play instruments in school playgrounds on preschool children's learning and development. Intervention schools under the experimental study created a joyful environment for children, with an anticipation that the children would be encouraged to go to school and the dropout rate would be reduced. The project also provided positive interventions for PPE children's school readiness. The study found that the intervention areas' primary education dropout rate decreased and 100% of students passed the primary school completion examination. Also the preschool children found school interesting because of the school playground, which enhanced their school readiness day-by-day (Sharif 2014).

The above research studies provide significant understanding on how play can create opportunities for children's learning and development either in formal or informal contexts. As evident from these studies, as well as highlighted in the PPE Operational Framework (MoPME 2008), play needs to be considered to make learning joyful and developmentally appropriate for PPE age children to ensure their holistic development.

26.6.5 Research on Different Aspects of Child Development

Saha et al. (2010) investigated children's (birth to 24 months) language development in relation to household food security in rural Bangladesh. The researchers collected data on household food security and socioeconomic status of the participant families during pregnancy period. They also gathered data on morbidity, weight and length of children in every month of the first year and quarterly in the second year of their life. The study found that early childhood language acquisition depends on household food security. They suggested that low-income countries need to enact appropriate policies to ensure household food security for children's language development in early years.

There are similar types of studies on the impact of food, nutrition and mothers' maternal health on young children's health and wellbeing. For example, infants' motor and explanatory behaviour development is related to iron and zinc levels (Black et al. 2004), mothers' depressive symptoms impact on infants' development and growth (Black et al. 2009), infants and young children growth depends on household food security (Saha et al. 2009) and under-5 children's stunting depends on a number of factors such as parents' education, household economic status and number of children (Rahman and Chowdhury 2007).

Moreover, parents' education also impacts on young children's growth and development in the early years. For example, Semba et al. (2008) studied children's stunting in a cross-cultural study between Indonesia and Bangladesh. They found that maternal and paternal education related to caregiving behaviours, immunisation, sanitation and use of iodised salts are important for children's growth and upbringing from birth to 5 years. Aboud et al.'s (2013) research examined the effectiveness of a parenting programme that included illustrative cards and discussion on hygiene, responsive feeding, play, communication, gentle discipline and nutritious foods. It was found that the participant parents could contribute more to children's cognitive and language development. However, there was no difference in children's health or growth between the participant and nonparticipant parents. Similar studies were conducted by Aboud (2007), Aboud and Akhter (2011) and Aboud et al. (2008) about parenting programmes or feeding interventions in rural Bangladesh for young children's health and growth.

The studies reviewed above strongly recommend the need for further research on children's learning and development at their early years. However, despite this strong-felt need, there is still a big gap in understanding the overall research context

for early years' learning in Bangladesh. Above all, the studies recommend that the quality of curriculum, teaching practices and programmatic strategies in ECCE in Bangladesh should be improved. The policy designs must consider research outcomes for improving current child care and education practices in Bangladesh, otherwise the goals of ECCD policy will not be achieved.

26.7 Challenges in Bangladesh ECCE Sector

Though the ECCE movement has come a long way in Bangladesh, many challenges and bottlenecks persist that prevent expansion of universal ECCE services with good quality for all. What follows is an account of key challenges facing the ECCE sector in Bangladesh.

Availability of reliable data is a key challenge. While there is no reliable national database for parenting education and early learning services, data related to PPE are available to some degree, but huge discrepancies remain between the sources. For example, BBS and MoPME data report different figures for PPE enrolment, making it difficult to make informed decisions to choose policy and programmatic options in a context that is substantially resource constrained and quality of services is of questionable standard.

Service coverage is another big problem. While there are few data on the coverage of different ECD services, DPE's PPE Expansion Plan indicated:

> Despite the increase in enrolment, there are still huge number (1.4 million as per mapping and 2.9 million as per BBS) of eligible children out of preschool coverage. It is estimated that 122,010 preschools at the rate of 30 children per school to meet teacher student ratio of 1:30 as set in the PPE Operational Manual by MoPME will be required to cover the total number of 3,660,286 PPE age children. However, the government, under PEDP3, has a plan to open one pre-primary class attached with 37,672 GPS. In addition 23,616 preschools with secured funding till 2015 are currently run by NGOs, meaning another 60,722 will be required for universal PPE coverage (DPE 2012, p. 13).

Therefore *GO-NGO collaboration* is needed to expand access for universal coverage of PPE services. However, coordination among service providers is nearly absent. As a result, some geographical areas, such as urban concentrations, are service-saturated, while isolated geographical pockets, such as remote rural areas, the hilly terrains of southeastern Bangladesh, islands and coastal belts, chars (riverbanks), haor (wetlands), baor (low-lying lands), tea gardens, brothels and jails for mothers who have committed crimes, suffer from service-famine, which denies the right of children from these particular backgrounds to survive, grow and learn. To address this issue, the MoPME developed a PPE Expansion plan in 2012 that identified areas with the highest needs. A GO-NGO collaboration guideline was approved in 2011, followed by an implementation plan for the GO-NGO collaboration. However, to date there has been no attempt from the government to implement these plans and guidelines. At least a few selected unions (lowest administrative units) could demonstrate collaboration models among different service providers, including government, NGOs and private providers to achieve universal coverage of PPE.

The *quality of services* remain a big challenge. In the absence of nationally defined quality standards, the existing ECCE services substantially vary in provision, scope, curricula, materials, methods, teaching and supervisory staff, training, infrastructure, indoor and outdoor play provisions and security issues related to children's wellbeing. As part of the PPE Expansion plan, a set of minimum quality standards was developed under the MoPME's guidance. The quality standards create a benchmark for all service providers to follow in assuring minimum standards in service provision. However after its development and endorsement, the MoPME has taken no initiative to disseminate the quality standards through circular or directive. Therefore, service providers have not yet been held accountable for not complying with the standards. Quite paradoxically, a small monitoring exercise done by UNICEF in 2013 using Tanahsahi model – a model widely used in health sector to examine bottlenecks in effective coverage – revealed that the majority of the GPS-based PPE classes do not meet quality standards for a dedicated space for PPE class, a trained teacher teaching PPE children and a teacher-student ratio of 1:30. While the centre-based facilities run by NGOs, MoWCA and MoCHTA follow the 1:30 teacher-student ratio, the GPSs take all children who come to seek enrolment in a PPE class, and this results in class sizes sometimes reaching 70–80 children in one classroom. This means the early experience of schooling for many children is not welcoming, as they can barely find a place to sit in the classroom, and individual attention and one-to-one support are seldom available.

Low parental awareness about the importance of early care, support and stimulation means that children do not receive age-appropriate interactive care in the homecare setting in their most formative years. Lack of stimulation delays children's cognitive, social, emotional and language development. By the time children come to school, their developmental potential is already lost to a great extent and children struggle to cope with the formal school environment with lack of school readiness skills. Low awareness also means low demand. While availability and accessibility of services are of major concern, utilisation of whatever services are available is also a problem. Utilisation falls sharply due to the fact that parents do not know the value of preschool education for getting the child ready for school. Timely enrolment is not done, as early learning remains a low priority agenda for many impoverished communities who struggle with poverty, illness and hardship of life. Even when enrolments are done, bringing children to schools/centres day after day is not ensured, because families are busy working, they have lack of transport and there is a ubiquitous cultural understanding that children from poor families have a low intellectual capability and therefore underperform in schools. NGOs and GPSs run parent meetings every month, but these meetings do not adequately highlight the agenda properly and take concrete mitigating measures to ensure children from disadvantaged/impoverished communities can access and utilise services to the extent that benefits them to learn, grow and transit to primary schools successfully and timely.

Though the concept of children learning through *Play* is acceptable in the contemporary world (Fleer 2011), and MoPME (2008) acknowledges the importance of play in children's holistic development, the evidence is not found in practices.

Bangladesh could benefit by incorporating a play-based learning approach not only into the curriculum framework but also in practices. Chowdhury and Rivalland (2011, 2012) provided research evidence that play can provide meaningful happy learning context that considers the sociocultural and educational realities of children of Bangladesh. Moreover, though NCTB considered age-appropriate developmental learning theories in designing the national PPE curriculum, there are multiple theoretical frameworks available, such as social learning, cultural-historical theory, post-development theories and the Reggio Emilia Approach to ECCE in the contemporary world. Also recent early childhood research studies (Banu 2012; Chowdhury and Rivalland 2011; Sikder and Fleer 2015a, b) show that preschool children's learning and development are influenced not only according to age but also by their family, society and culture. The inclusion of a multiple theoretical framework could provide a broader framework in developing the national PPE curriculum of Bangladesh.

Assessment of children's progress along the developmental milestones within the domains demands professionally skilled knowledge, skill and commitment from teachers and/or centre facilitators. Lack of appropriate tools, indicators and a culture of continuous assessment of more subtle developmental aspects than overt emphasis on academic achievement is still an area requiring further attention. Monitoring and evaluation of services are undertaken, but there is no common agreed set of monitoring indicators to assess the quality of PPE and ECCE services. The monitoring and supervision staff lack technical knowledge and skills and are hence unable to extend full support to the teachers in running PPE classes and other ECCE services. Though monitoring visits are carried out, there is no system for compiling the monitoring observations and then taking corrective measures to address current shortcomings and bottlenecks. While systematic evaluations that guide programmatic choices are rare, relevant research studies that inform policies and practices on what to do and how are rarer. Some discrete research studies are undertaken by academics, individuals and service providers; however, no systematic approach is being taken to compile a research depository or to undertake more applied research to see what works and what does not. Most importantly, research findings are seldom considered by policy planners while taking policy and programmatic decisions.

26.8 Conclusion

Although Bangladesh is still in the initial stages of establishing standard ECCE services and practices, government and NGOs continue to gradually work on further development of the ECCE sector in a more complementary manner. In some cases, both government and NGOs have worked collectively, such as developing the national PPE curriculum and materials package and the development of the CECCD policy framework (MoWCA 2009). However, to improve the coverage and quality of ECCE services in Bangladesh, both government and NGOs need to work in a

more coordinated manner to ensure efficient use of limited resources. While NGOs in Bangladesh have pioneered the implementation of ECCE, government has come forward to extend state support for sustainable expansion of the services. It would be wise for both government and NGOs to learn from each other and complement each other's strengths to overcome bottlenecks in access, equity and quality of ECCE service provisions so that all children can realise their fullest development potentials.

Additionally, Bangladesh perhaps needs more evidence-based research on ECCE. There is very little research that allows an understanding of the ECCE sector in Bangladesh. Conducting more research on the sector can inform the current practices on how to be more responsive to the realities and to develop cost-effective sustainable programme models and innovative solutions to address the current capacity and coordination gaps.

It is suggested that the implementation of policies is also vital, rather than making policies without practising them. Although there are many challenges in achieving success, it is hoped that the government of Bangladesh, along with other actors in the field, keep abreast of the recent developments in the field, and improve their practices accordingly, continuing to pay more attention to the quality of services reaching all children with state-of-the-art ECCE programmes that are cost-effective and affordable by all.

References

Aboud, F. E. (2006). Evaluation of an early childhood preschool program in rural Bangladesh. *Early Childhood Research Quarterly, 21*, 46–60.

Aboud, F. E. (2007). Evaluation of an early childhood parenting program in rural Bangladesh. *Journal of Health, Population and Nutrition, 25*, 3–13.

Aboud, F., & Akhter, S. (2011). A cluster-randomized evaluation of a responsive stimulation and feeding intervention in rural Bangladesh. *Pediatrics, 127*(5), 1191–1197.

Aboud, F. E., Moore, A. C., & Akhter, S. (2008). Effectiveness of a community-based responsive feeding program in rural Bangladesh: A cluster randomized field trial. *Maternal & Child Nutrition, 4*, 275–286.

Aboud, F. E., Singla, D. A., Nahil, M. I., & Borisova, I. (2013). Effectiveness of a parenting program in Bangladesh to address early childhood health, growth and development. *Social Science & Medicine, 97*, 250–258.

Abouda, F. E., & Hossain, K. (2011). The impact of pre-primary school on primary school achievement in Bangladesh. *Early Childhood Research Quarterly, 26*, 237–246.

Ahuja, D. A., & Ibrahim, D. M. (2004). *An assessment of inclusive education in Bangladesh*. UNESCO: Dhaka.

Ardt, K., Hastings, C., Hopkins, K., Knebel, R., Loh, J., & Woods, R. (2005). *Report on primary education in Bangladesh: Challenges and successes*. Dhaka: BANBEIS & Ministry of Women and Children Affairs.

Bairagi, R., & Chowdhury, M. K. (1994). Socioeconomic and anthropometric status, and mortality of young children in rural Bangladesh. *International Journal of Epidemiology, 23*, 1179–1184.

Banu, M. S. (2012). *Exploring the quality of classroom teaching practices in preschools in Bangladesh.* Unpublished PhD thesis. Monash University, Australia.

BBS. (2011). *Socio-economic and demographic report*. Dhaka: Ministry of Planning.

BBS & UNICEF. (2014). *Progotir pathey: Multiple indicator cluster survey 2012–2013 key findings.* UNICEF. Available at http://www.childinfo.org/files/Bangladesh_2012-13_MICS_Key_Findings_Report.pdf

Bhuiya, A., Zamicki, S., & D'Souza, S. (1986). Socioeconomic differentials in child nutrition and morbidity in rural area of Bangladesh. *Journal of Tropical Pediatrics, 36*, 17–23.

Black, R. E., Brown, K. H., & Becker, S. (1984). Malnutrition is a determining factor in diarrhoeal duration, but not in incidence, among rural children in a longitudinal study in rural Bangladesh. *American Journal of Clinical Nutrition, 37*, 87–94.

Black, M. M., Baqui, A. H., Zaman, K., Persson, L. A., Arifeen, S. E., Le, K., McNary, S. W., Parveen, M., Hamadani, J. D., & Black, R. E. (2004). Iron and zinc supplementation promote motor development and exploratory behaviour among Bangladeshi infants. *American Journal of Clinical Nutrition, 80*, 903–910.

Black, M. M., Baqui, A. H., Zaman, K., McNary, S. W., Le, K., Arifeen, S. E., Hamadani, J. D., Parveen, M., Yunus, M., & Black, R. E. (2007). Depressive symptoms among rural Bangladeshi mothers: Implications for infant development. *Journal of Child Psychology and Psychiatry, 48*, 764–772.

Black, M. M., Baqui, A. H., Zaman, K., El Arifeen, S., & Black, R. E. (2009). Maternal depressive symptoms and infant growth in rural Bangladesh. *American Journal of Clinical Nutrition, 89*, 951–957.

Chen, L. C., Chowdhury, A. K. M. A., & Huffman, S. L. (1980). Anthropometric assessment of energy-protein malnutrition and subsequent risk of mortality among preschool aged children. *American Journal of Clinical Nutrition, 33*, 1836–1845.

Chowdhury, N. N., & Rivalland, C. (2011). Conceptualizing play as pedagogy in the ECE context of a developing country: The case study of Bangladesh. *Journal of Educational Studies, Trends and Practices, 1*(2), 171–186.

Chowdhury, N. N., & Rivalland, C. (2012). Value of play as an early learning instrument in Bangladesh context: A socio-cultural study. *Australasian Journal of Early Childhood, 3, 7*(4), 115–122.

Cunha, F., & Heckman, J. J. (2006). *Investing in our young people*. Unpublished manuscript, University of Chicago, Department of Economics.

Directorate of Primary Education (DPE). (2012). *Pre primary education expansion plan*. Dhaka: Government of Bangladesh.

Education Watch. (2013). *New vision old challenges: The state of pre-primary education in Bangladesh.* Retrieved from http://www.campebd.org/page/Generic/0/6/18#

Fleer, M. (2011). 'Conceptual Play': Foregrounding imagination and cognition during concept formation in early years education. *Contemporary Issues in Early Childhood, 12*(3), 224–240.

Guhathakurta, M., & Schendel, W. V. (Eds.). (2013). *The Bangladesh reader: History, culture, politics (the world readers)* (p. 568). Durham: Duke University Press Books. ISBN 0822353040.

Heckman, J. J. (2011). The economics of inequality: The value of early childhood education, *American Educator, Spring,* 31–47.

Heckman, J. J., & Masterov, D. V. (2007). *The productivity argument for investing in young children*. Available at http://jenni.uchicago.edu/human-inequality/papers/Heckman_final_all_wp_2007-03-22c_jsb.pdf.

Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P. A., & Yavitz, A. (2010). The rate of return to the high scope Perry Preschool Program. *Journal of Public Economics, 94*, 114–128.

Hedegaard, M., & Fleer, M. (Eds.). (2008). *Studying children: A cultural-historical approach*. London: Open University Press.

Iqbal, I. (2010). *The Bengal Delta: Ecology, state and social change*, *Cambridge Imperial and Post-Colonial Studies*. Basingstoke: Palgrave Macmillan.

Islam, S. (2003). *Banglapedia: A national encyclopedia of Bangladesh*. Dhaka: The Asiatic Society of Bangladesh.

Islam, Z. (2010). From 'Marginality' to 'Mainstream': A narrative of early childhood professionalism in Bangladesh. *Contemporary Issues in Early Childhood, 11*(1), 29–38.

Johanson, E. (2011). Introduction: Giving words to children's voices in research. In E. Johansson & E. J. white (Eds.), *Educational research with our youngest* (pp. 1–14). New York: Springer.

Khanom, F., Yesmin, S., Zaman, S. S., Rahman, N. F., Khanom, R., Sharif, M. S., Akther, M., & Ahmed, M. (2013). An investigation on effectiveness of a comprehensive child development package. *Bangladesh Education Journal, 13*(2), 15–30.

Mason, J. B., Shrimpton, R., Saldanha, L. S., Ramakrishnan, U., Victoria, C. G., Girard, A. W., McFarland, D. A., Martorell, R. (2014). *The first 500 days of life: Policies to support maternal nutrition.* Global Health Action: Co-action Publishing.

Ministry of Primary and Mass Education (MOPME). (2008). *Operational framework for pre-primary education*. Dhaka: Government of the People's Republic of Bangladesh.

Ministry of Primary and Mass Education (MOPME). (2011). *Prashikkhan Shahaika Prak-Prathomic Shikkha (Training Manual)* (In Bangla language). Dhaka: Government of the People's Republic of Bangladesh.

Mitra, S. N., Al-Sabir, A., Anne, R. C., & Knata, J. (1997). *Bangladesh demographic and health survey 1996–1997*. Dhaka: NIPORT, Mitra and Associates, and Macro International Inc., C Anna.

Moore, C., Akhter, S., & Aboud, F. E. (2008). Evaluating an improved quality preschool program in rural Bangladesh. *International Journal of Educational Development, 28*, 118–131.

MoWCA. (2009). *Comprehensive Early Childhood Care and Development (ECCD) policy framework* (Ministry of women and children affairs). Dhaka: BG Press. Retrieved from http://itacec.org/itadc/document/learning_resources/project_cd/ELDS%20South%20Asia/Bangladesh.pdf

MoWCA. (2013). *Country report on early childhood care & education in Bangladesh*, *Ministry of women and children affairs*. Dhaka: BG Press.

Nath, S. R. (2006). *Children's access to pre-school education in Bangladesh* (BRAC research Report). Dhaka.

Raghavan, S. (2013). *1971: A global history of the creation of Bangladesh.* Harvard University Press.

Rahman, A., & Chowdhury, S. (2007). Determinants of chronic malnutrition among preschool children in Bangladesh. *Journal of Biosocial Science, 39*, 161–173. doi:10.1017/S0021932006001295.

Rich-Orloff, W. (2010). *Mainstreaming pre-primary education in Bangladesh: Bringing it together*. Dhaka: Ministry of Primary and Mass Education.

Roy, N. C. (2000). Use of mid-upper arm circumference for evaluation of nutritional status of children and for identification of high-risk groups for malnutrition in rural Bangladesh. *Journal of Health, Population and Nutrition, 18*, 171–180.

Saha, K. K., Frongillo, E. A., Alam, D. S., Arifeen, S. E., Persson, L. A., & Rasmussen, K. M. (2009). Household food security was associated with growth of infants and young children in rural Bangladesh. *Public Health Nutrition, 23*, 1–7.

Saha, K. K., Tofail, F., Frongillo, E. A., Rasmussen, K. M., Arifeen, S. E., Persson, L. A., Huda, S. N., & Hamadani, J. D. (2010). Household food security is associated with early childhood language development: Results from a longitudinal study in rural Bangladesh. *Child: Care, Health and Development, 36*(3), 309–316. doi:10.1111/j.1365-2214.2009.01049.x.

Semba, R. D., Pee, S. D., Sun, K., Sari, M., Akhter, N., & Bloem, M. W. (2008). Effect of parental formal education on risk of child stunting in Indonesia and Bangladesh: A cross-sectional study. *The Lancet, 371*, 322–328.

Shahjamal, M. M., & Nath, S. R. (2008). *An evaluation of BRAC pre-primary education programme* (BRAC research report). Dhaka.

Sharif, S. (2012). Effects of picture dictionaries on children's early language and literacy development. *Asia-Pacific Regional Network for Early Childhood., 6*, 10–12.

Sharif, S. (2014). School playground: Its impact on children's learning and development. *Asia-Pacific Regional Network for Early Childhood., 8*, 17–19.

Sikder, S. (2015). Social situation of development: Parents perspectives on infants-toddlers' concept formation in science. *Early Child Development and Care*. doi:10.1080/03004430.2015.1018241.

Sikder, S., & Fleer, M. (2015a). Small science: Infants and toddlers experiencing science in everyday family play. *Research in Science Education*. doi:10.1007/s11165-014-9431-0.

Sikder, S., & Fleer, M. (2015b). The relations between ideal and real forms of small science: Conscious collaboration among parents and infants-toddlers. *Cultural Studies of Science Education* (in press).

UNICEF. (2009). *Child poverty and disparities in Bangladesh.* Dhaka: UNICEF. Available at http://www.unicef.org/sitan/files/Bangladesh_Child_Poverty_Study_2009.pdf

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Asia*

Liang Li, Yuejuan Pan and Xiaoying Wang

Chapter 27
Early Childhood Education Reform: Crisis and Changes

Liang Li, Yuejuan Pan, and Xiaoying Wang

Abstract The study and development of early childhood education (ECE) in Asian countries has been influenced by local cultural values, local government policies and Western education philosophy and pedagogical programs, and national and international economies. Early childhood education (ECE) in Asian countries has been through a dynamic history of educational reform. It is noticeably developed in the last two decades in many areas, such as teacher education, family education, and collaborations and curriculum development. This chapter will focus on the crises and changes during the early childhood education reform in Asian countries and conclude that it is essential to consider the interconnection and integration of Western early childhood practices into local traditional ideas and values during the process of contextualization and reform.

Keywords Early childhood education in Asia • Early childhood education reform • Crises and changes

27.1 Introduction

The study and development of early childhood education (ECE) in Asian countries has been influenced by local cultural values, local government policies and Western education philosophy and pedagogical programs, and national and international economies. Early childhood education (ECE) in Asian countries has been through a dynamic history of educational reform. It is noticeably developed in the last two

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decades in many areas, such as teacher education, family education, and collaborations and curriculum development. However, the study has indicated that many Asian countries have challenges in ensuring equitable access to quality ECE services for all children, especially for minority ethnic groups and rural populations (Liu et al. 2004; Nanakida 2015; Harman et al. 2010; Phan 2012). How to improve the quality of ECE to meet families' and communities' needs is another important issue we need to address.

Within the last decades, along with the rapid development of Asian economy, the ECE in Asian countries has been through the dramatic change and development. These can be noted by the countries' policy reform, the implementation of the guidelines, and in particular the increasing enrolment rates in the kindergarten settings. These are explained by the authors in this volume (Pan, Wang, and Li; Lim; Liu and Lin; and Phan). We see an example of this in the writing of Pan et al., where it highlights the cause of early childhood education developed dramatically in China and explains where it shows the improvements in the enrolment rate of children, the quality of teachers, and research on ECE. Meanwhile, it needs to be noticed that the rapid development of early childhood education in Asian countries has also faced its developmental crises and challenges. Lenin (1914) develops the Marxism and sees the development in a dialectical way.

> A development…proceeds in spirals, not in a straight line; a development by leaps, catastrophes, and revolutions…inner impulses towards development, imparted by the contradiction and conflict of the various forces and tendencies acting on a given body, or within a given phenomenon, or within a given society. (cited in Anderson 1995, p. 24)

The development of human being, culture, and society is dialectical. The whole developmental process moves in a spiraling line. The upward spiral progress of development is a dialectical process which involves the conflicts, crisis, and challenges as the moving forces. The development of ECE in Asian countries exactly explains this dialectical process. It requires to make clarity of the key crisis before we take the further actions to move forward.

This chapter will highlight and discuss what key conflicts and changes the Asian ECE have faced in recent years and provide possible developmental trends in the future.

27.2 First Crisis: Cultural Traditions and Values in ECE

As Fleer and Hammer (2014) argue, cultural values are embedded in young children's learning, development, and education. Cultural values on education impact the way educators work with children and the way children participate in education.

Generally speaking, Confucian's beliefs and philosophy have been rooted in many Asian countries' ECE. The Confucian goal of harmony in social relationships influences on teaching and learning. For example, the collective ideology is the key value in education. The Confucian principles include filial piety, ancestral unity,

primogeniture, and lineage. It acknowledges the social obligations; respecting teachers, parents, and elders; and building harmony relationships with others (Pan et al.; Phan). These have significantly impacted on the philosophy of the kindergarten, including how to see children, how children learn, how teachers teach, and the relationships between teachers/adults and children (Zhu and Zhang 2008).

Compared to Western values in young children's independence and assertiveness, many Asian education values in mutual interdependence from an early age of children and family are considered as a first important and outweigh personal desires (Yunus 2005). The differences of cultural values have been noted by all the chapters in this volume.

Phan has discussed the ECE heritage and emphasized on great challenges of Vietnam's ECE teachers' deeply rooted Confucian beliefs about adult superiority, teacher authority, and child submission.

Similarly, Pan et al. have also mentioned that children's voice in China's context is ignored, and the adults make a lot of decisions on behalf of children such as the play environment, the interest classes, etc. The child in a Chinese family mostly is considered as the hope of family. This also impacts on early childhood education that ECE in China is deeply entrenched by the cultural traditions on collectivist orientation. The pedagogical approach highlights the teachers' direction and the group and collective work rather than individual child's demands and desires. As discussed by Pan et al., during the ECE reform recently happened in China, although the teachers start to look at children's perspective in the teaching practice and guided by the national curriculum, the adults still focus on their own agenda on child's learning and development.

This also has been discussed by Lim who explains and discusses the Singapore context of ECE. In particular, she has stated the ideologies in ECE in Singapore and explained that the "Our Shared Values" published in White Paper comprise five broad principles which have similarities to Confucian ideals. For instance, one of the principles describes "nation before community and society before self" which response to the neo-Confucianist idea of "community of self."

It can be seen that the Confucian's ideas have been embedded in ECE and teaching practices which show the cultural tradition influence on how the child looks like and how the education looks like. Adapting the Western educational philosophy and approaches, such as Montessori, Reggio Emilia approach, etc., which focus on child-centered teaching practice, it seems to be a dramatic philosophical shift for Asian EC educators with deeply rooted culturally shaped Confucians on superiority and teacher authority. This brings a critical question on how we develop a suitable early childhood education curriculum locally and globally. It brings a challenge into the ECE in Asian context on how to establish the cultural appropriate ECE educational system which on the one hand suits the local cultural traditions of collectivist orientation and the other hand meets children's needs and development.

As emphasized by Zhu and Zhang (2008), Confucianism has greatly influenced the educational ideas and philosophies in early childhood. They have proposed that it is not a good idea to give up the original traditional culture, but modify the tradi-

tional culture in the curriculum reform. During the curriculum reform, another crisis has embedded in EC teachers' pedagogical practices.

27.3 Second Crisis: Curriculum and Pedagogy

As Hedegaard (2012) argues, societal demands are considered as "the primary forces for human conducts" (p. 14). The top-down educational system from national government has initiated the curriculum reform. The national guidelines in Asian countries have driven and reinforced the fast speed of this reform in ECE. The policy and societal demands change the ECE teachers' pedagogical practices and approaches; however, this makes another conflict between educators' philosophy and beliefs and the translation of the child-centered practices.

Through interviewing the EC teachers, Phan has noticed the central problem of ECE reform in Vietnam is that the challenges the teachers have to face is how to implement the new EC approaches in the practices. The understanding of the new EC programs varies in Vietnam context which causes the problem in the implementation of EC curriculum.

The similar challenge, the translation of the new EC approaches, is also evidenced by Pan, Wang, and Li. In their work, the power of curriculum management decentralized results in many different curricula are able to be seen in the kindergarten practices in China from the adapted Western curriculum and models such as Reggio Emilia, High/Scope, and the ones created locally such as the Integrated Thematic model, etc. Many teachers do not have curriculum awareness and capacities. One particular change has been noted that teacher's teaching behaviors develop behind their beliefs. They identify that "Although teachers used key concepts advocated by the reform in their discussions, reflections, and documentations, they did not immediately transform the key concepts to appropriate practices." Their lack of understanding of the values and principles of the Western play-based learning enhance this enlargement of this conflict.

In explaining the challenges of ECE in Singapore, Lim amplifies the two different government agencies regulate the kindergartens and childcare centers, each with different priorities which make the challenges to educators' pedagogical practices as there is no standard national early year curriculum as a compulsory guideline for EC centers to adhere to. Lim has mentioned that Singapore's ECCE policy reform has moved as a cautious space, which needs to pay more attention to the professional images of ECCE and improve the quality of care and education to meet the needs of Singapore family and children.

The curriculum reforms in Japan have been discussed by Liu and Lin. There are two separate national curriculums to early childhood education in Japan, which are the Course of Study for Kindergarten for children over 3 years old and Guidelines for Nursery Care for children under 3 years old, respectively. Both are revised in 2008. These two curriculums provide the different goals and aims to the kindergarten and childcare centers which impact on educators' pedagogy. Guidelines for

Nursery Care focus on the caring rather than education, and the Course of Study for Kindergarten emphasizes on the education purpose to be ready for primary school education. The crucial crisis has been noticed by Liu and Lin, where enrolment rates of children in kindergartens are decreasing year by year because of low childbirth rate and long economic depression. This promotes the needs to integrate the nursery center with kindergartens during the ECE reform.

27.4 Changes and Creation in ECE

It can be noticed that ECE in Asian countries have been experiencing the crises. It is time to make quality changes. We need to rethink, rework, and create new possibilities to make sure that young children have increasing access to the quality of early childhood education and care. It needs to develop a concrete analysis of each specific crisis in the local social and cultural contexts.

27.4.1 Cultural Awareness and Appropriateness

It is required to develop the awareness of culture appropriateness when borrowing the EC curriculum models. Phan's work emphasizes Vietnam EC reform needs to consider how to bring borrow-from-outside educational model to local context. In China, as elucidated by Pan, Wang, and Li, in order to make a transformation of teachers' values and beliefs in practice, it is necessary to develop the cultural appropriateness in practice. This could be interpreted by two aspects: one is the appropriateness for the traditional culture, and the other is the appropriateness for the future culture a modern society will develop. They have argued that the educational reform should respect the local culture and be rooted in cultural context. It echoes Zhu and Zhang's (2008) argument that "there is no high-quality curriculum that can be effectively adopted in all different cultures" (p. 177). It is not an ideal form to give up the deeply rooted culture traditions.

27.4.2 Teachers' Education and Professional Development

With respect to children's rights and needs, the educational curriculum reform has been fast developed in Asian countries in order to improve the quality of early childhood education and care. The teachers' education and their professional development are paid great attention through the reform. According to Zhu and Zhang (2008), the curriculum reform requires the educators' high quality of professional knowledge to understand the child-oriented educational theory or the practical applications of child-initiated activities. As Pan et al. explained, the great sense of

teachers' identification and qualification needs to be established in China. In particular, the training of preservice teacher and in-service teacher needs to be more concerned about how to apply the theoretical understanding of the curriculum into the pedagogical practices. Phan examines the EC teachers' understanding of the borrowed curriculum and proposes the similar concern when discussing the teachers' professional development in Vietnam context. She has mentioned "the Vietnamese ECE reforms also highlight the need to align teacher education with ECE development." Lim has given her concern to the lack of research in teacher education to examine the effectiveness of teacher preparation programs in Singapore. In particular, she has noticed that one of the EC teacher training programs is offered by the private training agencies with overseas universities; however, there are no research evidences to show the efficacy of the EC degree courses provided by the private training agencies. Liu and Lin state that in Japan, teachers have conducted their own research to improve their knowledge of child development. This illustrates the importance of the research to develop the teachers' professional development.

27.5 Conclusion

The purpose of this chapter is to explore ECE reforms in Asian countries. Drawing upon Marx's theory of dialectical development, by investigating the ECE in China, Singapore, Japan, and Vietnam, this chapter reveals the key crises and challenges of ECE within Asia and provides relevant suggestions on how to cope with the crises at the local and societal level. It confirms that the development of ECE is progressing in an upward spiral. It also implies that curriculum reforms need to consider the important factor of contextualization. It should not ignore the local traditional values in ECE, but build upon contextual and conceptual ECE by adapting Western ideology in ECE. It is essential that the interconnection and integration of Western early childhood practices into local traditional ideas during this process of contextualization are considered.

References

Anderson, K. (1995). *Lenin, Hegel, and western Marxism: A critical study*. Urbana/Chicago: University of Illinois Press.

Fleer, M., & Hammer, M. (2014). Repertoires of cultural practices for enacting play and learning in a playgroup. *International Research in Early Childhood Education, 5*(1), 42–53.

Harman, G. S., Hayden, M., & T.N., P. (Eds.). (2010). *Reforming higher education in Vietnam: challenges and priorities* (pp. 15–30). Dordrecht: Springer.

Hedegaard, M. (2012). The dynamic aspects in children's learning and development. In M. Hedegaard, A. Edwards, & M. Fleer (Eds.), *Motives in children's development: cultural-historical approaches* (pp. 9–27). New York: Cambridge University Press.

Liu, Y., Pan, Y. J., & Sun, H. F. (2004). Review and analysis on the kindergarten curriculum reform in recent two decades in mainland China (in Chinese Taipei). *Educational Research (for mainland China), 9*, 4–22.

Nanakida, A. (2015). Early childhood education and care curriculum in Japan. In L. Huo, S. B. Neuman, & A. Nanakida (Eds.), *Early childhood education in three cultures* (pp. 25–38). Berlin/Heidelberg: Springer Verlag.

Phan, T. T. H. (2012). *Vietnamese early childhood teacher education and new early childhood education practice: A cultural historical analysis*. Unpublished PhD thesis. Melbourne: Monash University.

Yunus, S. M. (2005). Childcare practices in three Asian countries. *International Journal of Early Childhood, 37*(1), 39–56.

Zhu, J. X., & Zhang, J. (2008). Contemporary trends and developments in early childhood education in China. *Early Years, 28*(2), 173–182.

Chapter 28
Early Childhood Education and Development in China

Yuejuan Pan, Xiaoying Wang, and Liang Li

Abstract In China, both the survival and development of children and the early childhood education have been improved greatly, but the development is uneven in different regions and groups. And child researches deepened and widened with the usage of new technologies and emergence of new topics and emphasize more and more research with children. The problems in early childhood education partly resulted from policy selection and system design. The policies in the past did not clearly define the role of the government and designated the main body responsible for funding at low level of government without strong capacity of public revenue, and the quality supervisory system did not work well. Since 2010, the government issued series of policies and redesigned the system through reforming public funding, teacher training, kindergarten management, etc. The most important change in policy is the shifts from emphasizing effects and efficiency to equity and equality. But lately, policies still exploit the old structure of funding bodies, and the local government could not keep abreast with the central government, and the implementation of policies was challenged. There had long lack of separate professional title system and rigid and explicit professional qualification management and sufficient staff establishment and valid and pertinent education and training system for kindergarten teachers, and it resulted in insufficient, instable, and low qualified staffing. To change teacher-controlled and subject-centered curriculum, the curriculum reform beginning in 1980s decentralized power of curriculum management and advocated beliefs about respecting children, active learning, play-based curriculum, etc. The physical environment and teachers' beliefs and behaviors changed a lot, but the

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changes were not simultaneous and very unbalanced among kindergartens, which led into discussions about the cultural adaptation of the reform.

Keywords Child development and research • Policy on early childhood education • Kindergarten staffing • Curriculum reform

Early childhood education refers to education for 0–6 or 7 years old children and is treated as basic education within the education system. As the advance in social and economic development and the further of international communication and cooperation, the early childhood education in China has made great achievements since the Open Door Policy at the end of 1970s. Just under the influence of the special period of social, cultural, and economic transformation, the early childhood education in China faced particular problems and challenges.

28.1 Development of Children and Children Research

28.1.1 Survival and Development of Children

China government has made series of policies on and taken many measures of and increased public investment in children's health, education, legal protection, environment creation, etc. These efforts have dramatically reduced mortality rate of infants and under 5 year olds and basically universalized 9-year compulsory education and effectively suppressed violence against and criminal on children and thus effectively improved children's survival and development.

But the situation is uneven, and there still have many problems in the rural, remote, and poor areas, and it needs to strengthen protecting disadvantaged children's rights and profits (National Working Committee on Children and Women under the State Council 2005). Therefore, the priority of policies on children after 2005 obviously shifted from effects and efficiency to equity (Zhang 2011b). The China Development Research Foundation began to administer pilot projects such as "early nutrition intervention" and "deliver education to countryside" in Ledu county of Qinghai province and Xundian county of Yunnan province in 2009, which provided nutrition bags for 6–24 months old infants and early education for 3–5 years old children. Since 2012, the Ministry of Finance, the Ministry of Health, and the All-China Women's Federation invested one billion RMB to administer the Nutrition Intervention Project for pregnant woman and 6–24 months old infants in 100 counties in eight amassed and joined poor areas and Countryside Kindergarten Project in 640 countrysides of eight counties in Guizhou, Sichuan, Hunan, and Xinjiang provinces. And the Ministry of Education administered the Roving Education Project in countrysides of ten poor counties (People's Daily 2013). Nowadays, it has been widely recognized that improving survival and development of disadvantaged children in poor areas is an effective measure to eliminate poverty and advance social justice.

28.1.2 Awareness and Protection of Children's Rights

With the Open Door policy in 1978 and the communications with foreign countries, human rights and children's rights gained unprecedented attentions. The New Culture Movement in the mid of 1920s in China, which advocated humanity, human rights, and human agency and was disrupted by the National Salvation Movement (roughly from the mid of 1920s to the mid of 1940s), was resumed in the 1980s. Human rights and other humanity issues were no longer prohibited theoretic areas and became hot topics in the fields of culture, politics, education, and other areas (Guo and Tao 1999; Xu and Luo 2007). Education practices that treated children as passive learners were questioned and criticized. The ideology that children should be recognized and respected as active learners and that children have their own rights began to be in shape.

One cultural thread that has been deeply entrenched in Chinese culture for thousand years, simply to put, is the collectivist orientation which stresses the priority of group goals over individual goals and the importance of cohesion within social groups. Children in traditional culture were treated as the hope of family and future of country, and the value of children was defined by the profits of family and future, and the subjectivity of children as individuals is ignored. Reflected in a classroom, teachers paid attention only to the obscure needs and interests of group but not to individual child. Consequently, the most often observed classroom episode before the reform was that all children in the same class did all the activities including routines, play, and lessons at the same time and in the same way (Tobin et al. 1989).

The political breakthrough and philosophical reflection in human rights spurred the new concept of children. Children are viewed not only as having unique physical or psychological characteristics but also as being independent subjects with their own rights, needs, and interests. The Regulations on Kindergarten Education Practice – Trial Version (National Education Commission 1989a) and the Guidelines for Kindergarten Education Practice – Trial Version (MoE 2001) clearly propose that teachers should respect children including respecting their rights, learning needs and developmental characteristics, and individual difference and regulate that kindergarten education should promote each child's development in his or her own individual way. After decades of reform, the kindergarten practice changed a lot. Teachers in many classrooms began to listen to children's perspectives, care for needs of individual children, and allocate more time for free play, and give children more chances to make their own plan and choice (Liu et al. 2004, 2008, 2011a, 2012a, b).

But the protection of children's rights, especially rights to participate and play still needs to improve (Shi and Gao 2007; Pan 2011). It is often found that adults ignore children's rights and needs and arrange children's life according to their own needs in practice. For example, one investigation on children's life situation in Beijing found that most of children sampled attended interest classes, and many children joined more than one class (Zhang 2006). Otherwise, only few parents choose interest class according to children's needs and wills (Research team of

General Education Institute 2008). The free time belonging to children got less and less, and the whole life of the children was institutionalized. Meanwhile, the free public space for children's play and entertainment was shrunk as the process of industrialization and urbanization sped up. Many studies found that the reduction of natural play environment and public street and neighborhood space changed children's life and play behavior (Wang 2012; Shen 2008). In sum, children usually lose their own voices on many important affairs, and the environment was generally arranged according to adults' decisions.

28.1.3 Research on Child Development

The child development research has developed three aspects and greatly deepened the knowledge of a child.

First, many researchers tried to use new technology to study a child from different disciplines in recent years, which provide new research views and findings. For example, Zhou et al. (2006, 2007, 2009) studied the brain function and mathematical cognition using new brain imaging techniques including event-related potentials and functional magnetic resonance imaging, etc. and revealed that children learn addition and subtraction using mental number line and computation strategies and then form visual Arabic number representation and learn multiplication by oral recitation of multiplication table and then form auditory-language representation. Zhou and Liu (2010), Gao and Zhou (2010), and Liu et al. (2011a) studied young children's picture book reading and Chinese character awareness using eye movement analysis technique and found that Chinese-speaking children of 3–6 years old concentrated visually on information-loaded zone of the page and that children spent more time in looking at illustration in picture book than the print and that Chinese character awareness is one of valid predictor of children's literacy ability, and children's Chinese character judgment experience stages from picture as whole, element analysis to character as whole. These studies shed light on understanding children's learning and development in Chinese cultural context.

Second, the topics and contents of research were deepened and widened, especially influenced by the new phenomenon and problems emerging in the process of social development. The researches in the past treated children as a homogeneous collective group and mostly examined the abstract general law of development. As the class division getting more obvious and the gap between classes becoming larger, it has become hot topics whether children from families of different social status gain equal development and fair opportunity for development, and thus many studies after 1990s focused on school readiness, the effect of social resources on children's early development, and special group including children moving with parents and staying at hometown from family of migrant workers. For example, Yu et al. (2010), Gai and Zhang (2005) and Gai (2007) studied the structure, characteristics, influential factors, and assessment tools of school readiness in a deepgoing way. Xiao et al. (2009), Chen et al. (2009), Zhou et al. (2011), and Liu et al. (2012a)

examined the difference of school readiness of children from families with different social status, from minority nationalities, and in urban and rural areas. Lin and Liu and their colleagues investigated migrant children's social adaptation in urban cities, the relationship between their stigma perception and mental health (Lin et al. 2009; Liu et al. 2008). These studies proved that the gap in development between individual children has occurred in early childhood, and the difference of resources possessed by different social classes exerted main effects, which provide convincing proofs to understand the role of interaction between individual and environment in a child development, and important implications for reflecting and improving educational equality and social justice.

Third, it gains more attention to do research with children. Under the context of awareness of child rights, the status and role of children in research was reflected and reconstructed. It was recognized gradually that children were not only subjects of research but participants and coresearchers, and child research is not only on children but also for and with children. As a result, many studies began to shift their views of research and tried new research methods working with children. For example, Liu et al. (2005) studied young children's perceptive on play using material stimulation interview. Huang (2010) compared children experienced participation and teacher perceived children's participation and revealed there existed great difference. Liao and Li (2004) and Yan and Wei (2008) analyzed ideal curriculum and play and those experienced by children. These studies proved and acknowledged young children's ability to understand and judge their own affairs and revealed the difference of perspectives between children and adults.

28.2 Development of the Cause of Early Childhood Education

28.2.1 The Cause Made Advancement in a Twisty Road

As to the whole tendency, the cause of early childhood education developed dramatically. Compared to the situation in 1978, the total number of young children enrolled in kindergartens in 2016 rose to 44.14 million from 7.88 million, and the enrolment rate of eligible children in 3-year kindergarten education rose from 11.4 to 77.4% (MoE 2016). It means that the enlargement of quantity of kindergartens could satisfy more and more young children's needs for kindergarten education.

But the road of the development is not smooth. First, the total number of kindergartens rose steadily before the middle of 1990s and then decreased and did not go up again until 2003. Second, the total number of kindergarten teachers correspondingly rose gradually to 1.17 million in 1996 and then reclined to 0.63 million during the period in 1997–2001 and resumed after 2002. Third, the number and percentage of kindergartens sponsored by public enterprises and institutes dramatically

decreased; otherwise the number of private kindergartens increased. In the end of 1991, the number of private kindergartens across the whole country just was 12,000, which amounts to 7.29% of total number of kindergarten in the country but grew to 75.4 thousands in 2006, which amounts to 58% of the whole (Zhang et al. 2008, p. 65).

The curve of development of early childhood education mainly resulted from the economic reform in the 1990s. Before the middle of the 1990s, the majority of kindergartens were set up and managed by educational authorities and work units and provided as welfare for employees. In the 1990s, the reform of economic system began shifting from planning economy to market one. The public enterprise and institutes did not shoulder responsibilities by social sector anymore, and the schools, hospitals, etc. that sponsored by such kind of work units were separated from their original sponsoring bodies. In this context, many kindergartens of such kind were sold or closed. Meanwhile, the rural tax and fee reform gradually called off rural taxes and fees. Consequently, county or town governments have almost no financial capacity to fund early childhood education. Until 2003, the proposal on Reform and Development of Early Childhood Education (2003) clearly maintained that the government is the main body responsible for providing public kindergartens. After that, the development of early childhood education resumed.

The allocation of the resource of early childhood education is unequal and the development is uneven.

Two obvious problems should be noted in the process of development of early childhood education in China: On one hand, the resource of early childhood education as a whole was absolutely scarce while it made great achievements. On the other hand, the limited resource was allocated unequally which resulted in comprehensive, systematic, and multilevel uneven development among different geographical regions and social stratum between urban and rural areas.

First, the development of ECE in east advanced regions is better than that in middle and west regions. There are many children who have no access to basic kindergarten education in the middle and west regions, while the problem in east regions is how to provide quality kindergarten education for each child. For example, the enrollment rate for 3-year kindergarten education in Shanghai reached more than 98% (Shanghai Municipal Education Commission et al. 2011), while in Jiaozuo in Henan province only was 63% (Jiaozuo Municipal Education Commission 2011), which is only slightly higher than the national average of 56.6% in 2010 (Department of Development and Planning of MoE 2011). The total number of kindergartens was 1252 with 31.6% private ones, while that in Jiaozuo only was 501 with 93.2% private ones. And the average budgetary educational funding per permanent residential eligible children was 132.63 RMB in Shanghai, but that was only 3.02 RMB in Jiaozuo. Great gaps exist in budgetary educational funding, ratio of public kindergartens and the enrollment rate in Shanghai and Jiaozuo.

Second, the development of ECE in urban areas is better than that in rural areas. Currently, the quantity and quality of kindergartens, the enrollment rate, the number and educational degree, and qualifications of teachers in rural areas lagged far behind than in urban areas (Hong and Luo 2012). Liu et al. (2012a, b) observed 108 senior classes in kindergartens (including reception classes in primary schools) in cities, counties, and countryside in three provinces and found that the quality of physical environment, daily care, curriculum, etc. in kindergartens in the countryside was significantly worse than that in cities and counties. Such pattern of difference existed in three provinces sampled in east, middle, and west regions.

Third, the development of public kindergartens sponsored by educational authorities, government branches, and public enterprise and institutes is better than those sponsored by other bodies. Song (2011) analyzed the cost sharing by local government using data of 591 kindergartens in 25 counties in Hebei, Anhui, and Zhejiang provinces and found that only 8 of 218 private kindergartens gained public funding, otherwise 247 of 373 public kindergartens got public funding, and the government shared about 60% costs of these kindergartens. Kindergartens with different sponsoring bodies are different in funding raising mechanism, cost sharing model, and adequacy of non-personnel expenditure and thus difference in kindergarten conditions, staff qualification and stability, and classroom environment quality. For example, according to a large-scale investigation conducted in Hebei province, a province in the North China region, only 25.6% teachers in rural kindergartens have associate degrees or higher (Liu 2012). Liu et al. (2012a, b) and Pan and Liu (2008) found that the kindergartens in cities and sponsored by educational authorities performed better than those in town and countryside and sponsored by communities and private sectors.

Fourth, the families of higher social status more likely possess quality early childhood education than those of lower social status. The studies of Xu and Chen (2007) in Shanghai, Li (2010) in Wuhan, and Sun (2013) in Nanjing all revealed the same pattern of allocation of ECE resources among families of different social status that children from families of advantaged social status went into public kindergartens with higher quality. Zhang Yan found that the tuition fee of public and private kindergartens went far beyond the buying capacity of migrant workers, and their children either stay at home or enroll in illegal kindergartens without official registration (Jin et al. 2005). There were 1266 registered kindergartens in Beijing, but 1298 kindergartens without registration in 2009 (Political Consultative Committee Member investigation 2009). These kindergartens without registration scattered in the rural-urban fringe zone, and 95% children enrolled in these kindergartens were from migrant worker family (Zhang and Li 2010). In one word, most of quality public ECE resources are possessed by children from families of advantaged social status in cities.

28.3 Policy on Development of Early Childhood Education

28.3.1 The Problems in Past Policies on ECE

The problems of ECE in China resulted partly from the level of social economic development and partly from the policy selection and system design. Many scholars analyzed the policy on ECE and generally pointed out the problems as follows.

The responsibility of the government was not defined clearly, and the policies were not fully administered. The management system of ECE in China was established as "responsible by local government, managed by authorities at different levels, and coordinated by different branches with individual responsibility." Under such system, the responsibility of the government was defined ambiguously. And there are no concrete rules for implementation and no related mechanism and measures including average cost accounting, performance evaluation, funding guaranteeing, etc. Moreover, the policies on ECE are department regulations and then exerted little constraint on local government. As a result, many policies issued by central government just became a mere scrap of paper.

The level of the main body responsible for funding ECE is low, and the funding is not adequate and allocated unequally. The proposal on Reform and Development of Early Childhood Education (2003) reinforced and clearly maintained again that county governments are responsible for setting up public kindergartens in counties, and town governments are responsible for both setting town central kindergartens and raising funds for kindergartens in rural areas. However, after the establishment of the tax-sharing system in 1994, financial power was centralized with the powers of the county and town governments being weakened. Moreover, the rural tax and fee reform gradually called off rural taxes and fees. Consequently, county or town governments have almost no financial capacity to fund early childhood education. On the other hand, influenced by the urban-rural dual structure established since the establishment of the PRC in order to accelerate industrialization and urbanization, limited funding had been heavily invested in developing model kindergartens operated by public work units in cities, and kindergartens sponsored by private companies or communities and those in rural areas hardly received public funding.

The quality supervisory system is imperfect. The Kindergarten Management Regulations in 1989 (National Education Commission 1989b) stipulated that the local educational authorities should be responsible for supervising, evaluating, and guiding the care and education practice in kindergartens. Since that, many local educational authorities developed kindergarten rating standards and administered kindergarten evaluation, which positively promote kindergarten quality. But it could not guarantee objective and valid evaluation for public kindergartens, because the educational authorities play roles both of sponsoring, guiding, and evaluating bodies. And it lost effective control on quality of private kindergartens, because the private kindergartens charge tuition fee according to cost instead of quality, and the educational authorities have no power to fund and personnel private kindergartens.

28.3.2 Changes in Current Policies on ECE

The China government has been making efforts to improve accessibility, affordability, quality, and equality of ECE. Especially since 2010, the government held several summit meetings and issued series of policies and redesigned the ECE system in order to provide equitable and quality ECE.

Any change in policy is essentially kind of rearrangement of power and responsibility and reallocation of resources and profits among different bodies. The most obvious change of lately policies on ECE is the value orientation to equity and equality. The developmental goal of ECE is definitely proposed as establishing public provision system of ECE covering urban and rural areas with rational geographical distribution in order to provide basic and quality ECE for eligible children. And it emphasized that most kindergartens should be beneficial universally, which means that most of this kind of kindergartens funded by the government, and most eligible children could enroll in kindergartens, and most children from poor families could gain subsidy from the government. Thus, it requires that the public funding should be tilted to rural areas and remote poor areas and should establish subsidy system to help poor children and orphan and handicapped children receiving ECE. The central government will set special project to promote ECE in rural areas, and local government of every level should allocate special funding to construct kindergartens in rural areas.

To fulfill the goal, the policy reaffirmed the leading role of the government in developing ECE:

- Enrich resources of ECE in various ways including developing public kindergartens, supporting private kindergarten by buying service, awarding as subsiding, tax reducing, etc. and construct and plan community kindergartens in cities as a whole.
- Establish rational standard of teacher-children ratio, check and ratify establishment standard, improve the teacher qualification accreditation system, and issue teacher professional standard, improve teachers' status and remuneration, and the central and local government set training projects for teachers in rural areas.
- Enlarge funding in ECE by including ECE funding into financial budget, directing the increment of educational funding into ECE, establishing funding standard per student in public kindergarten, establishing ECE subsidy system, allocating special grants and increase funding to support rural areas in middle and west regions and minority and remote regions.
- Strengthen kindergarten management, strictly administer kindergarten accreditation, and establish standard for setting up kindergartens of different types and manage and guide kindergartens according to their types.
- Enhance management of kindergarten tuition fee charging.
- Make a 3-year development plan within the range of county (State Council 2010b).

The process of policy making is also more open, transparent, and evidence-based than before. Series of policy texts, including the Outline of China's National Plan for Medium- and Long-term Education Reform and Development (2010–2020) (abbreviated as the Outline, State Council 2010a), the Kindergarten Teacher Professional Standard (MoE 2011), the Kindergarten Staffing Standard (MoE 2013), etc., were worked out on the base of investigation and granted project study. After the draft of policy text was finished, it would be open to different groups at different levels within different ranges for comments. For example, the draft of the Outline was open to public comments through the website from February 28 to March 28 in 2010. The website of Ministry of Education received 18,474 comments and suggestions, and there are 3951 about ECE part, which is the biggest percentage among each education stage (Wang et al. 2010).

But these policies still have problems not solved and challenges in implementation. First, they still exploit the old structure of funding bodies though the focus of funding objectives was changed a lot. The policies stipulated the government should raise funding and construct rational cost sharing system, but the main funding bodies remain at local government mainly at the level of county and town and countryside, and the percentage of the government at different levels and families was not defined clearly. Within current revenue and tax system, the government at the lower level has weaker financial capacity, otherwise shoulder much heavier responsibilities for social welfare. To guarantee the funding as proposed by the policy, the funding bodies should be lifted to the government at a higher level with stronger financial capacity, if the macro revenue and tax system not be reformed. Second, the local government could not keep abreast with the central government in basic value orientation and management mode. China is centralized in politics and decentralized in administration. In many contexts, the local government could not accurately understand and implement the policy issued by central government. For example, the central policy required the government should play leading role and should energetically develop public kindergarten and form the setup that both public and private kindergartens develop simultaneously. But in a 3-year developmental plan, the local government invested most in building, rebuilding, or extending public kindergartens; therefore the number of public kindergartens grows dramatically. As to the social economic capacity, the government does not have enough public revenue to provide universal public kindergartens for all eligible children at this stage. Therefore, it is not a sustainable developmental mode to rely totally on the government's public revenue without employing market and volunteer mechanism.

28.4 Problems and Challenges in Kindergarten Staffing and Teachers' Living Conditions

A teacher directly and indirectly affects young children's learning and development and is one of critical factors influencing kindergarten quality. But problems in professional qualification and title, staff establishment, and teacher training have always been hindering kindergarten staffing and teachers' living conditions.

28.4.1 Professional Qualification and Title

The professional title for kindergarten teachers has long borrowed from title system for primary teachers. There were 48.2% teachers across the whole country who did not join the appraisal of professional title in 2002. Liu Xia (2011) found there were 64.23% among 21,179 kindergarten teachers who did not join the appraisal of professional title in Guangzhou. Also there is deficit in teacher qualification management system. The Regulations on Kindergarten Management in 1989 first proposed that kindergarten principal and teacher should have a degree of vocational kindergarten teacher training school or appraised as qualified by educational authorities. The Teachers Law of the People's Republic of China (Central People's Government of the People's Republic China 1993) proposed to administer teacher qualification management system and required that kindergarten teachers should have kindergarten teacher qualification and degree of vocational kindergarten teacher training school or upper or should pass the teacher qualification examination if not having such degree. But these policies accredited qualification only by educational degree and did not give explicit and concrete requirements on what knowledge and capacity should kindergarten teachers possess. As a result, kindergarten teacher as occupation has long been at low level of professionalization. And kindergarten teachers were called "auntie" or viewed as a babysitter who anybody could be or versatile young beauty.

The Teachers Qualification Regulations in 2000 made concrete regulations on kindergarten teachers' qualification standard, accreditation, and management. But it still had problems that the requirements are low and ambiguous, and the accreditation method is not scientific, and the qualification certificate is valid lifelong (Hong 2011). To improve the professional level, the Ministry of Education issued the Professional Standards for Kindergarten Teachers in 2011, which regulated what basic professional qualifications should a qualified kindergarten teachers have on aspects of professional beliefs and ethics, knowledge, and capacities. The issue of professional standards greatly promotes the professional level of this occupation and provides regulations and guidance to the accreditation, professional development, and education and training of kindergarten teachers.

28.4.2 Staff Establishment and Remuneration

The management of kindergarten teachers is based on staff establishment. Establishment is authorized size and structure of staff in government branches and public institutes. The salary of teachers having authorized establishment is totally or partly funded by the public revenue, which is the main way of public revenue investing in kindergarten education. Therefore, only public kindergartens, including kindergartens sponsored by educational authorities, government branches, and public enterprise and institutes, have an opportunity to apply for staff establishment. Majority of private kindergartens and those in rural areas do not have staff establishment. For example, there were 21,179 kindergarten teachers in Guangzhou, and only 1324 of them had establishment, which amounted to 6.25% (Liu 2011). But it is very difficult for kindergartens to get staff establishment, because the developmental emphasis is on 9-year compulsory education.

Establishment is the organizational identity of teacher, and teachers' profits including salary and welfare, training, and promotion are closely related to establishment. Teachers having establishment have higher salary from public revenue and more chances for training and promotion and then have stronger commitment to and recognition to this job, while teachers without establishment was paid by kindergarten at low level of salary and thus turns over frequently. Under such situation that the kindergartens severely lack staff establishment and teachers with and without establishment do same work but have different payment, kindergarten staff as a whole is insufficient, instable, and low qualified.

The Several Proposals on Development of Early Childhood Education (State Council 2010b) require that local government should check and verify staff establishment in public kindergartens and gradually personnel sufficient staff. But one basic content of the reform of government and public institutes is to reduce organizational size and staff and raise efficiency. The number and percentage of personnel paid by public revenue was reduced dramatically, and the staff establishment for kindergarten decreased more and more. In practical situation, some local government attempts to explore new management mode. For example, Hefei in Anhui province avoided the problem of staff establishment and exploited post management mode and provide teachers with and without establishment in the same post with the same salary and same conditions.

28.4.3 Teacher Education and Training

Many researchers studied kindergarten teachers' professional development, differences in beliefs and behaviors, etc., but there are many problems in preservice education and post-service training in practice.

The preservice education is administered at three levels of technical secondary school, 3-year college, and undergraduate university. And technical secondary

school had long played important role in training and delivering kindergarten teachers. During the Tenth Five-Year Plan Period, most technical secondary schools were transformed to a 3-year college. But the rash advancement incurred problems in adaptation of educational goals, training modes and curriculum arrangement, and sufficiency and qualification of teachers. As to curriculum, because of having long lacked professional standard and the cultivating goal is obscure, the education in technical secondary school had long emphasized music, dance, and art skills (Qin 2012) and ignored theoretical knowledge and teaching skills, while university contrarily stressed academic and ignored practice. The former aims to cultivate versatile teachers, but the latter aims to cultivate kindergarten teachers' academic attainment and research ability (Ye 2006).

Scholars studied learner community, kindergarten-based teaching research, and apprenticeship learning and their effects on teachers' development through action research, case study, and narrative study. But investigations showed that the in-service training in practice lack pertinent and effective content, participatory training method, and equal opportunity allocation (Li and Wang 2011; Qiu 2009; Research team of Song Qingling Development Center 2012; Shi et al. 2010; Tian and Zhou 2009; Wu and Wang 2012). Even the national kindergarten training project for teachers in rural kindergartens in middle and west regions also has these problems. Pang pointed out that the project did not rigorously examine and approve the qualifications of the training institutes and personnel; the trainees were not all teachers in rural kindergartens, and it lacked supervision and evaluation on the process and effects of project administration, and the content was not pertinent and appropriate; the training method was mainly the off-site group instruction (Wei and Pang 2013).

28.4.4 Living Conditions of Kindergarten Teachers

As a whole, the living conditions of kindergarten teachers were not optimistic under the influence of staff establishment, payment, and opportunity for training and promotion. Liu Xia's investigation found that the average salary of kindergarten teachers was significantly lower than that of non-private work units (Liu 2011). Li Hui compared the payment of kindergarten teachers in Shenzhen, Hong Kong, and Taipei and found that the level of payment in Taipei is the lowest, and the real purchasing power in Hong Kong is the lowest (Li et al. 2013). Li's investigation on kindergarten teachers' job pressure and living conditions implied that kindergarten teachers faced heavy work load and psychological pressure, felt a strong sense of job burnout and weak sense of success, and are not committed to this occupation (Li 2000). Liang and Feng questionnaired 447 teachers in kindergartens sponsored by different bodies and found that 48.4% teachers sometimes wanted to quit job, and 26.9% teachers regretted to choose this job, and some expressed to change job provided the payment is acceptable (Liang and Feng 2004).

The living conditions of teachers without establishment, in rural areas and private kindergartens, are even worse. Li found there is great difference in payment between teachers in public and private kindergartens, in urban and rural areas, and with and without establishment (Li 2012).

28.5 Achievements and Problems of Curriculum Practice and Reform

The early childhood education in China has gone through four major periods since the establishment of the first kindergarten run by the government in 1903 (Zhu and Wang 2005; Wang 2004). The history of kindergarten curriculum in mainland China has been an integrating process of learning from foreign countries and exploring native models. In the fourth period from the 1980s till present, the practice learned from the Soviet Union was criticized, and the curriculum management and beliefs and practice were reformed. Through three decades of efforts, the reform has made great achievements but still has essential problem waiting to solve.

28.5.1 The Power of Curriculum Management Decentralized

According to Zhang (2011a), power decentralization for kindergarten curriculum management has progressed through three phases. In the first phase, scholars and practitioners spontaneously explored new curriculum models. It is during this phase that the first kindergarten curriculum textbooks (Zhang 2011a) that were not issued by governmental institutes were published and marketed. In the second phase, the government formally decentralized the power of curriculum decision-making. Specifically, in 1999, the Central Committee of the CPC and the State Council co-held the third National Education Conference and proposed to reform the curriculum management system in primary education. A three-tier (national, local, and school) curriculum management system was established since then. Moreover, it was also agreed that local educational authorities and schools have more power in curriculum decision-making than national authorities. In the third phase, the Guidelines for Kindergarten Education Practice – Trial Version (MoE 2001) advocated that local authorities and kindergartens should create local curriculum reflecting and catering to local needs and culture, which substantially elevated the awareness and participation of kindergartens and teachers in curriculum decision-making. As a result, developing and designing school-based curriculum has become a hot issue in research and practice during this phase (Wang 2004). "Some local educational authorities require every kindergarten develop their own kindergarten-based curriculum, and some even use kindergarten-based curriculum as one important criterion for kindergarten quality rating" (Zhu 2006a). Therefore, the

decentralization of curriculum decision-making has directly led into the birth of curriculum models of a great deal of diversity and variety, which forever overturned the scene that all kindergartens across the country exploited one uniform curriculum. Many different curricula, from the ones borrowed from foreign countries such as Reggio Emilia or Project Approach to the ones created locally such as the Integrated Thematic model or Infiltration Model, can be seen in kindergartens.

But underneath the surface of diversity and autonomy is the disorder and uneven of kindergarten curriculum. Some studies pointed out that many principals and teachers do not have curriculum leadership and curriculum awareness and capacities to select and design curriculum and integrate curriculum resources (Yang and Zhang 2008; Zhang 2012). The quality of many curriculum kindergarten developed is low, and some kindergartens even thought developing kindergarten-based curriculum is to compile textbook or choose content totally on their own will (Yuan 2004). Jin (2012) investigated 15 kindergartens in Shenyang and found that the goals of the curriculum kindergarten developed were not comprehensive, and the contents of curriculum were too many and not integrated, and the way to implement curriculum was unitary, and the evaluation is weak. Zhao (2013) investigated 116 kindergartens in 14 cities and regions of Hunan provinces through interview and questionnaire on principals and teachers and found kindergarten teachers relied mostly on textbook or teacher guidebook, but the development of kindergarten-based curriculum is lagging. Therefore, it needs to improve teachers' capacity as well as delegate teachers' power.

28.5.2 Changes in Teachers' Beliefs and Behaviors

The reform in the range of the whole country was formally launched by the issue of the Regulations on Kindergarten Education Practice – Trial Version (National Education Commission 1989a), which symbolized the shifting from nongovernmental bottom-up exploration to government-directed top-down reform. The propagation and the mobilization of the reform were pushed forward from central to local government and then to kindergartens by administrative power. In 2001, the Ministry of Education (former National Education Commission) issued another national guideline, the Guidelines for Kindergarten Education Practice – Trial Version, to further carry on the curriculum reform.

The reform is "essentially a kind of self-conscious 'value-priori' cultural selection" (Liu and Feng 2005). The core values advocated by the reform included respect individual children, active learning, play-based integrated curriculum, etc. For decades, the reform efforts have been to transform the value-bearing fundamental principles to efficient education practice. And also the most obvious and greatest achievement of the reform was believed to be the change of educational values among practitioners (Liu and Feng 2005). Transforming educational beliefs (zhuan bian jiao shi guan nian) has become the most frequently used term in the reform literature (Liu et al. 2004; Huang and Liu 2006). In her dissertation study, Liu

(2007) interviewed different groups of stakeholders for kindergartens, which include teachers and principals, administrative officials, and scholars, and asked them to list the key concepts that they thought advocated in the reform and found that all the participants listed "respect children," "active learning," and "providing play as basic activity" as the key concepts for the reform. Yi and Pang's (2005) narrative study with one kindergarten teacher revealed similar results. Specifically, the teacher reported that she would respect and satisfy young children's needs as much as possible, would not pose too more rigid rules and discipline, and would encourage and engage children in classroom activities; the teacher also reflected that changes in her beliefs and teaching were resulted from learning the Guidelines for Kindergarten Education Practice – Trial Version (MoE 2001). Wang and Yu (2004) investigated kindergarten teachers in rural areas on their educational beliefs and found that teachers' beliefs had changed a lot and shifted from teacher-centered to children-centered.

The shift from rice-seedling-bed configuration to learning centers is obviously another noticeable achievement for the reform. Xiang (1995) investigated 407 kindergartens in six provinces and found that 50% of classrooms provided learning centers. Similarly, Liu and her team (2011b) evaluated qualities of kindergartens in 11 provinces, and one of the findings shows that learning centers were commonly adopted in kindergarten classrooms. In sum, after decades of reform, the setup of learning centers has become a common classroom configuration in Chinese kindergartens regardless of its variations in types or in quantity. Moreover, compared with classrooms in the past that only provided paper drill textbooks or sole type of manipulative, classrooms today provide a variety of hands-on manipulatives. For example, Liu and her colleagues (2004) found that all the 15 kindergartens they observed in Beijing provided some sort of play materials in learning centers and that classrooms of better qualities provided two to three types of materials in each learning center.

Another change is that teachers began to allocate more time for free play and give children more freedom and opportunities in choosing. Liu and colleagues (2012a, b) reported that 62% of classrooms in cities provided at least 30–45 accumulated or uninterrupted minutes of indoor free play on a daily basis, and some classrooms even allocated as much as an hour. During play, teachers would allow children to make autonomous choice for play theme, materials, or peers.

Meanwhile, teachers also began to teach and care for individuals. In the past, teachers usually paid too much attention on curriculum goals and lesson plans; as to children's needs, teachers only cared about them as a collective. For example, Zheng (2004) found that teachers mostly interacted with the whole group, and what teachers said and did was often directed to the obscure children as collective (i.e., teacher often said "ni men" [equivalent to the plural meaning of you]; "xiao peng you men" [equivalent to the meaning of "little friends"]). Liu et al. (2004) documented evidences that teachers began to care about children's individual needs, for example, children were allowed to go to toilet without asking for teachers' permission. Liu and colleagues' latest studies (Liu et al. 2008, 2012a, b) show that teachers allocated attention not only to individual child's basic needs such as eating, toileting, or

napping but also to the child's learning and developmental needs. For example, some teachers took anecdotal notes for individual child and gave accordingly individual scaffolding. Studies on teacher-child interaction also revealed similar patterns of change.

As to the entire tendency, the changes in abovementioned implied that the reform has made great achievements. But two phenomena should be noted when examined elaborately what kindergartens have made what changes at what aspects at what time.

First, it is easier to change physical environment than to change teaching behaviors. Physical environment, daily routine, and teaching interact with each other, but changes of these factors do not happen synchronically. The first made and most obvious achievements were those at the physical level. For example, learning centers had been observed in the early 1990s (Xiang 1995) which was just several years after the reform. In contrast, changes in teacher-child interactions and play did not obviously occur until mid and late 1990s (Liu 1995; note that the Xiang 1995 study was conducted earlier than Liu 1995, although they were published at the same year). In addition, teachers' teaching behaviors also lagged behind their beliefs. Although teachers used key concepts advocated by the reform in their discussions, reflections, and documentations, they did not immediately transform the key concepts to appropriate practice. Therefore, it was relatively easier to change physical environment than to transform teachers' practices.

Second is that the reform progressed to very unbalanced and great variations existed among kindergartens. Specifically, studies conducted by different researchers, in different years, or with different samples reached a similar finding that significant differences exist among kindergartens, especially in the domain of physical environment with public kindergartens in cities being generally better than private kindergartens or kindergartens in countryside. Moreover, there coexist curriculum models that popularized at different times – the traditional subject-based curriculum evolved from the establishment of the PRC as well as the most contemporary Project Approach or Reggio Emilia models. The impacts of the curriculum reform indeed landed upon different kindergartens at different extents (Pan and Liu 2008).

28.5.3 Cultural Appropriateness of Kindergarten Curriculum Reform

One important goal of the reform is to change the practice of group instruction which characterized as concentrated on subjects, centered on teachers and classrooms and textbooks, and based on talking and listening. But such kind of teacher-controlled knowledge-oriented group instruction still is prevalent in many kindergartens after decades. To this problem, there are many different answers. Some pointed to the difficulty in transforming teachers' beliefs and behaviors. And some discussed the cultural appropriateness of such wave of reform.

Zhu differentiated group teaching activity from group instruction and defined group teaching activity as that a couple of teachers organize teaching activities with many or whole children and generally ask all children do same activity or related tasks at same time. He asserted that group teaching activity could be either low-structured or high-structured; either teacher-preplanned or children-initiated; either integrated or subject-focused (Zhu 2006b). And he pointed out that "teacher-planned group teaching activity is main part of kindergarten curriculum, and most principals and teachers still treat group instruction as main activity in their kindergartens at present, and will do in future. It was shaped by our social culture and real situation." (Zhu 2006a) For example, the traditional culture in China admire collective spiritual, which is different from western culture. And the teacher-child ratio in China could not reach the standard in America, and teachers have no choice but group teaching activity when facing so many young children, but it is most effective (Zhu 2006b). Anyway group teaching activity is one particular kind of activity in kindergarten curriculum in China and should be reinforced and improved but not canceled or abolished. (Zhu 2006b).

Kindergarten curriculum reform should respect culture and be rooted in cultural context. But what are essentials of Chinese traditional culture which need to transmit? Is the group teaching activity that teachers selected in practice in context of high teacher-children ratio appropriate for the social ideal? Pan and Liu (2008) gave different explanations to these questions.

They thought Ming-Fen emphasis and examination orientation largely influenced the content and implementation of kindergarten curriculum. The pre-Qin Confucianism upheld benevolence, righteousness, propriety, wisdom, and integrity. Propriety means that people behave according to his or her social role to build a harmonious and orderly society. After the reinterpretation and reconstruction in post-Han dynasty and Song dynasty, however, the propriety evolved into the set of "Three Guides and Five Constants" (san gang wu chang), which strangles the development of humanity spirit. Liang (1987), a famous Chinese philosopher and social activist in the early twentieth century, maintained that Chinese culture was an ethics-based culture, in which individual identity was not defined by his/her capabilities and rights, but by his/her responsibilities and obligations for others and that individual's rights were not claimed by him or herself but imbued by others. Some scholars asserted that Ming-Fen was the essential of Chinese traditional culture, in which positions and roles in the society determined an individual's identity (Liang 1986; Qu 1981). Therefore, individuality was oppressed, and compliance to power and authority was promoted. The control of teachers on children just is the epitome of the macro social structure within kindergarten classroom.

The imperial examination system was firstly established in Sui dynasty, which was about 1400 years ago, and perfected in Tang dynasty, which was the successive dynasty after Sui, and had not been abolished until 1905. The imperial examination system had not been merely a political system for selecting cadres but also an open tunnel for the mass to upward their social status. The examination orientation has profoundly influenced Chinese's attitudes toward learning and the social wishes to examination. Affected by this orientation, learning means studying hard without

play, studying means preparing for examination, and examination is to change one's social status and gain advanced Ming-Fen. The beliefs of learning and studying for examination influenced by the imperial examination did not disappear but was reinforced after the abolishment in 1905. In nowadays, although there have been many critics about examination-oriented education and examination itself, examination is still viewed as the only equal and fair selecting measure. Because examination is treated as the sole pathway to gain Ming-Fen, teachers and parents highlight knowledge teaching and skills training, and treat play as a barrier for efficient learning.

However, culture appropriateness, however, should be interpreted from two aspects: one is the appropriateness for the traditional culture or cultural traditions, and second is the appropriateness for the future culture a society wishes to build. Curriculum reform therefore should balance its functions of cultural transmission and cultural selection/creation. Note that the obstacles encountered in the kindergarten curriculum reform reflect not only the conflicts between Western and Eastern cultures but also between traditional values and values pursued by the modern society. Therefore, there may not need to be too concerned about the loss of cultural identity, although the curriculum reform in China appears to be a product of learning from the West. On one hand, the ultimate purpose of the curriculum reform is congruent with the needs of the society. To fulfill modernization has long been the goal of social construction since the establishment of PR China in 1949, and to fulfill modernization, China needs autonomous and creative individuals. Moreover, in the West, child- or play-based curriculum was not the original kindergarten education tradition either. Lindon (2001) stated that "the focus on the value of spontaneous play grew in Western Europe from the 1930s to become established by about the 1970s" (p. 142). On the other hand, people usually interpret imported curriculum models from their own cultural lenses, add on their own interpretation, and select worthy elements from their own needs. Tobin et al. (2009) found that curriculums in different countries do not become totally the same even after decades of borrowing or learning from each other.

References

Central People's Government of the People's Republic of China. (1993). *Teachers law of the People's Repubic of China (in Chinese)*. Beijing: Central People's Government of the People's Republic of China.

Chen, M. Q., Feng, X. X., Xiao, S. J., & Cang, C. (2009). Literacy readiness for school and family SES (in Chinese). *Studies in Preschool Education, 4*, 3–8.

Department of Development and Planning of MoE. (2011). *Great achievements in development of education cause: Reports on social economic achievements during the Eleventh-Fives period*. Retrieved from http://www.stats.gov.cn/tjfx/ztfx/sywcj/t20110310_402709531.htm

Gai, X. S. (2007). *Research and practice on children's school readiness* (in Chinese). Changchun: Jilin Education Press.

Gai, X. S., & Zhang, X. K. (2005). The theoretical model and intervention of children's school readiness (in Chinese). *Advances in Psychological Science, 5*, 614–622.

Gao, X. M., & Zhou, J. (2010). Study on the visual concentration features of Chinese- speaking children in reading picture book (in Chinese). *Early Childhood Education (Educational Sciences), 1–2*, 23–26.

Guo, D. H., & Tao, W. (1999). *How was the theoretical prohibited area on human rights broken* (in Chinese). Law Science, No. 5.

Hong, X. M. (2011). Kindergarten teacher qualification system: Problems and solutions (in Chinese). *Research in Education Development, 15–16*, 6–11.

Hong, X. M., & Luo, L. (2012). Analysis on gap of early childhood education between rural and urban areas from view of equality (in Chinese). *Journal of Educational Studies, 5*, 73–81.

Huang, M. J. (2010). *Children's participation in kindergarten life: From ideal participation to the one experienced by children* (in Chinese). Unpublished postgraduate thesis. Sichuan Normal University.

Huang, Z., & Liu, X. Y. (2006). The focus of curriculum reform: Make changes within classroom (in Chinese). *Shanghai Early Education, 1*, 17–18.

Jiaozuo Municipal Education Bureau. (2011). *Jiaozuo municipal three-year action plan on early childhood education (2011–2013)*. Retrieved from http://www.fsou.com/html/text/lar/173611/17361190.html

Jin, M. L. (2012). *Situation of kindergarten-based curriculum: Case study of Shenyang* (in Chinese). Unpublished postgraduate thesis. Shenyang Normal University.

Jin, Q. H., Liu, Y., Zhang, Y., & Li, Q. (2005). A survey of current pre-school education of/for children from urban low-income families in Beijing. *International Journal of Early Years Education, 2*, 157–169.

Li, S. L. (2000). Investigation on kindergarten teachers' working pressure (in Chinese). *Shandong Education (Early Childhood Education), 6*, 8.

Li, Y. P. (2010). *Effects of social stratum on opportunity to access early childhood education: Case study of Wuhan* (in Chinese). Unpublished postgraduate thesis. Shanghai: East China Normal University. p50.

Li, H. (2012). Chinese kindergarten teachers' salaries: The problems and causes (in Chinese). *Early Childhood Education (Educational Sciences), 12*, 6–10.

Li, H. X., & Wang, D. L. (2011). Experiences and reflections on promoting kindergarten teachers' professional development through cooperation between universities and kindergartens (in Chinese). *Early Childhood Education (Educational Sciences), 11*, 22–26.

Li, H., Chen, Y. C., & Lin, Y. W. (2013). A comparison of kindergarten teacher compensation between Shenzhen, Hong Kong and Taipei (in Chinese). *Early Childhood Education (Educational Sciences), 3*, 9–13.

Liang, Z. P. (1986). Status society and ethical law (in Chinese). Beijing: Reading, 3, 36–42.

Liang, S. M. (1987). *Gist of Chinese culture* (in Chinese) (pp. 80–92). Shanghai: Xue Lin Press.

Liang, H. J., & Feng, X. X. (2004). Situation and causes about kindergarten teachers' job burnout in Beijing (in Chinese). *Studies in Preschool Education, 5*, 32–35.

Liao, F. R., & Li, Z. Y. (2004). When children-initiated curriculum confront with teacher-administered curriculum: Case study on curriculum experienced by children (in Chinese). *Journal of Taiwan Normal University, 2*, 89–112.

Lin, X. Y., Fang, X. Y., Liu, Y., & Lan, J. (2009). The effect mechanism of stigma perception on mental health among migrant children in Beijing (in Chinese). *Acta Psychologica Sinica, 10*, 967–979.

Lindon, J. (2001). *Understanding children's play*. Nelson Thornes.

Liu, Y. (1995). *Research on young children's perceptions of play: Questions and reflections*. In Proceedings of the 5th academic conference of the Chinese Association of Early Childhood Education (Series 2) (in Chinese). Beijing: Beijing Normal University Press.

Liu, L. X. (2007). *Research on effects of kindergarten education reform on classroom practice* (in Chinese). Unpublished doctoral dissertation, Beijing Normal University, 2007, P. R., China.

Liu, X. (2011). The outline of China's National Plan for medium- and long-term education reform and development and kindergarten teacher development: Based on the current situation (in Chinese). *Early Childhood Education (Educational Sciences), 1–2*, 16–22.

Liu, Y. (Interviewee) (2012). *Kindergarten teachers in town central kindergartens should become the main focus of the "National Teacher Training Project."* Data retrieved 10 Jan 2012, Retrieved from http://www.cnsece.com/news/201222/n983610714.html

Liu, Y., & Feng, X. X. (2005). Kindergarten educational reform during the past two decades in mainland China: Achievements and problems. *International Journal of Early Years Education, 13*(2), 583–593.

Liu, Y., Pan, Y. J., & Sun, H. F. (2004). Review and analysis on the kindergarten curriculum reform in recent two decades in mainland China (in Chinese Taipei). *Educational Research (for mainland China), 9*, 4–22.

Liu, Y., Pan, Y. J., & Sun, H. F. (2005). Comparative research on young children's perceptions of play- an approach to observing the effects of kindergarten educational reform. *International Journal of Early Years Education, 2*, 101–112.

Liu, Y., Fang, X. Y., Cai, R., Wu, Y., & Zhang, Y. F. (2008a). Floating children in urban adaptation: State and process (a qualitative study) (in Chinese). *Journal of Beijing Normal University (Social Sciences), 3*, 9–20.

Liu, Y., Pan, Y. J., Zeng, Y. X., & He, M. Y. (2008b). *Research on the situation and influential factors of kindergarten teachers' professional autonomy* (in Chinese). Beijing: Research on Teacher Education.

Liu, B. G., Zhou, J., Gao, X. M., & Li, L. H. (2011a). 4–6 years old children's visual attention to print during independent storybook reading: Evidences from eye movements (in Chinese). *Psychological Science, 1*, 112–118.

Liu, Z. L., team. (2011b). *Evaluation of kindergarten education quality in Mainland China: Investigation in eleven cities* (in Chinese). Beijing: Educational Science Publishing House.

Liu, Y., Qin, J. L., Pan, Y. J., & Shi, X. B. (2012a). Comparison about literacy readiness for school of children in one-year preschool education in rural and urban areas (in Chinese). *Journal of Educational Studies, 5*, 90–97.

Liu, Y., Yang, X. P., Tu, Y., & Pan, Y. J. (2012b). The comparative study on one-year pre-school education quality in urban and rural areas in mainland China (in Chinese). *Journal of Educational Studies, 3*, 74–83.

Ministry of Education. (2001). *Guidelines for kindergarten education practice- trial version* (in Chinese). Beijing: Ministry of Education.

Ministry of Education. (2011). *Kindergarten teacher professional standard* (in Chinese). Beijing: Ministry of Education.

Ministry of Education. (2013). *Kindergarten staffing standard* (in Chinese). Beijing: Ministry of Education.

Ministry of Education (2016). 2016 Statistics on Educational Development in China. Retrieved from http://www.moe.gov.cn/jyb_sjzl/sjzl_fztjgb/201707/t20170710_309042.html

Ministry of Education, State Commission Office for Public Sector Reform & other nine ministries. (2003). *Proposal on reform and development of early childhood education* (in Chinese). Beijing: UNESCO.

National Education Commission. (1989a). *Regulations on kindergarten education practice- trial version* (in Chinese). Beijing: National Education Commission.

National Education Commission. (1989b). *Kindergarten management regulation* (in Chinese). Beijing: National Education Commission.

National Working Committee on Children and Women under the State Council. (2005). China national report on child development (2003–2004) (summary) (in Chinese). *Chinese Journal of Reproductive Health, 5*, 260–263.

Pan, Y. J. (2011). Effects of urbanization on children's life: From the view of evolution of children's play (in Chinese). *Jianghan Forum, 11*, 137–140.

Pan, Y. J., & Liu, Y. (2008). A comparison of curricular practices in Chinese kindergartens: The influence of curriculum reform. *International Journal of Early Childhood, 2*, 33–48.

People's Daily. (2013). *Target at children's early development, blocking poverty* (in Chinese). 21st Apr, p. 9.

Political Consultative Committee Member investigation. (2009). *The number of kindergartens without registration is far more than that with registration* (in Chinese). Retrieved from http://news.wuhan.net.cn, 29 July 2009.

Qin, J. L. (2012). Functions of the kindergarten teacher professional standard: Discussion on the professional awareness of kindergarten teacher (in Chinese). *Studies in Preschool Education, 8*, 7–10.

Qiu, Sh. (2009). *Problems and solutions about apprenticeship in kindergartens*. Unpublished postgraduate thesis. Northeast Normal University.

Qu, T. Z. (1981). *Law and society in China* (in Chinese). Beijing: Zhong Hua Shu Ju.

Research team of General Education Institute in Shanghai Academy of Educational Sciences. (2008). Investigation on participation of children from Shanghai kindergartens in interest classes (in Chinese). *Shanghai Research on Education, 11*, 44.

Research team of Song Qingling Development Center. (2012). Investigation on current situation of post-service training for kindergarten teachers in several provinces (in Chinese). *Shanghai Research in Education, 12*, 39–43.

Shanghai Municipal Education Commission, Shanghai Municipal Development & Reform Commission and other nine bureaus. (2011). *Shanghai municipal three-year action plan on early childhood education (2011–2013)*. Retrieved from http://shanghai.eol.cn/shanghai_zc_5346/20110913/t20110913_682704.shtml

Shen, L. (2008). *Research on outdoor play and playground in neighborhood in cities*. Unpublished postgraduate thesis. East China Normal University.

Shi, Y. T., & Gao, J. B. (2007). The situation and goal of fulfillment of children's rights to participation in rural schools in west regions: Case study of "Child-Friendly School" (in Chinese). *Global Education, 4*, 76–79.

Shi, Y., Pan, H. L., & Yu, L. (2010). Kindergarten-based teaching research management for professional development (in Chinese). *Studies in Preschool Education, 4*, 63–66.

Song, Y. Q. (2011). *Empirical study on bias model of financial funding on early childhood education: Based on micro data from 591 kindergartens in 25 counties in 3 provinces*. Scientific Research Briefs of China Institute for Educational Finance Research in Peiking University. No. 4. http://ciefr.pku.edu.cn/publishsinfo_766.html

State Council. (2010a). *Outline of China's National Plan for Medium- and Long-term Education Reform and Development (2010–2020)* (Guo Jia Zhong Chang Qi Jiao Yu Gai Ge he Fa Zhan Gui Hua Gang Yao). [In Chinese.]. Beijing: State Council.

State Council. (2010b). *Several proposals on development of early childhood education* (in Chinese). Beijing: State Council.

Sun, D. (2013). Empirical study on equality of access to early childhood education: Based on accounting of early childhood education in Nanjing (in Chinese). *Shanghai Research on Education, 2*, 10–13.

Tian, J. Z., & Zhou, D. Y. (2009). *Current situation of kindergarten teachers' further education in rural areas in Hunan province* (in Chinese) (Research on Teacher Education. No 7).

Tobin, J., Wu, D., & Davidson, D. (1989). *Preschool in three cultures: Japan, China, and the United States*. New Haven: Yale University Press.

Tobin, J., Hsueh, Y., & Karasawa, M. (2009). *Preschool in three cultures revisited: China, Japan, and the United States*. Chicago: University of Chicago Press.

Wang, C. Y. (2004). *The historical research on century of development and reform of kindergarten curriculum in China* (in Chinese). Beijing: Educational Science Publishing House.

Wang, H. G. (2012). The game space and characteristics of game behavior for the urban children's outdoor activity. *Art and Design, 90*, 92–9 3.

Wang, J., & Yu, S. S. (2004). Investigation on kindergarten teachers' educational beliefs and self-efficacy in rural kindergartens (in Chinese). *Early Childhood Education, Z1*, 41–42.

Wang, L. Y., Zhang, H. R., & Liu, Y. (2010). Focusing on the state medium and long term program on education reform and development about preschool education: Analysis on the second public comments on the draft (in Chinese). *Studies in Preschool Education, 7*, 8.

Wei, Y. G., & Pang, L. J. (2013). Problems in implementation of National Project of Kindergarten Teacher Training (in Chinese). *Education Review, 2*, 45–47.
Wu, L., & Wang, J. H. (2012). Effects of training: Reflection on situation of pre-service training for kindergarten teachers in Anhui province (in Chinese). *Early Childhood Education (Educational Sciences), 9*, 22–25.
Xiang, Z. P. (1995). *Evaluation of kindergarten education quality in six provinces and cities (in Chinese)*. Beijing: Educational Science Publishing House.
Xiao, S. J., Feng, X. X., Cheng, L. Y., & Cang, C. (2009). Math readiness for school and family SES (in Chinese). *Studies in Preschool Education, 3*, 3–9.
Xu, Y. H., & Chen, S. H. (2007). Study on equality of early childhood education through the composition of people who possess early childhood education resources (in Chinese). *Early Childhood Education (Educational Sciences), 4*, 22–24.
Xu, J. L., & Luo, G. (2007). *Self -deconstruction of enlightenment* (in Chinese). Beijing: Jilin Press Group.
Yan, C. Y., & Wei, T. (2008). The distance between play and play: From ideal play and the one experienced by children (in Chinese). *Studies in Preschool Education, 9*, 43–36.
Yang, W., & Zhang, C. S. (2008). Problems and causes in kindergarten teachers' professional development in the context of kindergarten-based curriculum (in Chinese). *Studies in Preschool Education, 4*, 52–54.
Ye, P. Z. (2006). Situation, problems and solutions about pre-service education for kindergarten teacher (in Chinese). *Early Childhood Education (Educational Sciences), 3*, 23–27.
Yi, L. Y., & Pang, L. J. (2005). Grown-up in experience: Narrative research on personal educational beliefs of a kindergarten teacher (in Chinese). *Studies in Preschool Education, 2*, 33–48.
Yu, T., Tai, Y., & Gai, X. S. (2010). Assessment and promotion of school readiness of children (in Chinese). *Advances in Psychological Science, 1*, 46–54.
Yuan, J. X. (2004). Meaning, feature, conditions and methods: Review of online seminar on kindergarten-based curriculum (in Chinese). *Early Education, 8*, 171–201.
Zhang, Y. (2006). Investigation on young children's life in Beijing (in Chinese). *Studies in Early Childhood Education, 2*, 23–27.
Zhang, H. (2011a). Brief history of the development of kindergarten textbook in China (in Chinese). *Early Education (for teacher), 4*, 7–9.
Zhang, T. X. (2011b). The review of researches on child policy in China in 2010 (in Chinese). *Journal of Zhejiang Normal University (Social Sciences), 5*, 23–28.
Zhang, S. W. (2012). *Problems and solutions about teachers' participation in development of kindergarten-based curriculum* (in Chinese). Unpublished postgraduate thesis. Northwest Normal University.
Zhang, Y., & Li, X. Y. (2010). Unregistered nurseries and preschool education of migrant workers' children (in Chinese). *Studies in Preschool Education, 10*, 4.
Zhang, Y., Zhou, P. R., & Zhang, Q. J. (2008). Policies on early childhood education: From welfare to socialization. In X. L. Zhang (Ed.), *China's education development and policy: 1978–2008*. China: Social Science Academic Press.
Zhao, N. (2013). Kindergarten teachers' usage of textbook and teacher gudiebook: Example of Hunan province (in Chinese). *Journal of Educational Science of Hunan Normal University, 3*, 44–48.
Zheng, S. Y. (2004). *Institutionalized life in kindergarten classrooms (in Chinese)*. Beijing: Beijing Normal University Press.
Zhou, J., & Liu, B. G. (2010). From image to text: The early childhood reading and literacy development of Chinese- speaking children (in Chinese). *Chinese Journal of Special Education, 12*, 64–71.
Zhou, X., Chen, C., Dong, Q., Zhang, H., Zhou, R., Zhao, H., et al. (2006). Event-related potentials of single-digit addition, subtraction, and multiplication. *Neuropsychologia, 12*, 2500–2507.

Zhou, X., Chen, C., Zang, Y., Dong, Q., Qiao, S., & Dong, Q. (2007). Dissociated brain organization for single-digit addition and multiplication. *NeuroImage, 2*, 871–880.

Zhou, X., Chen, C., Qiao, S., Chen, L., Lu, N., & Dong, Q. (2009). Event-related potentials for simple arithmetic in Arabic digits and Chinese number words: A study of the mental representation of arithmetic facts through notation and operation effects. *Brain Research, 1302*, 212–224.

Zhou, X., Song, B., Chen, X. F., Jiang, J., Yang, Y., & Xiao, X. N. (2011). Study on home environment and school readiness of Zhuang minority children in Guangxi (in Chinese). *Early Childhood Education (Educational Sciences), 7–8*, 75–79.

Zhu, J. X. (2006a). Reflection on the kindergarten curriculum reform (second part) (in Chinese). *Early Childhood Education (Educational Sciences), 5*, 4–6.

Zhu, J. X. (2006b). Discussion on kindergarten-based curriculum (in Chinese). *Journal of Educational Development*, (May-Vol. 2), 4.

Zhu, J., & Wang, C. (2005). Contemporary early childhood education and research in China. In B. Spodek & O. Saracho (Eds.), *International perspectives on research in early childhood education*. Greenwich: Information Age Publishing.

Chapter 29
History and Reform of Early Childhood Care and Education (ECCE) in Japan

Xiangying Liu and Chiafen Lin

Abstract The first regular kindergarten (1876) and the first permanent nursery center (1890) in Japan have established for more than 100 years. However, Japanese early childhood care and education (ECCE) system includes kindergarten and nursery center to develop the dual education system. This paper introduces some aspects of history and reform of ECEC in Japan. The aspects examined are as follows:

1. History of results of dual early childhood care and education system

Both kindergartens and nursery centers were set up in modern days, whereas kindergartens and nursery centers were established under different backgrounds and environments. For this reason, they were distinguished from service objects, service function, and service characteristics. After WW II, kindergartens and nursery centers were classified into different systems and caused a long-term dual early childhood education system.

2. Characteristics and development of kindergartens and nursery centers under dual education system

After WW II, according to the School Education Law, kindergartens were subsumed within school education system. Kindergartens offered children basic education and care, offered a proper environment for children to grow up, and promoted student's physical and mental development. Ministry of Education, Science and Culture managed affairs of kindergarten. Kindergartens enrolled children whose age was from 3 to 6 and mothers were unemployed. In contrast, according to Child Welfare Law, nursery centers were subsumed within the child welfare system. Nursery centers were for those mothers who must work for her family that lived under minimum living standards.

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3. Curriculum reform of the kindergarten and nursery center in Japan after WW II

The curriculum standards both of kindergarten and nursery centers in Japan emphasize on children's development and classify five fields: health, relationship, environment, language, and expression.

4. Development of the early childhood teachers and children in Japan
5. Japanese attempts at child care support services in kindergartens and nursery centers
6. Trends in the early childhood care and education system reform of integrating kindergartens and nursery centers.

Keywords Japan • History and reform • System of ECCE • Kindergartens • Nurssery centers • Certified kodomoen

29.1 Introduction

Early childhood care and education (ECCE) in Japan already has an over 120-year history since the first regular kindergarten was established in 1876 and the first permanent nursery center opened in 1890. However, during these 120 years, a Japanese model of early childhood care and education has been completed to combine the traditional culture and new ways of thinking about children (Center for Women's Education and Development Ochanomizu University 2006) in the dual system that has been consisting of kindergartens and nursery centers (Liu and Nakata 2014).

This paper aims to provide the comprehensive view of the development of ECCE system in Japan from their foundation to their present situation. This paper is organized as follows:

1. History of the dual system of ECCE in Japan
2. Two types of Japanese preschool: Kindergartens and nursery centers
3. The curriculum reform of kindergartens and nursery centers after WW II
4. Teachers and children
5. Co-culture: Collaboration of home and kindergartens/nursery centers
6. Toward integrating kindergartens with nursery centers

29.2 History of the Dual System of ECCE in Japan

Both kindergartens and nursery centers were designed under different backgrounds and expectations. These two institutions were quite different in objects, functions, and characteristics. After WW II, kindergartens and nursery centers were more clearly differentiated from each other. This section explains how this dual system was constructed and what it caused.

29.2.1 Kindergartens as a National Policy of Modern Japan

The urgent goal of the Japanese government in the Meiji Era (1868–1912) after the long feudal times was to overtake and surpass the great powers of the West. One of the domestic policies that Meiji Government should deal with was to modernize its people: Education was a top priority. In 1871, Meiji Government constituted the Ministry of Education, Science and Culture and enacted an educational system in 1872. From 1879 to 1900, the compulsory educational system was devised and attempted. Thus, all Japanese children at the age of 6 became required to go to elementary schools in order to become the citizens of modern Japan.

An educational system also considered preschool education. Chapter 22 of An Educational System ordained that children under 6 must receive preparation education before going to elementary school (Ministry of Education, Science and Culture 1981). Under the government's active promotion, the first kindergarten in Japan was established in 1876 and affiliated with the Tokyo Woman's Normal School. The Tokyo Woman's Normal School, the antecedent of Ochanomizu University (the best national women's university in Japan), was the first higher educational institution for women established by the Meiji Government. This kindergarten was subsequently used as a model for the establishment of kindergartens in various regions around the country in Japan. By 1895, there were over 200 kindergartens nationwide. However, kindergartens were managed without the government's financial support (Japan Society of Research on Early Childhood Care and Education 2009); therefore in the 1890s, kindergartens gained the support of the upper-middle class, which included government officials and merchants who expected preparatory education for elementary school. This allowed kindergartens to flourish as institutions for preschool education to the children of the upper-middle class.

In light of the quantitative growth in kindergartens, the Ministry of Education, Science and Culture established a legal standard for them by drawing up the Regulation on Kindergarten Education and Facilities in 1899. These regulations established kindergartens as institutions for educating young children age 3 and above before they entered elementary school.

In the Taisho democracy period (from 1910s to 1920s), the pace of growth in kindergartens accelerated. Particularly, there was dramatic growth in private kindergartens, and they exceeded the number of public kindergartens. Educational curriculums and methods were also improved, having been influenced by educational philosophies in the United States and Europe, particularly with child-centered education methods and the Montessori Method. Under such background, in 1926, the ordinance relating to kindergarten was promulgated by the Ministry of Education, Science and Culture. In the regulations for carrying out the ordinance relating to kindergarten, the stated subjects were play, singing, observation, listening and talking, handwork, etc. (Center for Women's Education and Development Ochanomizu University 2006). This "ordinance" was the first independent one about kindergartens. It means that kindergartens were placed in the educational firman which was the best national regulation about education (Takatsuki 2010). In other words, the place for kindergartens within the country's educational system was established by it.

As abovementioned, we can assert that Japanese kindergartens were born under the control of the national government.

29.2.2 Nursery Centers Promoted by Nongovernmental Organizations

Quite different from kindergartens, nursery centers were set up by nongovernmental organizations as a charity for children whose family could not afford to take care of them.

Akazawa Atsutomi (1867–1937) and his wife opened the first nursery center affiliated to Niigata Seishu Private School. Akazawa Nursery Center enrolled children who were younger brothers and sisters of Niigata Seishu Private School students. Many of the students of Niigata Seishu Private School came from comparatively poor families. They were expected to take care of their younger brothers and sisters while their parents work out. Akazawa decided to open a nursery center in order to make his students study in Niigata Seishu Private School without worrying about their siblings.

Around the beginning of the twentieth century, the society had needed more nursery centers. Nursery centers provided care and education for poor children and burgeoned in major cities. In 1909, the government started to pay subsidiaries to nursery centers run by nongovernmental organizations. After WW I, the Ministry of Home Affairs founded Social Welfare Bureau in order to manage nursery centers and affairs for protecting children. From then, the nature of nursery centers changed from private charitable work to public social work. Public nursery centers appeared in many major cities (Takatsuki 2010). In 1938, the Ministry of Health and Welfare was established, and the Social Work Law was enacted. Under the law, nursery centers were legally positioned as a child protection activity (Center for Women's Education and Development Ochanomizu University 2006).

29.2.3 Dual System of ECCE After WW II

After the defeat of WW II, the Japanese government constituted and issued a new Japanese Constitution. Due to the spirit of the New Constitution—Peace, Gender Equality, and Democracy—integrating kindergartens with nursery centers was discussed in the Imperial Diet in 1946. However, it is hard to reach some agreement on providing free care and education for the poorest families.

In 1947, the Basic Act on Education and the School Education Law were enacted under the Allied General Headquarters. Meanwhile, the government also issued the Child Welfare Act. According to the School Education Law, kindergartens were subsumed within the school system. Kindergartens offered children basic education

and care, offered a proper environment for children to grow up, and promoted student's physical and mental development. Kindergartens became formally under the Ministry of Education, Science and Culture (from 2001 it is called Ministry of Education, Culture, Sports, Science and Technology). Kindergartens enrolled children from ages 3 to 6, whose mothers were home managers. In contrast, according to the Child Welfare Act (establishment in 1947 and the last change in 2014), nursery centers were subsumed within child welfare system. Nursery centers were for mothers who were paid workers for her family that lived under minimum living standards. However, from the 1950s to 1970s, owing to the movement to build more nursery centers, the great efforts of the women who acted to improve the care and education of children whose mothers work out, nursery centers became more popular and approved. Gradually, the quality of child care and education progressed (Liu and Nakata 2014). This was how the dual system of ECCE (the separation between kindergartens and nursery centers) was formed.

29.3 Two Types of Japanese Preschools: Kindergartens and Nursery Centers

This section is to reveal the difference between Japanese kindergartens and nursery centers by showing how the present kindergartens and nursery centers in Japan are managed.

29.3.1 Kindergartens

Japanese kindergartens are under the School Education Law, which provides that kindergartens offer education, care, and a proper environment for children to grow up, promoting their physical and mental development. As mentioned in Section 1, Ministry of Education, Culture, Sports, Science and Technology (the old name was Ministry of Education, Science and Culture) has been managing the affairs of kindergartens. Kindergartens enrolled children whose age was from 3 to 6.

Japanese kindergartens are divided into three types: (1) National kindergartens: These kindergartens are governed by the central government or Ministry of Education, Culture, Sports, Science and Technology. (2) Public kindergartens: These kindergartens are ruled by local governments or local education committees. (3) Private kindergartens: These kindergartens are established by legal persons; they are under the management of local governments (Morigami et al. 2013). As of 2013, the amount of kindergartens in Japan is 12,752, including 51 national kindergartens, 4695 public ones, and 8006 private ones (NPO Legal Person Kyouikusolution Company 2013a).

Japanese kindergartens start in April and end in March. Enforcement rules and kindergarten operation standards of School Education Law prescribe that annual

education weeks are more than 39 weeks even with a few exceptions. During the school year, children have spring break, winter vacation, and summer vacation. The day care time is 4 h a day. Japanese kindergartens are required to properly consider children's mental and physical development and their welfare.

Care and education in kindergartens are classified into five areas: health (physical and mental health), human relationships (the relationship between the child and other people), environment (children's surroundings and relationship to them), language (the process of language acquisition), and expression (feelings and expression). Japanese kindergartens place children at the same age bracket, and the class size is under 35 children. At least one full-time teacher is assigned exclusively to each class. Staffing allocation in a kindergarten is as follows: principal, head teacher, teachers, assistant teachers, special needs teachers, assistant special needs teachers, instructors, and educational assistants. A kindergarten teacher is qualified with an official teacher's certificate. As of 2013, there are 110,836 kindergarten teachers, including 354 national kindergarten teachers (0.32%), 23,799 public kindergarten ones (21.5%), and 86,703 private kindergarten ones (78.2%) (Ministry of Education, Culture, Sports, Science and Technology 2013).

School fees of Japanese kindergartens depend on each school. Needless to say, the fees of national or public kindergartens are lower than those of private ones. The government has been trying to minimize the gap of fees between private kindergartens and national or public ones. The Act on Subsidies for Private Schools issued in 1975 (enforced in 1976) assures that private kindergartens are subsidized by the government. A portion subsidy for private kindergarten expenses is offered to each private kindergarten through the following process: The government subsidizes prefecture governments; prefecture governments subsidize municipal governments; municipal ones subsidize each of private kindergartens.

29.3.2 Nursery Centers

Japanese nursery centers are under the Child Welfare Act. Nursery centers provide care service for children whose age is from 0 to 6 with lack of the care from family. Local governments manage affairs of nursery centers. The Ministry of Health, Labor and Welfare (the old name was the Ministry of Health and Welfare) supervises local governments. The Child Welfare Act provides that the nursery centers are for the children under the following situations:

1. Parents and relatives usually work out during daytime.
2. The child's mother is dead during or after childbirth.
3. One of the parents is sick, injured, insane, or disabled.
4. Parents need to take care of live-in relatives who are under long-term sickness, insanity, or disability.
5. Family just recovered from natural disasters like earthquakes, flood, and fire.
6. Other situations like above.

In these cases, children are allowed to enter nursery centers. When a family needs a great help about child care from others, parents can choose a nursery center and apply to municipal governments. Municipal governments inquire into to what extent each family needs the help about child care from a nursery center. After detailed investigation, municipal governments permit parents to entrust their children to their suitable nursery centers.

Nursery centers are classified into private ones and public ones. Local governments have jurisdiction over public nursery centers. Private nursery centers are supported by NPO or legal person of social welfare organizations, religions, schools, etc. As of 2013, there are 23,888 nursery centers in Japan, including 10,641 public ones and 13,247 private ones (NPO Legal Person Kyouikusolution Company 2013b).

School days are about 300 days a year, and nursery centers have no winter and summer vacation. Day care time is 8 h a day in principle, but nursery center directors can expand care time according to parent's work time. As of 2015, Japanese nursery centers offer a service of approximately 11 or 12 h a day on average. Yet longer care, temporary care, and night-time care are offered by many nursery centers.

The Ministry of Health, Labor and Welfare decides the content of education and care that nursery center are required to offer children. The content of education and care for over-3-year-old children is the same as that for the same-aged children of kindergartens: health, relationship, environment, language, and expressions. The staff of nursery centers consists of nursery teachers with official license, commissioned doctor, and cooks (may be contracted out). The standard ratio of a teacher and children is as follows: 0-year-old class is 1:3; 1-year-old class and 2-year-old classes are 1:6; 3-year-old class is 1:20; 4-year-old class and 5-year-old class are 1:30. More teachers are allocated to a class having children with disabilities. The statistical data of 2012 shows that the total number of formal staff members in Japanese nursery centers is 317,146; the number of the staff members in public nursery centers is 120,571; and those in private nursery centers are 196,575 (Ministry of Health, Labor and Welfare 2014).

Local governments support the expenditure for Japanese public nursery centers, though the support level depends on regions. Each nursery centers can use its subsidy from local governments for salary payment, operation expenses, administration expenses, office expenses, and so on. A private nursery center admitted by a local government is subsidized by the national government and its local government. Of the costs incurred by the municipality, the national government bears a half, the prefectural governments subsidize a quarter, and the municipal ones aid a quarter, after deducting the amount assumed by nursery center users.

Parents pay their children's care fees if they can afford to pay. How much parents pay depends on the amount of the income tax parents paid in the preceding year. The poorest families don't need to pay any children care expenses. Under the Children's Welfare Act, the poorest children are given opportunities to enjoy necessary care and education in nursery centers.

29.3.3 The Difference of Japanese Kindergartens and Nursery Centers

As abovementioned, we can assert that Japanese kindergartens are literal preschools or educational institutions for children whose families can afford to pay expensive fees of kindergartens and to have stay-at-home mothers. This situation has not changed since its foundation. On the other hand, since its foundation, Japanese nursery centers were regarded as social welfare institutions for poor children. Thus, we can safely say that the difference between Japanese kindergartens and nursery centers was decided by social and economic class.

But the situations around nursery centers in Japan have drastically changed. These days, the number of mothers working outside to build their own careers after their childbirth has been increasing also in Japan. It means that Japanese nursery centers have changed from social welfare institutions to indispensable preschools in which professional staff members offer appropriate care and education to children whose mothers contribute to their society as competent labor force. In this sense, the function of nursery centers in Japan is getting more significant.

29.4 Curriculum Reform of Kindergartens and Nursery Centers After WW II

This section examines some aspects of the curriculum reform that kindergartens and nursery centers underwent in the postwar Japan. Under the occupation of General Headquarters (GHQ), since the defeat of WW II in 1945, Japan was forced to change itself. Japanese government proclaimed the Japanese Constitution which based on democracy, new principles of new Japan, in 1946. Due to the spirit of the new Constitution, education reform in Japan after WW II started. Japanese preschool curriculum was also reformed. According to Tamiaki (2008) and the Center for Women's Education and Development at Ochanomizu University (2006), the circumstances of curriculum reform in kindergartens and nursery centers in Japan after WW II are as follows.

29.4.1 Curriculum Reform in Kindergartens

In 1948, Ministry of Education, Science and Culture issued Nursing Guidelines: Handbook of Early Childhood Care and Education which was composed by American specialists in GHQ and Japanese kindergarten education specialists. The handbook was intended to be applied to kindergartens, nursery centers, and the home.

The handbook emphasized the following issues: children's developmental traits, life instructions, living environments, daily living, happy experience, and the relationships between family and kindergartens.

For example, life instruction referred to children's growth, intelligence development, emotional development, and social development. Living environments mentioned about the playground, the building, and toys. The curriculum was based on happy experiences for children, such as field trip, rhythmic exercises, break, free play, music, storytelling, painting, handwork, nature observation, imitative play/dramatic play/puppet play, health care, and an annual calendar of events. The relation between family and kindergartens should be promoted through the following things: parent-teacher associations, parent education, instructions for parent education, and contact with elementary schools.

The handbook rather was created based on respect for children's natural activities and the belief that children's everyday activities should be rooted in their interests and desires, in order to avoid the tendency to treat the five areas delineated in 1926's ordinance relating to kindergarten pedagogically almost like elementary school. This period was marked by an overall strong stance toward promoting children's independence and self-initiative.

However, after the 1950s, the Nursing Guidelines attracted criticism from those concerned. Some said that the guidelines were the lack of group instruction to children. Some pointed out that the guidelines did not understand the significance of passing down the Japanese culture and knowledge to children. With growing demand for early childhood education, the Ministry of Education, Science and Culture revised the guidelines in 1956, by issuing the Course of Study for Kindergarten as the national curriculum standards. Revised points were the following three points: (1) Care and education should be cohered to those of the elementary schools. (2) Kindergartens should start using "areas" as criteria, and the curriculum was divided into set six areas: Health, society, nature, language, music rhythm, and drawing handwork. (3) Kindergartens should give children different education from those of elementary schools and higher education. The objective of the new guidelines was to have educational activities implemented on a systematic and planned basis in order to match with the five goals stated in the School Education Law.

This Course of Study for Kindergarten was revised again and again in response to the opinions and requests of those concerned.

In 1964, the Ministry of Education, Science and Culture bestowed legal binding force on the Course of Study for Kindergarten. The new version of the Course of Study for Kindergarten in 1989 that has the set of revisions in 25 years clearly affirmed the independence of early childhood education. It clearly stated that the curriculum should provide every day activities appropriate to early childhood, general instruction centered around play, and support for the development of each individual child. Learning was divided into five areas: health, human relationships, environment, language, and expression (these five areas are used up to now). In 1998, it was newly revised. There were no changes to the contents of early childhood care and education, but an attempt was made to organize the curriculum to be

responsive to changes in the environment surrounding children such as increasing numbers of working women, the shift to the nuclear family unit, the breakdown of local communities, and the problem of a decreasing birthrate, etc. Current discussions center around how to organize a curriculum that precisely gauges child development and environmental changes and that is acutely aware of the close cooperation with parents and guardians. Another issue is to clearly affirm the independence of kindergarten while keeping the collaboration between kindergartens and elementary schools in view. In 2008, Course of Study for Kindergarten added the following points in its regulations: (1) Continuous supplement to early childhood education according to development and learning. (2) Continuous supplement to early childhood education according to kindergartener's life and family life. (3) Supplement to nurse children and temporary care. Besides, in order to cope with the serious problem of children's food and nutrition, the government constituted the Basic Law on Shokuiku (food and nutrition education). Food and nutrition education for children had become a big issue in Japan around 2008. As of 2015, the guidelines are valid.

29.4.2 Curriculum Reform in Nursery Centers

After the war, the establishment of childcare practices based on the principles of child welfare was demanded against a backdrop of the enactment of the Child Welfare Act in 1947. At the same time, policies were formulated that positioned aspects of kindergarten education as a part of childcare at nursery centers. In 1948, the Ministry of Health and Welfare constituted the Minimum Standards for Child Welfare Institutions. Under Article 35 of the Minimum Standards, childcare at nursery centers consists of health observation, individual exams, free play, afternoon naps, and health checkups. In accordance with the abovementioned Nursing Guidelines: Handbook of Early Childhood Care and Education which was issued by the Ministry of Education, Science and Culture in 1948, music, rhythmic exercises, painting, handwork, storytelling, nature observation, social observation, and group play were indicated as examples of free play. However, the descriptions were lacking in specificity from an instructional point of view, so the Ministry of Health and Welfare frequently put out childcare guidelines for actual activities to serve as reference for nursery centers.

Then, the Ministry of Health and Welfare enacted a law about running a nursery center in 1950 and nursery instructions in 1952. These documents explained about facilities and staff allocating, but did not mention the content for children's care and education in nursery centers.

In 1963, the Ministry of Education, Science and Culture and the Ministry of Health and Welfare jointly announced that the educational aspects of childcare at nursery centers would follow the kindergarten curriculum. Influenced by the Course of Study for Kindergarten, in 1965, the earliest Guidelines for Nursery Care at Nursery Center was issued by the Ministry of Health and Welfare. The Guidelines indicated that the fundamental feature of childcare at nursery centers was the unity

of nursing and education (it is also same at present). Education and care at nursery centers were intended to precisely accommodate children's development. In the 1965 Guidelines, the educational areas were established for children of each age bracket. For example, two areas (life, play) for more than 6 months up to under 2-year-old children; three areas (health, society, play) for 2-year-old children; and four areas (health, society, language, play) for 3-year-old children were even established. However, following the kindergarten curriculum, six areas were established for children from 4 up to 6 years old: health, society, language, nature, music, and arts and crafts. It attempts to indicate that a standard of education in nursery centers is not lower than that of kindergartens.

Yet Guidelines for Nursery Care at Nursery Center was revised in 1990 with a change in Course of Study for Kindergarten in 1989. The areas were eliminated for children under 3 because of a number of difficulties from a developmental standpoint, and the five areas which indicated in the 1989 Course of Study for Kindergarten were applied only to children over age 3. This might imply the coming integration of kindergartens and nursery centers. In addition, as day care for infants just a few months old became more commonplace, age groups for infants under 2 years old were subdivided as follows: under 6 months infants, more than 6 months up to 15 month infants, and more than 15 months up to under 2-year-old infants. Childcare programs for infants of each age group were called in detail, as efforts were to enhance nursery care for infants.

The amendment of the Course of Study for Kindergarten in 1998 caused the second revision of Guidelines for Nursery Care at Nursery Center. Due to this revision, one major change was implemented. It was about classification. The developing process of children replaced the age classification. The development process classification was set as children under 6 months, children from 6 months to 15 months, children from 15 months to under 24 months, 2-year-old children, 3-year-old children, 4-year-old children, 5-year-old children, and 6-year-old children. The contents of care and education are prescribed in detail according to the feature of each development process. Understanding the developing process of every baby and constituting the comprehensive content of care and education were emphasized. In every developing process, the following points have to be considered: (1) Main traits in every developing process; (2) postures and attention of nursery teachers; and (3) enforcement of the content.

In 2008, the latest version of Guidelines for Nursery Care at Nursery Center was published on the Ministry of Health, Labor and Welfare Notification. Since then, the Guidelines were bestowed a law binding and the nature of legislation. Thus, the Guidelines for Nursery Care at Nursery Center obtained the legal binding force, as the Course of Study for Kindergarten has. This became the lowest standard that every Japanese children welfare institution must meet. The abovementioned change from age and developing process in classification was one of the results. The new version of Guidelines for Nursery Care at Nursery Center divided care and education into two parts. One was "content about care (nurse and care in Japanese)" and the other was "content about education." This new Guidelines decided that nursery teachers protect children's lives and stabilize children's mood. The purpose

of education of nursery centers became articulated as helping children grow up in a healthy way and enrich activity through aid of developing. The education of nursery centers consisted of five areas: health, human relationship, environment, language, and expression. It was emphasized that these five areas should associate with care content, like “protecting children’s lives and stabilizing children’s mood.” Needless to say, these educational activities should develop completely through children’s life and play. We think the new version of the Guidelines reflects the feature of the Japanese educational philosophy and method of ECEC particularly. For instance, on the development side, emphasis is given to both intellectual and emotional/social development. Moreover, both these types of development are understood to be closely related. Activities with other children are cultivated while giving priority to the children’s emotional stability. This encourages intellectual development in a kind of embedded form. Further, the Japanese ECEC system emphasizes independence in basic and necessary life habits and holds that children will develop through playing at nursery centers and engaging in the activities of daily life. Teachers provide instruction not only for specific activities but during the children’s playtime and for other aspects of their lives. However, instruction is not provided in the form of orders from above; rather, suggestions and advice for activities are given in order to foster the children’s initiative, and things are placed in the room that children naturally want to play with (Center for Women’s Education and Development Ochanomizu University 2006).

29.5 Teachers and Children

In order to cultivate high-quality human resource from the early stage, early childhood care and education (ECCE) reform is one of the most critical issues the world in this century has to face. Now, the points of reform focus on raising “the quality of early childhood care and education.” Because, above all, children’s sound and good development must be ensured, and the level of professionals engaging in caring must be guaranteed. In the other words, teachers in kindergartens or nursery centers must own related knowledge and effective skills for children’s development. This section is to discuss the recent situations about teachers and children in Japanese ECCE.

29.5.1 Child’s Development Theory in Japan After WW II

As mentioned in Section 3, after WW II, under the US occupation, Japanese government announced the new Constitution based on democracy. Due to the spirit of the new Constitution, some associations consisted of early childhood teachers and researchers were established, including HOIKUMONDAI-KENKYUKAI and

Japanese Research Association of Psychological Science. The theories about the child's development constructed by Japanese Research Association of Psychological Science offered the concrete theoretical basis to Japanese ECCE practice. Especially, the Human Development Theory made by Tanaka Masato (1932–2005), the former professor of Kyoto University, was highly evaluated. This theory was originally called "Theory of Hierarchies and Stages on the Reversible Operations in Human Development" (Tanaka 1987). The Tanaka theory disclosed the regularity of human's whole development from birth to an adult with the materialist dialectics as follows.

First, in a usual case, it is thought that human has four developmental hierarchies from birth to an adult as follows. The first developmental hierarchy was called as "the hierarchy of the reversible operation, "rotation": from birth to around 6 and 7 months old." The second developmental hierarchy was called as "the hierarchy of the reversible operation, "connection": from around 6 and 7 months old to around 1 year old and a half." The third developmental hierarchy was called as "the hierarchy of the reversible "dimensional operation": from around 1 year old and a half to about 10 years old." The fourth developmental hierarchy was called as "the hierarchy of the reversible operation, "transformation": from about 10 years old to about 20 years old." It can be thought that there is the fifth hierarchy which name is the hierarchy of the reversible operation, "abstraction," after this.

Second, it is possible to admit three development stages in each of four developmental hierarchies. In a usual case, the first hierarchy includes the three development stages equivalent to around 1 month old, around 3 months old, and around 5 months old. Around 6 and 7 months after this are a fast transitional period to the second hierarchy from the first hierarchy. The second hierarchy includes the three development stages equivalent to around 7 months old, around 9 months old, and around 11 months old. The first half after 1 year old is a fast transitional period to the third hierarchy from the second hierarchy. The third hierarchy includes the three development stages equivalent to around 1 year old and a half, about 4 years old, and about 7 years old. About 2 years after this is a fast transitional period to the fourth hierarchy from the third hierarchy. The fourth hierarchy includes the three development stages equivalent to about 10 years old, about 12 and 13 years old, and about 17 and 18 years old. Several years after this are a fast transitional period to the fifth hierarchy from the fourth hierarchy.

Third, the motive power which achieves a shift during the developmental hierarchy occurs by translocation process to the third development stage from the second development stage in its hierarchy, respectively. In a usual case, in around 4 months old, the first new developmental power occurs. In around 10 months old, the second new developmental power occurs. In about 5 and 6 years old, the third new developmental power occurs. In about 14 and 15 years old, the fourth new developmental power occurs.

Fourth, it can be thought that existence of "reversible anti-operation" was found at a fast shift during the respective hierarchies.

Fifth, there is an obstacle in occurrence of developmental motive power in each hierarchy, which is clarifying as abnormality of the function system or the function link at a shift during the hierarchy. Based on this regularity, “Tanaka theory” contrives the steps of five of developmental security from birth to an adult as follows. The first step of developmental security is from birth of the third new developmental power in the viviparity period until birth of the first new developmental power of around 4 months old. The second step of developmental security is from birth of the first new developmental power of around 4 months old until birth of the second new developmental power of around 10 months old. The third step of developmental security is from birth of the second new developmental power of around 10 months old until birth of the third new developmental power of about 5 and 6 years old. The fourth step of developmental security is from birth of the third new developmental power of about 5 and 6 years old until birth of the fourth new developmental power of about 14 and 15 years old. The fifth step of developmental security is after birth of the fourth new developmental power of about 14 and 15 years old.

“Tanaka theory” showed the development feature of children from birth to 6 years old with lots of detailed scientific facts in particular (Tanaka and Tanaka 1981, 1982, 1984, 1986, 1988) and greatly contributed to construction of child’s development theory in Japan after World War II. By consideration about Japanese contents of ECCE practice and contents of Guidelines for Nursery Care at Nursery Center, we found that the Tanaka theory not only provided theoretical instruction for early childhood teachers’ learning professional knowledge and skills in ECCE practice but also offered scientific evidence for the Japanese government in deciding the guidelines of ECCE.

29.5.2 Children’s Development Perspective in Japanese ECCE Practice

ECCE practice in Japanese kindergartens and nursery centers was divided in the Course of Study for Kindergarten and Guidelines for Nursery Care at Nursery Center. The Course of Study for Kindergarten did not explain clearly the developmental traits and target of children over 3. However, in 1999, the second version of Guidelines for Nursery Care at Nursery Center based on child developmental theory explained the eight developmental processes of children from 0 to 6 years old. Also, the Guidelines gave a detailed explanation to the whole process. However, in order to show concrete description of aspects of children’s development in each stage to teachers of nursery centers, the new version of Guidelines was revised again as the fundamental principles in 2008. Thus, in the new Guidelines, the contents of eight developmental processes are stated as the following briefly. The following instruction has been orienting Japanese ECCE practice since 2008.

Development Process (1): Under 6 months. The infant after birth starts to adapt to changes of the surrounding environment, and the development is significant. The infants straighten their neck, and their hands and feet move frequently. Then, the infants start to turn over and crawl, and whole body movements also began to be frequent. Meanwhile, the vision, hearing, and other sensory organs also have significant development. The infants express their desires and requirements through crying, laughing, and other facial expressions, body twist, and babbling and establish a link to meet a specific adult who can satisfy the infant's desires and requirements.

Development process (2): From 6 months to 1 year and 3 months. Sitting, crawling, standing, and a series of movements become remarkable. In addition, the baby operates the arm and fingers consciously, becomes interested in people and things around him, and starts the exploring movements frequently. Through the interaction with a specific adult, the baby deepens the emotional ties. On one hand, the baby interacts with a particular adult more. On the other hand, the baby begins to recognize strangers. Also, the baby starts using gestures to convey the desires and requirements to adults and understands the adult's feelings and simple languages. In the side of diet, the baby starts to eat baby food instead of milk gradually.

Development process (3): From 1 year and 3 months to 2 years. Children begin to walk, to use hands, to talk, and to interact with things and people around him. By walking, pushing, grasping, turning, and other kinds of movements and getting the new behavior, children's desire of interacting with the environment grows. Children in this period can exchange goods, compete with goods, and use toys to play symbolic play. The development of the symbolic function means the reinforcement of relationship with people and things. In addition, children understand what adults say and convey their desires and requirements to get closer to adults more and more. Children use fingers, gesture, and say a few words and say two words in a sentence.

Development process (4): About 2 years old. Walking, running, jumping, other basic functions of movements and fingers become mature. Thus, child should eat and0 put on and take off clothes and other things by himself. In addition, the function of excretion improved. Pronunciation becomes clear, vocabulary grows more, and children are able to express their meaning, desires, and requirements. With the expansion of the sphere of activity and more exploration, more self-awareness, and more self-advocate, children mimic others' behavior and discover common characteristics between things. Meanwhile, children can share some easy mimic play with adults through mature symbolic function.

Development process (5): About 3 years old. Children mastered basic movements in this period. Therefore, children can complete some things by themselves, like eating, excretion, and put on and take off clothes. Children master the oral language, ask questions actively, and have high intellectual curiosity. The more clearly self-consciousness they get, the more frequency they interact with peers. In fact, most children share parallel play with peers in the same place. Children often

mimic adults' behavior and the daily experience and explore symbolic function and observation to start the play. Children are able to anticipate and expect their actions.

Development process (6): About 4 years old. Children have the ability to keep the body in balance, and children's movements are very flexible. Children approach natures actively, understand the characteristics of a variety of things, and master ways of approaching these things and the way of the play. A child's imagination is very rich, and they have a purpose to start an activity. They learn making, painting, and trying gradually. Their anxiety causes the struggling in mind, because children can expect their action and the result. Children increase close relationship with peers in this period, but times of disputation with peers also increase. Also, they need to understand the importance of rules and obey the rules. Children are passionate, are able to understand the feelings of people around them, control the feelings little by little, and learn to be patient gradually.

Development process (7): About 5 years old. Children have formed basic living habits. Their exercise function is more perfect, and they like to participate in sports. Children like to play with peers actively in this period. Children will use the same image and language to play with peers. They have a purpose to start a play. In addition, in order to enrich the game content and to start a play happily, they will constitute the rule with peers. And they have self-thinking, self-judgment, and self-criticism; children can solve the disputation, forgive peers, and accept different thinking. They master the basic skills for social life. They feel happy when doing good things for others and view themselves as a member of the companion.

Development process (8): About 6 years old. Children's movements are soft and flexible. They can run around happily. Through old experience, children have confidence, are energetic in mind and body, and have high activity. They cherish the opinions of companion. They start cooperative play and mimic play with peers. They will not stop until they satisfy. They start the play by all kinds of experience, knowledge, and creativity. They are good at thinking and cognition. They are interested in facts and phenomena of nature and social and character. Children like to be loved from familiar adults and relax. Children's confidence will increase by variety of experiences.

29.5.3 Japanese Early Childhood Teachers and Children's Development

Under the Course of Study for Kindergarten, teachers should consider children's developmental traits. The Guidelines for Nursery Care at Nursery Center also demand the same to teachers of nursery centers. Teachers need to connect children's everyday life with play and understand children's physical and mind status in order

to help children fulfill their proper development. As we saw above, Guidelines for Nursery Care at Nursery Center accentuates that the abovementioned eight developmental processes set up reliable standards for early childhood teachers to evaluate and understand children's development in the same age. Thus, it became easier for them to cope with children's problems in their developments owing to Guidelines. The Guidelines also leads teachers to offer some proper support to children with problems.

For a long time, Japanese early childhood teachers have been conducting research about children's developmental status in each developmental process and improving the professional knowledge and skills in ECCE practice. Their great efforts resulted in making a clear and detailed program to ensure high-qualified ECCE service. Chart 29.1 shows an example of under 6-month-old infants' developmental traits and ECCE goal and content.

29.6 Co-culture: Collaboration of Home and Kindergartens/Nursery Centers

A co-culture can be biotechnologically defined as the growth of more than one distinct cell type in a combined culture. In this paper, "co-culture" means the nurturing and education of children by family in highly conscious collaboration with kindergartens/nursery centers and community. Traditionally parents were exclusively responsible for raising children and helping them to appropriately grow up, mentally or physically. However, since the previous century, nursing environment in Japan has been changing. For various reasons, domestic educational power has declined. At the same time, function of nursing support in community has shrunken, too.

In order to cope with these situations, Japanese government appealed actively to kindergartens, nursery centers, family, community, etc. The government also tried to build good co-culture environments to compose all concerned organizations as a whole to cultivate and educate the next generation. "Co-culture" can be divided into two types in Japan. One is that kindergartens and nursery centers develop preschool education through using resources of neighbor communities and cooperating with family. The other is that kindergartens and nursery centers become more aware of taking responsibility to foster children. The Course of Study for Kindergarten and Guidelines for Nursery Care at Nursery Center called the former as "cooperation with family and community" and the later as "nursery aid." The Course of Study for Kindergarten and Guidelines for Nursery Care at Nursery Center also constituted the related regulations, as 5.1 describes.

Chart 29.1 Goal and content of care and education for under 6-month-old infants

Goal of care and education
Prepare a healthy and safe environment, observe infants' body status carefully, detect disease and disorder, and make infants live comfortably
Pay attention to each infant's life regularity; fulfill infant's appetite, slumber, excretion, and other physical desires to stabilize infants' life
Caress infants according to each infant's status and make infants' status good to stabilize infants' emotion
Feed milk under different situations and baby food to make infants grow and develop robustly
Start activities under the safe environment and facilitate infants to turn over, crawl, and other athletic activities
Treat infants' emotion situation tenderly, like crying and laughing, and give response to infants' voice to practice the babbling
Enrich infants' listening, watching, touching, and other feeling exercises under reliable relationship and material environments
Content of care and education
Know each infant's health well and treat properly when the condition is abnormal
Know well each infant's mind-physical growth and development
Make infant's body, cloth, and things around infant clean
Satisfy infants' mind desires and live comfortably under nursery school teachers' accepted care
Hold the infant in hand with smile, talk to the infant gently, and use happy mood to communicate with the infant when feeding
Make children get used to other tastes and eat food with a spoon. Discuss with doctor when to eat baby food according to each infant's situation
Pay attention to infant's life regularity and make infants sleep well under cozy environment
Talk to the infant gently when changing unclean diaper. The infant will feel comfortable after the diaper was changed
Improve infants' health according to each situation and discuss with doctor
Pay attention to indoor and outdoor temperature and humidity. Change cloth according to infant's health condition
Talk to the infant gently and wipe the face and hands when feeding, before and after the meal, and after changing the unclean diaper
Hold the infant with a standing position; make the infant flex and crawl. Change infant's body position and make the infant develop happily
Talk and sing softly to the infants. Answer the infant's crying and babbling. Develop a happy exchange between the infant and the nursery teacher
Talk to the infant softly. Make the infant listen, watch, and touch toys to develop the play

29.6.1 Regulations of Course of Study for Kindergarten and Guidelines for Nursery Care at Nursery Center About Co-culture

29.6.1.1 Regulations of Course of Study for Kindergarten About Co-culture

About cooperation with family and community, the Course of Study for Kindergarten says that kindergartens should lead children to obtain basic living ability through cooperation with the family and community. Children's lives develop gradually through the family and community. Thus, lives in the kindergarten have to be closely connected to family and community. In order to enrich children's life experience, kindergarten uses various kinds of resources in the community, including natural resources, human ones, festival, and public facilities for educational activities. In addition to using resources of community, kindergarten try to build interactive relationship with the family by giving messages and advice to family, through which family can deepen their understanding for early childhood education from specialists with professional knowledge and skills.

The guides for Course of Study for Kindergarten about nursery aid are as follows. Kindergartens need to depend on real situations and parents' need and offer extra care after official education time. Also, in order to realize the goal of kindergartens and to enrich children's whole life, kindergartens should endeavor to offer nursery aid to family and community. In the Course of Study for Kindergarten, kindergartens are supposed to be an early childhood education center in the community, open all facilities to residents in the community with complete cooperation with associated organizations. Kindergartens are also required to offer professional advice and related messages to parents, welcoming parents, and children to kindergartens, through which the interactive relationship between kindergartens and parents is achieved.

29.6.1.2 Regulations of Guidelines for Nursery Care at Nursery Center About Co-culture

About cooperation with the family and the community, Guidelines for Nursery Care at Nursery Center is emphasizing the next in particular. When constituting ECCE plan, nursery centers should pay much more attention on cooperation between the family and the community. Nursery centers need to base on children's continuity of lives and cooperate with the family and the community to start the ECCE activities. Nursery centers use nature, human, festival, public facilities, and other resources in the community to enrich children's lives.

Concerning nursery aid, Guidelines for Nursery Care at Nursery Center accentuates on aid to parents. Especially, Guidelines for Nursery Care at Nursery Center

Chart 29.2 Kindergartens and nursery centers developing co-culture

Type 1: kindergarten and nursery center cooperate with parents to cultivate children a regularity and habit and to cultivate an independent children
Practice 1: exchange information with parents
Practice 2: invite parents to join routine activities
Practice 3: invite parents to join ECEC activities
Type 2: offer parents time and chance to discuss with each other and deepen dependent relationship between children and parents. Release nursing anxiety and enjoy nursery joy
Practice 1: starting exchange information activities
Practice 2: offer exchange messages chance on visiting day
Type 3-1: using nursery resource in the community
Practice1: starting fabulous exchange information activities with all residents in the community
Practice 2: make children approach nature resource and make good use of education and culture facilities in the community. Cultivate children's fabulous mind and ability of exploring
Type 3-2: cooperate nursery aid with the community
Practice 1: join all activities being held in the community. Organize parents and children to join volunteer activity (cleaning activity, welfare activity, and so on.) Cultivate empathy and social skill through approaching residents. In the meantime, enlarge the relation net of parents
Practice 2: teachers, parents, and residents join to protect children's activity

details on "basic aid for parents in nursery center," "aid for children's parents in nursery center," and "nursery aid in the community."

29.6.1.3 Kindergartens and Nursery Centers Developing Co-culture

Under the government's calling in the Course of Study for Kindergarten and Guidelines for Nursery Care at Nursery Center, all of the kindergartens and the nursery centers in Japan develop fabulous co-culture:

- Co-culture as "cooperation with family and the community"

About "cooperation with family and the community" type, kindergartens and nursery centers develop mainly following types of co-culture (Chart 29.2).

29.6.2 Practice of Co-culture as Nursery Aid

About nursery aid, kindergartens use after-class time to practice it. The kindergarten offers paid "authorized ECCE" service to needed family whose children are enrolled. Then, nursery center offers aid to those children who are not enrolled. This chapter makes a brief introduction on nursery center's practice.

Since the late 1990s, under the government's promotion, each nursery center has started the function of nursery aid, subsumed nursery aid into yearly ECCE plan, established specially nursery aid room, allocated full-time nursery aid teachers, and

offered various kinds of nursery aid services regularly. The objects of nursery aid in the nursery center are children, who are under 3 and not enrolled, and parents. The following chart is yearly nursery aid plan of nursery center A (Chart 29.3). The practice of nursery aid in the nursery center A is usual in Japan. Due to the different plan, date, and content, a family will go to a different nursery center to experience fabulous nursery aid.

29.7 Toward Integrating Kindergartens with Nursery Centers

In this section, we will see the current situation of ECCE in Japan, with the reason why uniting kindergartens with nursery centers is one of the most important tasks of ECCE in Japan. Some attempts to integrate kindergartens with nursery centers will be referred to.

29.7.1 The Present ECCE in Japan

For more than 120 years, Japanese preschool system has been dual: kindergartens and nursery centers. In this view, aspects of ECCE in Japan have been various and prosperous. Through statistics of OECD (Ministry of Education, Culture, Sports, Science and Technology 2012), the ratio of 3-year-olds in ECCE institutions including kindergartens and nursery centers is 75%; the ratio of 4-year-olds in ECCE institutions is 97%; the ratio of 5-year-olds in ECCE institutions is 100%. These ratios are higher than the average of OECD.

However, we have to notice a strange fact that ECCE in Japan is financially managed mainly by nongovernment organizations. 55.0% of ECCE expenditure in Japan is by nongovernment; 38.3% of ECCE expenditure is by family. Public expenditure is only 0.2%. The average percent of public expenditure for ECCE institutions of OECD member countries is 0.5%, higher than that of Japan. Although Japan is one of economically successful countries, Japan is the fourth poorest country among OECD members from the viewpoint of the level of public support for ECCE institutions.

As we have seen, Japanese nursery centers have been belonging to child welfare institutions. But parents are required to pay nursery fees decided by the norms for levying nursery fees, according to their income tax in the preceding year. Since caring babies and infants is a tough work, the nursery fees of children under 3 years old are higher than those of elder children. It means that some poor family cannot pay that, and many women with low income in working class are forced to quit their job to take care of children by themselves, giving up their opportunities to build their career (Nakata and Liu 2013). It is the reason why children under 3 in nursery cen-

Chart 29.3 Yearly nursery aid plan of nursery center A

Month	Content
4	Making new friends:
	Singing songs and playing finger play;
	Reading picture books and listening stories;
	Balloon play;
	Lecture: making baby food;
	Open up the nursery center to parents
5	Making a cake;
	Holding a birthday party for children who were born in April and May;
	Using balloons to make artifact;
	Mommy gymnastics
6	Dietitian's lecture;
	Baby massage;
	Puppet show;
	Mommy gymnastics
7	Double seventh festival;
	Summer gathering;
	Baby massage;
	Holding a birthday party for children who were born in June and July
8	Water play in the swimming pool;
	Lecture: children's food problem
9	Using toys which are good to body and mind to play indoor;
	First aid training;
	Holding a birthday party for children who were born in August and September;
	Athlete meeting
10	Mommy gymnastics;
	Using hand-made toys which are made by materials on hand to play indoor;
	Strolling in the park;
	Holding a birthday party for children who were born in October
11	Open up the nursery center;
	Baby massage;
	Watching apron puppet show;
	Holding a birthday party for children who were born in November and December
12	Singing nursery rhythm and playing fingers play;
	Watching paper drama;
	Holding a little show; Making pastry;
	Christmas festival party

(continued)

Chart 29.3 (continued)

Month	Content
1	Baby massage;
	Lecture: preventing decayed tooth for parents and children;
	Making ghost mask for February festival;
	Holding a birthday party for children who were born in January
2	February festival;
	Dietitian' lecture;
	Mommy gymnastics;
	Holding a birthday party for children who were born in February and March
3	A celebration of girl and doll;
	Lecture: children and food;
	Farewell party

ters are only 20% of total children (0-year-old children: 10.0%, 1-year-old children: 28.1%, 2-year-old children: 34.6%) (Ministry of Health, Labor and Welfare 2013). If nursery centers would obtain much more public financial support, a poor mother could join the labor market to escape from poverty. Here, we can assert that scarce financial support from Japanese government causes lower fertility in recent Japan, because the cost of having children is higher in Japan.

In order to cope with proceeding lower birthrate in Japan, the government hastened the establishment of new child care policies. After 1995, nursery centers began to offer special kinds of care and education services. Though the contents of these services have changed many times until now, as of 2008, Ministry of Health, Labor and Welfare determines child care policies as follows (Matsumoto et al. 2009):

1. Temporary and specific care: temporary care service, specific care service, temporary home child care, using society resource
2. Holiday and night care services: holiday care service and night care service
3. Sick and cured children care service
4. Solving children's difficulties of enrolling: door-to-door service, family-based care, transferring to a regular nursery center, setting branch nursery centers, experiencing special service of nursery centers and health of irregular care institution and safety service
5. Improving care environment

These new care policies are implemented by municipal governments; nursery centers take on the task of offering care service; the government supports the expenditures.

However, unfortunately these policies for heightening birthrate have been ineffective so far. What is worse, economic depression since 1990s has been increasing the number of poor people. Therefore the whole society has begun to pay much

more attention to the childhood poverty. According to the research, Japanese children's poverty rate is 14.2% in 2006. The situation about children's poverty is getting more serious. It was up to 15.7% in 2009, which means that approximately 3.23 million children, one in seven children, live in poverty in Japan (UNICEF 2012). These days, the number of working mothers is increasing, but the lack of nursery centers to which mothers can safely trust their babies and infants is still unsolved. This problem causes Japanese low birthrate. The government and local governments are trying to offer much more nursery centers, but the supply cannot meet the demand in quality and quantity.

On the other hand, Japanese kindergartens are facing a crucial crisis. The number of children in kindergartens is decreasing year by year because of low childbirth and long economic depression, which shrinks the number of stay-at-home mothers in middle class and higher class. Yet kindergartens must survive as preschools, no matter what they take. On the other hand, much more nursery centers must be supplied. This is why the need to integrate nursery centers with kindergartens has arisen.

29.7.2 Certified Kodomoen: A New Model Preschool

In order to use facilities of nursery centers and kindergartens reasonably, governments issued a guideline in 1998 and revised it in 2005. The guideline constituted related policy of running a model school. Enforcement Guidance 2003 mentioned a project of synthesis constitution and established an integration of ECCE. After many negotiations between the authorities of kindergartens and those of nursery centers, the Japanese government constituted a law about the integration of kindergartens and nursery centers on June 15, 2006. In this way, a model preschool called certified kodomoen (children's preschool) was born. All of the children from ages 0 to 5 can be enrolled in this certified kodomoen. The certified kodomoen is an institution which offers education and care services for all families, whether mothers work out or not. But kindergartens and nursery centers will remain their original orientation, even though they change into certified kodomoen.

There are four types of certified kodomoen:

Type 1 is cooperation of kindergartens and nursery center type: Regular kindergartens and nursery centers work together to offer education and care to children.
Type 2 is kindergarten type: Regular kindergartens with function of nursery centers offer education and care to children.
Type 3 is nursery center type: Regular nursery centers with function of kindergartens offer education and care to children.
Type 4 is local management type: Irregular kindergartens and nursery centers offer education and care.

In order to proceed with this integration more and more, the government established another new kind of institution in June 2010, enacting three laws for bringing up children in August 2012. This new institution is a sort of intensified kodomoen

which belongs to the type of cooperation of kindergartens and nursery centers. This new version of kodomoen emphasizes on integrating school education (kindergartens), care (nursery centers), and parenting support (family).

As of April 2014, there are 1359 certified kodomoens. In these certified kodomoens, 1107 kodomoens were private and 252 were public. Classifying by types, 720 were cooperation of kindergartens and nursery centers type; 410 were kindergartens type; 189 were nursery center type; and 40 kodomoens were local management type (Office for Advancing Kindergarten and Day-care Center 2014). From April 2015, the system of certified kodomoens with the type of cooperation of kindergartens and nursery centers is carried out in earnest (Cabinet Office, Government of Japan & Ministry of Education, Culture, Sports, Science and Technology & Ministry of Health, Labor and Welfare 2013). ECCE in Japan has reached a new stage.

29.8 Conclusion

This research provided a comprehensive view of Japanese ECCE from its foundation to the present. The historical background, characteristics, development, and system reform of ECCE were referred to. Although the recent attempt of integrating kindergartens with nursery centers is minimizing the gap between kindergartens and nursery centers, problems caused by the dual system in Japanese preschools remain unsolved. How should Japan integrate education with care through uniting kindergartens with nursery centers? It is impossible and unfair for each family to bear the cost of good-quality education and care of children. Since education and care of the next generation is one of the imperative duties of society, Japanese government should be responsible for them. All of the children should be given equal rights for living, learning, and developing by the unification of education and care in ECCE. The reform must start from protecting and improving the welfare system. What matters is the construction of a mutual benefit society by redistributing wealth.

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References

Cabinet Office, Government of Japan & Ministry of Education, Culture, Sports, Science and Technology & Ministry of Health, Labour and Welfare. (2013). *About three laws relevant child and child-rearing* (April, Heisei 25). Retrieved from http://www8.cao.go.jp/shoushi/kodomo-3houan/pdf/s-about.pdf#search

Center for Women's Education and Development Ochanomizu University. (2006). *The history of Japan's preschool education and care*. Tokyo: Ochanomizu University.

Japan Society of Research on Early Childhood Care and Education. (2009). *Life and early childhood care and education in Japan after WWII*. Tokyo: Aikawa Shobo.
Liu, X. Y., & Nakata, T. (2014). Early childhood education and childcare systems in Japan: History and reform. *Forum for Sino-Japanese Education, 4*, 31–38.
Matsumoto, S., Horiguti, M., & Mori, K. (2009). *To study child welfare: Support for children and home*. Kanagawa: Nanami Shobo.
Ministry of Education, Culture, Sports, Science and Technology (2012). *Education at a glance: OECD indicators* (2012 edition). Retrieved from http://www.mext.go.jp/b_meu/toukei/002/index01.htm. Accessed 31 July 2013
Ministry of Education, Culture, Sports, Science and Technology. (2013). *Statistical abstract education, culture, sports, science and technology Heisei* (25th ed.). Tokyo: Nikkei Printing.
Ministry of Education, Science and Culture. (1981). *The history of educational system 100 years*. Tokyo: Incorporated Company Imperial Local Administration Society.
Ministry of Health, Labour and Welfare. (2013). *Situation adjustment about nursery centers* (April 1, Heisei 25). Retrieved from http://www.mhlw.go.jp/file/04-Houdouhappyou-11907000-Koyoukintoujidoukateikyoku-Hoikuka/0000022681. Accessed 31 July 2013.
Ministry of Health, Labour and Welfare. (2014). *Survey of social welfare institutions, 2012*. Retrieved from http://www.mhlw.go.jp/toukei/itiran. Accessed 4 Jan 2014.
Morigami, S., Omameuda, H., & Mitani, D. (Eds.). (2013). *The collection of the newest early childhood care and education data 2013*. Tokyo: Minerva Shobo.
Nakata, T., & Liu, X. Y. (2013). *The child welfare system and ECCE system in Japan after WWII. The collection of the 2nd press results about preschool education development for mobile children* (pp. 1–10). Beijing: Beijing Normal University.
NPO Legal Person Kyouikusolution Company. (2013a). *National school data: Kindergarten*. Retrieved from http://www.kyouikusolution.jp/gakkoudata/sample/youchi.html. Accessed 13 Aug 2013.
NPO Legal Person Kyouikusolution Company. (2013b). *National school data: Nursery center*. Retrieved from http://www.kyouikusolution.jp/gakkoudata/sample/hoiku.html. Accessed 13 Aug 2013.
Office for Advancing Kindergarten and Nursery Center, Ministry of Education, Culture, Sports, Science & Technology and Ministry of Health, Labour and Welfare. (2014). *Press release: About authorization number of certified kodomoens before April 1, Heisei 26* (May 7, Heisei 26). Retrieved from http://www.youho.go.jp/joho.html. Accessed 10 June 2014.
Takatsuki, N. (2010). *History study of early childhood care and education practice in Japan: Focus on Taisho democracy period*. Tokyo: Ochanomizu Shobo.
Tamiaki, G. (2008). *Formation and changes of Course of study for Kindergarten and Nursery Instructions for Nursery Center*. Tokyo: Houbunshorin.
Tanaka, M. (1987). *Human's development theory*. Tokyo: Aoki Shoten.
Tanaka, M., & Tanaka, S. (1981). *Child's development and diagnosis: 1 The babyhood first half*. Tokyo: Otsuki Shoten.
Tanaka, M., & Tanaka, S. (1982). *Child's development and diagnosis: 2 The babyhood second half*. Tokyo: Otsuki Shoten.
Tanaka, M., & Tanaka, S. (1984). *Child's development and diagnosis: 3 Infancy I*. Tokyo: Otsuki Shoten.
Tanaka, M., & Tanaka, S. (1986). *Child's development and diagnosis: 4 Infancy II*. Tokyo: Otsuki Shoten.
Tanaka, M., & Tanaka, S. (1988). *Child's development and diagnosis: 5 Infancy III*. Tokyo: Otsuki Shoten.
UNICEF. (2012). Innocenti report card 10[M]. UNICEF.

Chapter 30
Early Childhood Education and Development in Singapore

Sirene May-Yin Lim

Abstract This chapter situates early childhood care and education (ECCE) provision in the context of culturally diverse and urbanised city state of Singapore. It provides an overview of state ideologies, the government's position on maintaining a majority private and commercial sector, and outlines policy initiatives in the last two decades that aim to improve the accessibility, affordability and quality of services. Much of the chapter provides a brief discussion of prevailing issues in the areas of policy development, curriculum and pedagogy, teacher preparation and development, as well as research in ECCE.

Keywords Singapore • Early childhood education • Policy • Teacher education • Research

30.1 Introduction

In the last 47 years since its independence from the British colonial rule and subsequent brief merger as part of Malaysia, the tiny island state of Singapore has risen relatively quickly to be classified by the IMF as an advanced economic entity. In 2009, its per capita GDP reached S$53,143 (USD36, 537) (Department of Statistics, May 2010), and the 2011–2012 Global Competitiveness Report placed Singapore in second position. These show that economic competitiveness has been the key focus in Singapore's development as a small island state, and the government has accomplished this by investing much in the education of its citizenry. The annual education budget has averaged about 3.5% of the annual GDP in the last decade; with the 2012 budget for education at $10.6 billion, it increased from S$9.7 billion in 2010 (cite). While the nation enjoys increasing affluence, the widening gap between rich

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and poor Singaporeans has become a point of contention in the public arena; and many citizens would want the government to focus on reducing the present Gini coefficient of 0.463 (Department of Statistics 2016).

The current ruling political party, the Peoples' Action Party (PAP), has been in favour since 1959. Political stability and security in the country has contributed to economic success, sustained cohesion and the steady growth of an educated workforce. In the late 1960s, the country's 2 million or so population was almost entirely illiterate; and by the early 1970s, all children had access to secondary education. In 2009 when Singaporean students took part in the OECD Programme for International Student Assessment (PISA) for the first time, they were ranked top 8 for reading among 65 economies in the world, second for mathematics and fourth place for science (OECD).

These achievements aside, it is a less well-known fact that the nation's government-funded "education system" actually excludes early childhood care and education (ECCE). Even many Singaporeans have not been aware of how entirely privatised ECCE has been, until this past decade when ECCE issues have become more publicly debated in parliament and appearing more frequently in local news and media. This article, therefore, focuses on the distinct waves of ECCE policy developments since the year 2000.

30.2 Singapore's Diversity

The Singapore population is currently at about 5 million, out of which 1.3 million are foreigners. This distinctly diverse population comprises 74% Chinese, 13.5% Malay (includes indigenous peoples), 9.3% Indian, 3.2% Eurasians and other ethnicities (Department of Statistics 2010). Cutting across these different ethnicities are a variety of cultural and religious beliefs and practices: 33.3% identify themselves as Buddhists, 18.3% as Christians, 14.7% as Muslims, 10.9% as Taoists, 5.1% as Hindus and 0.7% as "other" (Tan 2012a). Singapore is also linguistically diverse – although the four official languages are Mandarin, Malay, Tamil and English, commonly spoken non-English languages include Chinese dialects such as Hokkien, Teochew, Cantonese, Hakka, Hainanese; regional Malay languages such as Baba Malay and Javanese; and Indian languages such as Punjabi, Bengali and Hindi. The English language has, therefore, become the official workplace language, and it is compulsory of all primary and secondary school children to be dual language learners (i.e. English and one other official language or other "mother tongue"). It is also notable that publicly disseminated brochures and booklets created by government agencies are always printed in the four official languages to ensure maximum outreach. Asian languages help Singaporeans maintain their cultural roots, while the English language has opened global economic doors.

30.3 Influence of State Ideologies on Education

The way that Asian languages are respected as equally as that of English in schools and the public space alludes to the Singapore government's communitarian ideology and meritocracy – both have always been the underlying principle of governance and these values transcend everyday life and culture (Chua 1995; Tan 2008). In rhetoric, communitarian ideology coupled with meritocracy is a way of promoting equal economic opportunities for a diverse Asian resident population. As such, multiculturalism has also been promoted by the government through top-down social policies because racial and religious harmony has been of prime importance in Singapore's nation building history influenced by its geographical location – immediate neighbours Malaysia and Indonesia have dominant Muslim majority population (Tan 2009).

From the state's inception, education has been seen as a priority and a prerequisite for building a nimble and productive workforce. The current ruling political party has been in favour since 1959, and this stability has contributed to the steady growth of an educated workforce and sustained social cohesion. In the late 1960s, the country's 2 million or so population was almost entirely illiterate, and by the early 1970s, all children had access to secondary education. In 2009 when Singaporean students took part in the OECD Programme for International Student Assessment (PISA) for the first time, they were ranked top eight for reading among 65 economies in the world, top two for mathematics, and fourth place for science. These achievements have come about without having the government invest a lot in ECCE.

Singapore's communitarian ideology can be summed up by a prominent White Paper known as "Our Shared Values" (1991), which comprises five broad principles, with the vision of uniting all Singaporeans while preserving racial, religious and other cultural differences:

1. Nation before community and society before self
2. Family as the basic unit of society
3. Community support and respect for the individual
4. Consensus not conflict
5. Racial and religious harmony

Although the White Paper states that these are not five Confucian principles, they have strong semblance to Confucian ideals (Chua 1995; Tan 2012a), and together, these articulate what the government had believed to be "Asian" values underpinning a multicultural yet globalised Singaporean identity.

Not all Chinese citizens profess to be deliberate Confucians and school children are not necessarily exposed to any of the Confucian writings. However, the Desired Outcomes of Education listed by the MOE for preschoolers carry undercurrents of Confucian values (Table 30.1); these are almost antithetical to many Singaporean families' wish for their child to master academic skills *prior* to entering Primary One so as to excel in primary and secondary school.

Table 30.1 Key stage outcomes of preschool education (MOE)

At the end of preschool education, children will:
Know what is right and what is wrong
Be willing to share and take turns with others
Be able to relate to others
Be curious and be able to explore
Be able to listen and speak with understanding
Be comfortable and happy with themselves
Have developed physical coordination and healthy habits
Love their family, friends, teachers and kindergarten

Now that there is an increasingly widening achievement gap among Singaporeans, the state's brand of meritocracy may soon need to be adjusted as it is increasingly at odds with its communitarian paradigm (Tan 2012b) – while meritocracy rewards individuals for their hard work and talent, being communitarian requires one to share and be gracious to others. And with childhood becoming more and more diverse, some children may never be able to achieve as much even with perseverance when compared with others who are wealthier and have more social capital (Gee 2012; Ng 2013).

30.4 Growing Up in Singapore

Young children in Singapore are fortunate to be in an environment where infant mortality is one of the lowest in the world, at 2 per 1000 live births (World Bank 2013). Most Singaporean children, however, grow up in small families with either no siblings or very few siblings. In 2008, the total fertility rate was around 1.2, a far cry from the 1960s when it was 4.62, and the government (like many developing nations of the time) instituted an anti-natal policy stance and called on its citizens to "stop at two" (Saw 1999). It was only until the mid-1980s that the government back-tracked and turned to a pro-natalist approach (Wong and Yeoh 2003), and this has since been promoted urgently in the last decade to increase the state's population.

In terms of education, every Singaporean child can enjoy a heavily government-subsidised schooling from primary through secondary and post-secondary years. Should the child make it to university, fees are also subsidised substantially. Even though the country had over the years achieved almost universal education at the primary and secondary levels with only a small percentage of children from each cohort who were not enrolled or would drop out of the national schools, the government saw a need to attain 100% attendance. Hence, it was surprising that the

Compulsory Education Act that was legislated in year 2000 (Tan 2010) required children to be in government-run national schools but only for a minimum of 6 years (i.e. to complete primary education). All local primary schools are nationalised with centralised subject syllabi designed by the MOE and a suite of approved textbooks to be selected by individual schools.

There is a high-stakes examination for all 12-year-olds at the end of their primary school education, and this has created anxiety among today's parents who try to enrol their 6-year-olds into choice primary schools. These parents think that the "better" primary schools will be able to adequately prepare their child for the Primary School Leaving Examinations (PSLE). This also means that many parents believe in having preschools that academically prepare their child for the rigours of a primary school curriculum.

The government's ideology of meritocracy has undoubtedly shaped the Singaporean image of the child – one that is in need of education because it is a precious human capital for a land without natural resources (the UNCRC's image of young children having "rights" (2005 General Comment No.7)). Many Singaporean families value their children's education – this is seen in the fact that more than 97% of 5-to-6-year-olds attend at least one year of early years education before they enter Primary One even when preschool is not compulsory (MOE 2010). And as the country becomes more affluent, families with plenty of disposable income tend to spend a lot on tuition fees, even for young children, so much so that the reported profit made by tuition centres was more than $110 million in 2005 (Toh 2008), and this industry has been dubbed the "shadow education system" by local scholars (Tan 2012), contributing to an "educational arms race" (Gee 2012) that further divides rich and poor children.

30.5 ECCE Provision in Singapore

The care and education of young children is provided entirely by the private sector – either commercial entities or not-for-profit social or religious organisations. Before a child enters Primary One (the year of her/his seventh birthday), many families can choose between several options to meet their young child's care and educational needs. ECCE that is not centre-based could be preferred by some families – this could involve having a live-in foreign domestic helper to look after their child; others may be fortunate enough to rely on grandparent care; yet others may want to place their child in the hands of a nanny who works from her own home and may be caring for a few children at the same time.

Of increasing demand are centre-based "preschool" services that are regulated by the government. Preschools in Singapore take the form of kindergartens and childcare centres. The former offers only half-day programmes for 3-to-6-year-olds, while the latter generally offers up to full-day care and education for children from 18 months through 6 years, with some centres even offering infant/toddler services for babies as young as 2 months. At present, there are some centre-based services

that are not registered nor regulated by the government, and these are loosely termed as "enrichment programmes" or "playgroups" for children below six.

Kindergartens and childcare centres have been the focus of recent policy developments. The majority of these are run by a community foundation affiliated with the current ruling political party and are called the PAP Community Foundation (PCF) kindergartens. These are located in public housing estates and charge affordable fees at the lower end of the S$100–$1000 monthly fee range. Despite their affiliation with the political party, these kindergartens are not considered government-run. In the childcare segment, the majority provider is affiliated with the National Trade Union Congress (NTUC). Monthly childcare fees range from about $300 – above $1000 (median: $800). In the bid to meet the needs of dual income families, there are now more than 1000 childcare centres offering half-/full-day and flexi care, while the number of kindergartens has remained fairly stable in the last decade at around 500 centres (all have at least a morning and an afternoon session). Universal childcare subsidies exist for families, but are definitely most generous for very low-income families.

30.6 Government's Position on ECCE

Several reports have highlighted the need for governments to invest in the early years (e.g. Barnett and Masse 2007; Barnett 2011). However, Singapore's education system appears to be careful in heeding this advice because its government has been cautious to invest in the universal provision of ECCE for its youngest citizens. The government's regressive structure of educational expenditure has recently been critiqued in light of the widening income and achievement gap (Gee 2012).

In the late 1980s, the government did experiment briefly with a few pre-primary classes in some primary schools, but this was discontinued and never resumed. Instead, the 1980s and 1990s saw many significant and catalytic changes made in the primary and secondary school system. In the first wave of initiatives to raise the quality of preschool education, the government was already adamant about the calculated nature of its expenditure in the sector and its relatively light-touch approach:

> Simply pouring money [into pre-school education] will not raise quality automatically. We must carefully decide how to deploy resources so that most children can get the most value out of pre-school education. […] we will be more involved in pre-school education, paying particular attention to high-leverage areas like defining outcomes, designing a developmentally-appropriate curriculum, training teachers, conducting research and improving our regulatory framework […] I want to emphasise that MOE will not take over preschool education. The provision of preschool education will remain firmly in the hands of the private and people sectors. There is merit in allowing different centres with different philosophies and schools of thought to offer different types of preschool education. It will also encourage creative innovation as each centre strives to meet the needs of its unique pupil profile. (MOE 2000)

The government's stance almost a decade later was unchanged:

> MOE's approach is to set broad parameters for kindergarten education to ensure a baseline of quality, while preserving the richness and diversity that comes from having a range of operators and models. This provides leeway for parents with different preferences to choose the option that best meets their needs. And their needs can vary; some might choose religious-based models to steep their children in religious knowledge since young. (MOE 2009)

Table 30.2 provides an overview of how the government has selected "high-leverage areas" (MOE 2000) to gradually uplift quality of ECCE in Singapore.

In comparison to the constant attention that the primary and secondary education system has had since the nation's independence, the last decade's policy developments could be viewed as a giant leap for ECCE, and yet it is too early to tell if it is merely new wine poured into old wine skins because there exist fundamental challenges to policy, practice, teacher education and research development.

Table 30.2 Overview of key government initiatives related to ECCE in the last decade

1985	Education Act stipulates that all "kindergartens" have to be registered as private schools under MOE
1988, revised 1992	Childcare Centres Act and Regulations stipulates licensing requirements by then Ministry of Community Development
First wave of preschool initiatives to improve quality	
1999	Formation of a *Preschool Steering Committee* (members from MOE and NIE) to look into improving the sector
	Desired outcomes of preschool education created
2000	MOE announced that all kindergarten principals would be required to obtain the Diploma in Preschool Education (Leadership) by 2006
	By 2008, one in four teachers will be required to obtain the Diploma in Preschool Education (Teaching) and all other teachers to have Certificates in Preschool Teaching and minimum English language proficiency
2000–2002	MOE funded Pilot Study conducted by the NIE to explore the impact of a more holistic, integrated and interactive curriculum (sample comprised both kindergartens and childcare centres) on child outcomes, as well as effect of higher qualified diploma-trained teachers
2001	The *Preschool Qualifications Accreditation Committee* (PQAC) was set up, co-chaired by the MOE and MSF
	This resulted in standardised professional requirements for preschool teachers to work in either the kindergarten or childcare segments
	This catalysed the growth of private training agencies that offered part-time diploma level EC training
2003	MOE launched its first kindergarten curriculum framework *Nurturing Early Learners* – not compulsory, but a recommendation

(continued)

Table 30.2 (continued)

Second wave of preschool initiatives to improve quality	
2007	*Committee on Improving Quality of Preschool Education* set up to take stock of landscape
	Work with social agencies to increase preschool attendance among disadvantaged groups
	Expanded the provision of Focused Language Assistance in Reading (FLAiR) in preschools with large proportions of non-English language speakers
2008	Government bursaries for teachers to upgrade professional qualifications
	Increase in recurrent government grants for anchor operators (PCF kindergarten and NTUC childcare) so that fees remain affordable
2009	All *new* preschool teachers to have a diploma professional qualification and minimum of five GCE "O" level passes (secondary), including English language
	By 2013, all centres to have at least 75% of its K1 and K2 teachers meeting the diploma requirement
2011	A voluntary quality assurance framework, the Singapore Preschool Accreditation Framework (SPARK), is implemented
	The Ministry of Community Development, Youth and Sports (MCYS)* launched the *Early Years Development Framework* for infant/toddler programmes
	*This was renamed Ministry of Social and Family Development (MSF) in 2012
2012	The MOE launched a revised *Nurturing Early Learners: A kindergarten curriculum framework*
	Six theoretical principles and six recommended learning areas (with name change for one of them) remain
	Learning goals now stipulated to address public concerns about children's transition to primary school
2013	MOE announces that it will set up five pilot kindergartens over the next 3 years to catalyse improvements in the sector; one third of places reserved for lower-income families
	Early Childhood Development Agency (ECDA) is formed to integrate the monitoring of kindergartens and childcare centres
	ECDA announces its plans to financially support a third anchor operator so as to increase availability and affordability of early care and education

30.7 Prevailing Issues in Singapore's ECCE

30.7.1 Policy

There remain long-standing and intricate policy issues to be tackled by the newly formed ECDA, to ensure that ECCE is available, affordable and of good "quality". In a 2012 study commissioned by a Singapore-based philanthropic organisation, the Lien Foundation, the Economist Intelligence Unit ranked Singapore 29th out of 45 developed and emerging economies. This created a period of public debate, capturing the attention of a ranking-conscious government and citizenry. This publicity stance may have influenced the creation of MOE-run kindergartens and the government's increased intent in leading improvements, beyond just "pouring money".

Historically, kindergartens and childcare centres have been regulated by two different government agencies, each with different priorities. Kindergartens have typically addressed children's social and academic transitions to primary schools, whereas childcare centres started because of the needs of families. The jury is still out on whether the ECDA will be able to truly integrate the administration and regulation of the preschool sector for the sake of all young children who have a right to quality early care and education. The agency would need to also look beyond just regulating and improving kindergartens and childcare centres in the long term, to include other types of centre-based ECCE that are currently not as regulated (such as "playgroups" and enrichment programmes for very young children). Additionally, the current SPARK quality assurance framework was designed by the MOE and adopted for childcare centres; currently, the public has little knowledge about the actual qualitative difference between SPARK-accredited centres and non-SPARK-accredited ones.

Of increasing concern is that of social mobility and growing inequality created by affluent families who support a thriving commercial tuition and enrichment education sector. Since the government has made clear that it is not yet prepared to take over the ECCE sector, it will need to step up its efforts to ensure that the most vulnerable children have access to good quality ECCE. Structural indicators such as the teacher-child ratios may have to be improved if the quality of interactions were to do so. At present, teacher-child ratios for ages 3–6 are currently 1:12, 1:15, 1:20 and 1:25 respectively, challenging for many teachers to conduct group discussions or to integrate child-led ideas and activities.

The ECDA would also have to collaborate with the MOE to ensure a smooth transition for all children entering primary schools, as well as creating public education platforms to help families understand the significance of early education (both in the home and in preschool) so that they are not unduly anxious about preparing their young ones for primary school. Since parental fear is caused mostly by what they imagine as primary school expectations, the ECDA has to work with the MOE to also review curricular enactments in its primary schools. Otherwise, it would be futile to keep revising the preschool curriculum framework or recommend preschool "best practices" that counter academic practices.

Another key challenge lies in how ECDA would steer the private sector such that centres will not sacrifice pedagogical quality for profit. Perhaps this is the reason for the government's annual capital grant support provided to anchor operators (these include the not-for-profit PCF and NTUC) as a way to co-fund centres that cater to the majority and keep fees affordable. It is also a way to help the not-for-profit centres to hire more qualified teachers and to pay their teachers marginally more equitably.

Singapore's ECCE policy reform has moved at a cautious pace, despite the two waves of initiatives meted out thus far. There is still some way to go before the ECCE sector can circumvent its workforce quality issues so that programmes improve qualitatively to meet the needs and ambitions of Singaporean children (and their families) in ways that respect the rights of young children. Singapore has been a signatory of this international convention since 1995, and yet, the spirit of the UNCRC has been slow in shaping public thinking and policies concerning children.

Teacher retention and professional development will remain a daunting task when the professional image of ECCE is not raised. A recent remark by a senior female government official is telling: "rope in housewives for the child care industry" (Leow 2011). This comment is still representative of Singaporeans in general, that ECCE is first and foremost a child-minding industry, best suited to women, and requires little professional skill and knowledge (except that they should speak good English).

30.7.2 Curriculum and Pedagogy

Dependent on market forces, both kindergartens and childcare centres offer a gamut of curricular and pedagogical approaches to offer choice. There are centres that profess to offer a Montessori curriculum, or more Reggio-inspired ones, or Waldorf-inclined; there are also those that describe their curriculum as "thematic" or "project-based". And these curricular programmes could also be religious-influenced if the centres are affiliated to churches, mosques, temples or the Soka association. A free market assumes that consumers are knowledgeable enough to "choose" from what is offered. However, in Singapore's ECCE market, families do not have enough information from legitimate sources about the various kinds of curricular offerings, neither do they know enough about the educational jargon used by centres as marketing tools.

Essentially, the two published government documents that are recommended for centre-based ECCE are:

1. The Ministry of Education Kindergarten Curriculum Framework (revised 2012) recommended for 3–6-year-olds in both kindergartens and childcare settings
2. Published by the Ministry of Community Development, Youth and Sports: the Early Years Development Framework (2011) for infant/toddler programmes, sometimes found within childcare centres

These two documents do not dovetail seamlessly because they were created by two different government agencies for different age groups, in different kinds of settings. The MOE kindergarten curriculum framework was published as a way to encourage parents and preschools to focus more on young children's holistic development rather than academics. The childcare setting offers full-day care and education; hence, they tend to have more fluid daily scheduling that contain lots of transition times (for instance, before and after children's shower and nap times) which could translate to free play or TV watching. In contrast, kindergartens tend to pack their 4-h programmes with continuous activity that is often teacher-led.

Furthermore, primary schools have centralised subject syllabi, while preschools merely have a "recommended" curriculum framework with few learning goals articulated – this does not address the existing bumpy transition that many children face when they begin Primary One.

30.7.3 Teacher Preparation and Continuing Education

A decade ago, less than 12% of preschool teachers had more than certificate level training (MOE 2003), and because of the nation state's compact size, more than 75% should by now have attained the minimum diploma-level professional qualification (MOE 2008). While this indicates progress, there lies a greater challenge than the attainment of numbers. In view of global competitiveness, Singapore needs to continue growing as a knowledge economy so as to maintain its relevance and generate employment on home soil. But beyond this, it also needs to grow as a knowledge society, a learning society where young people learn to learn and teachers (including ECCE practitioners) are intellectuals who are able to access and process information in meaningful ways to influence their interactions and pedagogical decisions (Hargreaves 2003).

Teachers in the national primary and secondary schools are sponsored by the Ministry of Education and prepared in the National Institute of Education (part of the government-funded Nanyang Technological University, NTU) and have many opportunities for subsidised continuing education which includes Masters-level studies. In contrast, ECCE teacher preparation programmes are mostly part-time to suit working adults and offered mainly by private training agencies with the exception of two full-time programmes offered to 17-year-olds in government-funded polytechnics. Although the Ministry of Education and Ministry of Social and Family Development had jointly formed an accreditation committee to oversee the quality of ECCE teacher preparation diplomas, their evaluative work is essentially a tabletop exercise. There is no impartial research evidence available to date, of the effectiveness of ECCE teacher preparation programmes in Singapore. In addition, we know little about the efficacy of EC degrees jointly offered by private training agencies with overseas universities.

30.7.4 Research

Educational research has only recently taken off with the National Institute of Education (NIE) setting up a Centre for Research in Pedagogy and Practice with a core research programme focusing on classroom practices in the primary and secondary levels (Luke et al. 2005). The NIE was, for many decades, functioning as a national teacher training college for the MOE. Its long-term agenda for research growth was only created when it became part of a young and ambitious local university, the Nanyang Technological University, in the new millennium. Under the influence of NTU, NIE has started to promote more rigorously designed studies and peer-reviewed research publications. However, research culture is not created in a short span of time, and it will take even longer for this academic culture to influence the private preschool education sector so that its knowledge base can deepen and substantial pedagogical change can be brought about.

Presently, local research is insufficient to create a comprehensive picture of existing curricular approaches and pedagogies, and little has been published from a large-scale longitudinal early childhood study that was funded by the Bernard van Leer Foundation in the 1980s (Ko and Ho 1992) to warrant current researchers to "build on" its findings. There is much room for Singapore to develop a research culture that generates a steady stream of quality research utilising a wide range of methodologies and paradigms to investigate topics that include teaching and learning, child diversity, teacher learning, leadership practices, policy studies, curricular approaches, programme characteristics, children's play, children's developmental pathways and the risk/protective factors, transition to primary schools, Singaporean childhood, media and cultural influences on child-rearing practices and home education.

30.8 Conclusion

Singapore's education system, including issues related to ECCE, is truly at ideological and political crossroads now – policies need to urgently shift in ways to pay close attention to the widening social and achievement gap and to generate a new kind of meritocracy so that graciousness and civil society can prevail in a nation that claims to promote the neo-Confucianist ideal of "community before self". The effects of poverty need to be mitigated for children living in the bottom 25% of the household income distribution, while families in the top 25% of the distribution would need to be less *kiasu* ("afraid to lose out" in Hokkien dialect). The education system's funding structure and reward system would need to be tweaked to minimise a Matthew effect of the rich getting richer.

References

Barnett, W. S. (2011). Effectiveness of early educational interventions. *Science, 333*(6045), 975–978.

Barnett, W. S., & Masse, L. N. (2007). Comparative benefit–cost analysis of the Abecedarian program and its policy implications. *Economics of Education Review, 26*, 113–125.

Chua, B. H. (1995). *Communitarian ideology and democracy in Singapore*. London: Routledge.

Department of Statistics Singapore. (2016). Key household income trends in 2015. Retrieved from http://www.singstat.gov.sg/docs/default-source/default-documentlibrary/publications/publications_and_papers/household_income_and_expenditure/pp-s22.pdf

Gee, C. (2012). *The educational "arms race": All for one, loss for all* (Institute of Public Policy Working Paper No. 20). Retrieved: http://www.spp.nus.edu.sg/ips/docs/publications/wp20.pdf

Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York: Teachers College Press.

Ko, P. S., & Ho, W. K. (Eds.). (1992). *Growing up in Singapore: The pre-school years*. Singapore: Institute of Education – Bernard van Leer Foundation/Longman Singapore Publishers.

Leow, S.W. (2011, June 29). Rope in housewives for child care industry. *The Straits Times,* Singapore.

Luke, A., Freebody, P., Shun, L., & Gopinathan, S. (2005). Towards research-based innovation and reform: Singapore schooling in transition. *Asia Pacific Journal of Education, 25*(1), 5–28.

Ministry of Community Development, Youth and Sports. (2011). Early Years Development Framework (EYDF). Retrieved from https://www.ecda.gov.sg/PressReleases/Pages/Early-Years-Development-Framework-(EYDF).aspx

Ministry of Education. (2010). Speech by Mr Masagos Zulkifli BMM, Minister of State, Ministry of Education and Ministry of Home Affairs at the Kindergarten Learning Forum on Tuesday, 23 November 2010, at 9.00 am at Republic Polytechnic. Retrieved from http://www.nas.gov.sg/archivesonline/data/pdfdoc/20101130006/press_release_for_spark_at_klf2010_23_nov_embargoed(vdd).pdf

MOE. (2000). *Committee of supply debate FY2000: Senior minister of state Dr A. Wong's response to questions on pre-school education*. Retrieved: http://www.moe.gov.sg/media/speeches/2000/sp14032000a.htm

MOE. (2003, January 20). Speech by Mr Tharman Shanmugaratnam senior minister of state for trade and industry & education official launch cum seminar of MOE's pre-school curriculum framework at Nanyang Polytechnic Auditorium at 9 am, 20 January 2003. Retrieved: http://www.moe.gov.sg/media/speeches/2003/sp20030120.htm

MOE. (2008). *Press release: Improving the quality of preschool education*. Retrieved: http://www.moe.gov.sg/media/press/2008/03/improving-the-quality-of-presc.php

MOE. (2009). *FY2009 committee of supply debate: 5th reply by Senior Parliamentary Secretary Mr Masagos Zulkifli BMM on supporting Singaporeans in education, reducing school attrition, and update on pre-school initiatives*. Retrieved: http://www.moe.gov.sg/media/speeches/2009/02/11/fy-2009-committee-of-supply-de-4.php

Ng, I. Y. H. (2013). Education and intergenerational mobility in Singapore. *Educational Review*. doi:10.1080/00131911.2013.780008.

Saw, S. H. (1999). *The population of Singapore*. Singapore: Institute of Southeast Asian Studies.

Tan, K. P. (2008). Meritocracy and elitism in a global city: Ideological shifts in Singapore. *International Political Science Review, 29*(1), 7–27.

Tan, C. (2009). Maximising the overlapping area: multiculturalism and the Muslim identity for madrasahs in Singapore. *Journal of Beliefs & Values, 30*(10), 41–48.

Tan, J. (2010). Compulsory education in Singapore – Who benefits? *Asia Pacific Journal of Education, 30*(4), 401–418.

Tan, C. (2012a). "Our shared values" in Singapore: A Confucian perspective. *Educational Theory, 62*(4), 449–463.

Tan, J. (2012b). Confronting the shadow education system: What government policies for what private tutoring? *Asia Pacific Journal of Education, 32*(1), 125–126.

Toh, M. (2008, June 17). Tuition nation. *The Straits Times*, Singapore.

White Paper. (1991). *Shared values*. Singapore: Singapore National Printers.

Wong, T., & Yeoh, B. S. A. (2003). *Fertility and the family: An overview of pro-natalist population policies in Singapore*. Singapore: Asian MetaCentre for Population and Sustainable Development Analysis.

World Bank. (2013). *Data: Mortality rate*. Retrieved: http://data.worldbank.org/indicator/SP.DYN.IMRT.IN

Chapter 31
Vietnam Early Childhood Education

Phan Thi Thu Hien

Abstract Change and confusion are the words best describe Vietnamese early childhood education (ECE) at the present. In the last two decades, Vietnam initiated two attempts to reform ECE curriculum and pedagogy national wide. In essence, the reforms are a paradigm shift from teacher-centered to child-centered pedagogy and from a fragmented and subject-based to a holistic integrated curriculum. The latter approach to ECE is customary in the West, but, for Vietnamese ECE professionals, the shift is radical as the child-centered and holistic philosophy contests their centuries-shaped Confucian beliefs about teaching and learning. Thus, in this section on Vietnam, I will show how the reforms have been posing great challenges in understanding and enacting the new ECE approach, causing confusion and disagreement among ECE stakeholders. I also speculate possible roots of the problem and discuss the consequences that the problematic understanding of the new ECE approach might bring about. To facilitate understanding of the challenges Vietnamese ECE is facing with, I first analyze problems of the country's established ECE provision.

Keywords Early childhood education • Educational change • Vietnam

31.1 The ECE Heritage

In Vietnam, ECE cares and educates children from 6 months to 6 years of age. Despite the turbulent historical developments in the second half of the twentieth century, Vietnamese ECE has observed relatively fast expansion compared to other equally economically disadvantaged countries (Dinh 2008; Hamano and Ochanomizu University 2010). At present in Vietnam, there are approximately 12,000 kindergartens with more than 3 million children. Education for under 6 is not compulsory in Vietnam, but the demand is always much higher than available places (Department of Early Childhood Education 2006). ECE has long been a part

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of the Vietnamese educational system under Ministry of Education and Training (MOET) management, which highlights Vietnam's focus on the educational aspect of ECE provision. Vietnam have had a comprehensive national ECE curriculum, an ECE research center, and a journal in ECE for decades. Meanwhile, ECE teacher preparation progressed from a 2-month course in the 1960s to a 2-year course then 3-year diploma in the 1970s. The first 4-year university degree was offered in 1985 (Department of Early Childhood Education 2006). Since then, almost all normal universities in Vietnam offer 4-year bachelor degrees in early childhood education. The growth of ECE provision in the tough years can be explained by Communism's tenet "Giving the best to young children," the Vietnamese government's strong commitment to developing extensive public ECE services with equal access for everyone, high birth rate, and the fact that the majority of Vietnamese women were working outside the home (Dinh 2008; Hamano and Ochanomizu University 2010).

One of the most prominent characteristics of Vietnamese conventional ECE practice is the uniform curriculum and pedagogy. All state and private ECE settings in Vietnam have been required to follow a unitary national curriculum for decades. Until 1998, Program of Care and Education for ECE Children, to be referred to here below as the Old Program, written in the early 1980s, was the national curriculum and the only ECE model in Vietnam. The Old Program had a top-down curriculum approach: number of lessons, their content and didactics, and detailed guidelines and instructions were predetermined on a day-to-day basis for each age group in all kindergartens across Vietnam. What teachers and children were expected to do was to follow the clearly set-out agenda (Ministry of Education 1986). The Old Program was also very much like a school subject-based curriculum where each lesson was scheduled to focus on one of its seven learning areas, for example, Language Development, Maths, or Arts. With reference to the Old Program's pedagogy, learning was highly teacher directed: the majority of the time, teachers explained, gave instructions, and showed examples, and the children executed the tasks. There was an excessive emphasis on what to learn over how to learn (MOET 2002b).

The Old Program's goals were defined as fostering children's all-round development in five domains: physical, cognitive, moral, aesthetic, and work ethics. However, the problem was that in reality, classrooms under the Old Program paid overwhelming attention to the cognitive aspect of child development, while the other four domains were underemphasized (MOET 2002b). Even in the single cognitive aspect, there was always a heavy focus on quantity of knowledge and skills rather than fostering children's independent and creative thinking. ECE teachers also paid overwhelming attention to lessons, while other kinds of activities were overshadowed (Phan 2005). With regard to assessment, under the Old Program practice, teaching and learning were frequently monitored by kindergartens' principals and inspectors from local Department of Early Childhood Education. The assessment was rigid and controlled both content and teaching procedure to detail (MOET 2002b). For decades the educational approach represented by the Old Program had been seen by Vietnamese ECE professionals as highly appropriate and effective. It is understandable, given the fact that Vietnam mostly had close academic ties with Eastern European countries, particularly the Soviet Union,

which at that time shared a similar sociopolitical background and educational philosophy (Dinh 2008).

It needs to note that Vietnamese parents also strongly contribute to the established ECE practice. Vietnamese parents take a generally indulgent attitude toward children, excessively pampering and overprotecting them (Huynh n.d.; Tran 2006). Thus, young children seem to have limited opportunities for trials and error, to experiment with their own abilities, take risks, or get to know the real world. There are limited chances for children to learn to be independent and responsible for themselves, both in learning and in life. Also, Vietnamese parents' deeply rooted respect for education (Ashwill and Thai 2005) seems to be a stimulating and, at the same time, constraining factor for education. In a society where respect and social status is gained through education, paramount focus is on academic achievements. Parents consider helping children learn to read, write, and calculate as one of the most important characteristics of "good" kindergartens. Meanwhile, essential requirements for working and living in the twenty-first century such as communication skills, life skills, social-emotional development, thinking critically, and problem solving have generally been overlooked for the sake of "what to learn."

Most of the cases of education innovation are driven by professional initiatives or attempts to rectify professional problems (Fullan 2005; Hargreaves 2005). In the contrast, the recent ECE curriculum and pedagogical reforms in Vietnam were brought about by enormous socioeconomic shifts in Vietnam after the issuing of doi moi (innovation) policy by the government in 1986. Changes in the economy highlighted weak competitiveness of the country's labor force and educational reforms are seen "as an integral part of national development" (Hirosato and Kitamura 2009, p. 1). The ECE curriculum and pedagogical reforms, discussed below, were born within the imperative to improve education quality. Meanwhile, it seems that democratization of Vietnam's politics and social life after doi moi (Wells-Dang 2006) created more openness toward critical thinking and questioning the existing ECE model. It was then recognized by ECE professionals in Vietnam that the unitary and top-down approach to curriculum delivery offered ECE teachers little room for flexibility, initiative, and decisionmaking to best promote children's learning in Vietnam's diverse contexts (Nguyen 2009).

31.2 ECE Paradigm Shift and Challenges

C. L. V. Le (2009a) notes that MOET has brought the "cautious, gradual, step-by-step approach," believed to be successful for Vietnam's economic reforms, to educational reforms. ECE reforms are no exception, with two versions of the New Program being gradually developed and piloted over the last decade. The first attempt of ECE curriculum and pedagogy reform was initiated in 1998 with the introduction of the first version of a new national ECE program. In 2005, the second version of the program was piloted, portraying a more radical shift toward child-centered education. Based on the positive assessment of the piloted results by the

program developers (Le 2009b), in July 2009, the program was officially legislated as the new national ECE program in Vietnam (Ministry of Education and Training (MOET) 2009). ECE in Vietnam is uniform and under supervision of MOET; thus, the new program is expected to be implemented across the country.

It is undeniable that the reforms have brought about positive changes in preschool classrooms. ECE teachers now have a greater degree in curriculum decision-making as compared to the previous curriculum with predetermined and detailed instructions regarding teaching content and didactics. Classroom atmosphere became more informal and friendly as compared to traditional practice. Research evidence (Phan 2005) indicates that Vietnamese ECE teachers met the reforms with enthusiasm. This is in contrast to the widely perceived "lack of uptake" of active learning and learner-centered methods by Asian teachers (Lewis and McCook 2002) and "resistance to change" for the fear of new things (Fink and Stoll 2005). The teachers are enthusiastic because they feel that the new ECE approach unbounds (though not fully) them from the traditional rigid teaching procedures and creates opportunities to make learning experience more exciting for young children (Nguyen 2009; Phan 2005).

However, evidence (Le 2009c; Phan 2005) indicates that even after 10 long years of carrying out ECE reforms, the holistic child-centered educational philosophy continues to cause great challenges for all ECE stakeholders: classroom teachers, ECE managers, and ECE teacher educators. The central problem is that the ECE professionals have been experiencing difficulty in conceptualizing how the new ECE approach should be understood and implemented. In an interview response, an ECE expert concerns about extreme versions of understanding of the new ECE philosophy by ECE stakeholders: "Well, if flexible is too flexible, if rigid is too rigid. The nature of the ECE reforms is still poorly understood" (2012, p. 162). This situation leads to a sharp disagreement between ECE stakeholders in defining the new ECE philosophy. Vietnamese ECE professionals themselves admit: "Of course there have been speakers, workshops, training about the new [ECE] program… we listened over and over… but cannot reach a consensus yet" (Phan 2012, p. 162).

Vietnamese ECE educators recognize that the difference in perspective and practice is not something like "quality in diversity" or creative translation of the new ECE approach into practice. Rather, the divergence associates with confusion and vagueness in understanding the new ECE program. An ECE teacher educator claims: "To be honest, there is still no consensus on the understanding of the new program and no sound grasp of it"(Phan 2012, p. 162). As a result, the reform intentions have not been fully and sometimes mistakenly translated into classroom practice. A study into implementation of the new ECE program shows that because of the problematic understanding of the new ECE approach, it is highly likely that the new ECE philosophy remains more cliché than practice (Phan 2005). Detailed discussion of the difference in understanding the new ECE approach and making judgments of them is beyond the focus of this section. Here below I emphasize that the problematic professional conceptualization and implementation of the new ECE program is the result of a combination of professional and contextual factors.

31.3 The Deep Roots of Challenges

First, MOET's unsatisfactory way of enacting reform, including the inadequate articulation of the new ECE approach, is largely blamed by ECE professionals for causing the difficulties in conceptualizing the new ECE philosophy. Vague and general expressions of new ECE principles in the new program documents are seen as a prominent contributor to poor understanding and implementation of the new program in practice (Le 2009a; Phan 2005). In addition, MOET's application of an educational model taken from other cultures seems to be positivist and straightforward. There is no clarification of cultural differences between the old and new ECE principles in the new program guidelines (MOET 2002a). Consecutive introductions of two versions of the new ECE program in 10 years (and continuous amendments to the two versions each year over that time) add weight to the confusion Vietnamese ECE teachers are experiencing. Many ECE professionals see the second version is a complete replacement of the previous one: They seem to experience difficulties in reading the change and continuity between two versions of the new ECE program. This misunderstanding has led to uncertainty and frustration about the changes: "That is we don't give high credit to the ECE reforms. We think that… sometimes it seems that they [the reforms] haven't been done in a sound and scientific way," a teacher educator responds (Phan 2012, p. 167). This is aligned with Stones's (1983) explanation as to the reasons for the gap between teachers' beliefs and their practice: misinterpretation of theory or faulty implementation of the theory or inadequacy of the theory itself. In this case, of Vietnamese ECE educational reforms, misinterpretation of theory seems to have led to described above unsatisfactory implementation of the theory and doubt in the rightness of the theory.

Second, there is evidence that the burden from previous educational beliefs contributes to the vague understanding of the new ECE philosophy. For instance, the habitual transmissive style of teaching, the preoccupation with subject knowledge, and the sacrifice of "how to learn" for the sake of learning outcomes seem to prevent ECE professionals from understanding active learning (Le 2009b; Phan 2005). The long practice of carrying out detailed teaching plans, ready-made by MOET, seems to make many ECE teachers struggle to create their own teaching agenda (Nguyen 2009; Phan 2005). Similarly, the studies show that accustomed to a subject-based curriculum, ECE teachers are struggling to understand an integrated curriculum, making tenuous and illogical links in attempts to integrate the key learning areas. The long-lasting isolation of Vietnamese ECE from the international landscape seems to also contribute to ECTE's difficulties in conceptualization.

Thirdly, there is evidence that the most prominent reason is culture related. The shift in ECE philosophy is enormous as the "old" ECE practice is the outcome of the combination of thousands of years of Confucian beliefs about teaching and learning and the Soviet model with communist ethos in education. Meanwhile, the "new" ECE practice that the reforms aimed for is taken from a very different cultural context: the Western modern of ECE. Thus, the changes exemplify not only the shift in professional beliefs and practice about ECE but also a shift in the deeply

rooted culturally shaped beliefs about teaching and learning and the image about the child. Studies into the implementation of the new ECE program (Le 2009c; Phan 2005) show that the child-centered philosophy greatly challenges Vietnamese ECE teachers' deeply rooted Confucian beliefs about adult superiority, teacher authority, and child submission. This is very much in line with findings from studies into similar educational shift at upper school levels in Vietnam (Sullivan 2000) and other Confucian heritage countries (Cheng 2001; Lee and Tseng 2008).

Last but not least, there is no doubt that ECE teachers' inadequate professionalism contributes to the problematic understanding of the ECE reforms (National Teacher Training College in Ho Chi Minh City 2009). Recent research (National Teacher Training College in Ho Chi Minh City 2009; Phan 2012) shows that Vietnamese teacher preparation fails to meet the demands of the new ECE practice. There is a significant gap between what teacher training offers and what changing ECE practice needs, between the unchanged ECTE and the fast-moving ECE practice. Firstly, ECTE's conventional curriculum is too much (overloaded and excessive, with mastery sacrificed for the sake of coverage) but, at the same time, too little (not covering all essential knowledge, dispositions, and skills) to effectively cater to the new ECE practice. Secondly, ECTE's long-standing teacher-centered pedagogy fails to empower prospective teachers with the essential capacities (self-directed, effective, and independent curriculum decisionmaking and critical reflection on teaching) to successfully work with the new ECE approach (Phan 2012). Thus, the current ECTE, including training curriculum and pedagogy, fails to empower graduates to work with the new ECE practice.

At the present time, the standard qualification required to work with preschool-aged children is a 2-year college diploma. However, since the 2000s, 2-year courses have gradually been reduced, and ECTE courses now tend to be either 3-year diplomas or 4-year university degrees. The scope of ECE teacher training has also been expanding since doi moi due to increased recognition of the importance of ECE teacher preparation (Department of Early Childhood Education 2006) and MOET's higher education expansion policy (Hayden and Lam 2010). As a result, the number of ECE teachers with standard qualifications has significantly increased during the last 5 years: 60% for nursery and 83% for kindergartens in 2004 and 92% in total in 2008 (MOET 2010). However, for the mentioned reasons, MOET is concerned that ECE teachers' true expertise is relatively lower than the degrees they possess (Department of Early Childhood Education 2006).

In conclusion, the current situation in Vietnamese ECE reforms speaks to several issues: the importance of proper articulation of reform intention and purpose and the importance of taking into account cultural aspect of education. This case of Vietnamese ECE reform asks educators to be cautious in bringing borrow-from-outside educational model to local context. The Vietnamese ECE reforms also highlight the need to align teacher education with ECE development.

References

Ashwill, M., & Thai, N. D. (2005). *Vietnam today: A guide to a nation at a crossroads*. Intercultural Press: Yarmouth.

Cheng, D. P. W. (2001). Difficulties of Hong Kong teachers' understanding and implementation of 'play' in the curriculum. *Teaching and Teacher Education, 17*, 857–869.

Department of Early Childhood Education. (2006). *Bao cao tong ket 60 nam xay dung va phat trien nganh giao duc mam non* (Summary report on sixty years of construction and development of early childhood education). Hanoi: Ministry of Education and Training.

Dinh, H. T. (2008). *Vietnamese early chilhood education: Challenges and developement policies to 2015*. Paper presented at the Science of Human Development for Restructuring the 'Gap-widening Society', Japan.

Fink, D., & Stoll, L. (2005). Educational change: Easier said than done. In A. Hargreaves (Ed.), *Extending educational change* (pp. 17–41). Dordrecht: Springer.

Fullan, M. (Ed.). (2005). *Fundamental change*. Dordrecht: Springer.

Hamano, T., & Ochanomizu University. (2010). *Trends in early childhood education in Vietnam – The "socialization of education" and the management of disparity*. Retrieved from http://www.childresearch.net/projects/ecec/2010_04.html

Hargreaves, A. (Ed.). (2005). *Extending educational change*. Dordrecht: Springer.

Hayden, M., & Lam, Q. T. (2010). Vietnam's higher education system. In G. S. Harman, M. Hayden, & T. N. Pham (Eds.), *Reforming higher education in Vietnam: Challenges and priorities* (pp. 15–30). Dordrecht: Springer.

Hirosato, Y., & Kitamura, Y. (2009). Introduction. In Y. Hirosato & Y. Kitamura (Eds.), *The political economy of educational reforms and capacity development in Southeast Asia: Cases of Cambodia, Laos and Vietnam* (pp. 1–6). Dordrecht: Springer.

Huynh, D. T. (n.d.). Family relationships. From http://www.vietspring.org/values/family.html

Le, C. L. V. (2009a). Education reform in lower secondary education in Vietnam. In Y. Hirosato & Y. Kitamura (Eds.), *The political economy of educational reforms and capacity development in Southeast Asia: Cases of Cambodia, Laos and Vietnam* (pp. 217–236). Dordrecht: Springer.

Le, T. L. H. (2009b). *Doi moi chuong trinh giao duc la viec khong de dang* (Curriculum reform is not easy). Paper presented at the Teacher training to meet requirements of new early childhood education program, Ho Chi Minh City.

Le, T. H. (2009c). *Ket qua danh gia chuong trinh giao duc mam non thi diem va thuc hien thi diem chuong trinh giao duc mam non* (Evaluation results of experimental early childhood education program and its implementation). Paper presented at the Training teachers to meet demands of the new early childhood education program, Ho Chi Minh City.

Lee, I. F., & Tseng, C. L. (2008). Cultural conflicts of the child-centered approach to early childhood education in Taiwan. *Early Years, 28*(2), 183–196.

Lewis, M., & McCook, F. (2002). Culture of teaching: Voice from Vietnam. *English Language Teaching Journal, 56*(2), 146–153.

Ministry of Education. (1986). *Program of care and education for preschool children*. Hanoi: Educational Publishing House.

Ministry of Education and Training (MOET). (2002a). *Huong dan doi moi hinh thuc to chuc hoat dong theo huong tich hop cho tre mau giao 5–6 tuoi. Năm học 2002–2003* (Guidance for innovating forms of organising activities for 5–6 years old children according to integrated approach. Academic year 2002–2003). Hanoi: Educational Publishing House

Ministry of Education and Training (MOET). (2002b). *Mot so dinh huong xay dung chuong trinh mam non* (Orientations for designing early childhood education program). Hanoi: Educational Publishing House.

Ministry of Education and Training (MOET). (2009). *Ban hanh chuong trinh giao duc mam non* (Issue of early childhood education program) (17/2009/TT-BGDĐT). Hanoi: Educational Publishing House.

Ministry of Education and Training (MOET). (2010). *Thong ke toan nganh giao duc tu nam hoc 1999–2000 den năm học 2010–2011* (Statistics of education and training system from 1999–2000 to 2010–2011 academic year). Retrieved from http://www.moet.gov.vn/?page=11.10&view=3544

National Teacher Training College in Ho Chi Minh City. (2009). *Dao tao giao vien dap ung yeu cau thuc hien chuong trinh giao duc mam non* (Training teachers to meet demands of the new early childhood education pogram). Ho Chi Minh City: National Teacher Training College.

Nguyen, T. K. N. (2009). *Mot vai suy nghi tu viec thuc hien chuong trinh giao duc mam non moi* (Thoughts for implementation of the new early childhood education program). Paper presented at the Training teachers to meet demands of the new early childhood education program, Ho Chi Minh City.

Phan, T. T. H. (2005). *An investigation into the implementation of the new preschool programme in Vietnam*. MPhil thesis, University of Leeds, Leeds.

Phan, T. T. H. (2012). *Vietnamese early childhood teacher education and new early childhood education practice: A cultural historical analysis*. Unpublished PhD thesis, Monash University, Melbourne.

Stones, E. (1983). Perspectives in pedagogy. *Journal of Education for Teaching: International Research and Pedagogy, 9*(1), 68–76.

Sullivan, P. (2000). Playfulness as mediation in communicative language teaching in a Vietnamese classrom. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 115–131). Oxford: Oxford University Press.

Tran, Q. V. (2006). *Co so van hoa Vietnam* (Foundation of Vietnamese culture) (8th ed.). Hanoi: Education Pulishing House.

Wells-Dang, A. (2006). *The dynamics of social change in Vietnam: Capturing the butterfly effect*. Paper presented at the Vietnam Roundtable, Hanoi, Vietnam. Retrieved from http://www.viet-studies.info/kinhte/ReviewDoiMoiRTWellsDang.pdf

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Africa*

Joseph S. Agbenyega

Chapter 32
Examining Early Childhood Education System in Ghana: How Can Bourdieuian Theorisation Support a Transformational Approach to Pedagogy?

Joseph S. Agbenyega

Abstract This chapter uses Bourdieu's conceptual tools (habitus, field and capital) to examine and explicate Ghana's comprehensive and universal early childhood education policies and programmes in Africa. It discusses the contexts in which these policies and programmes were designed and implemented and how childhood constructions and pedagogical practices situate children as receptacles receiving knowledge from teachers as sages. This chapter argues that although there are compelling evidences to suggest that a lot has changed positively for children in Ghana since the Early Childhood Care and Development (ECCD) policy was enacted, current teaching practices are limiting the development of children's cognitive capital and habitus needed for effective functioning in present and future social, economic and political fields. In doing so, this chapter proses that children's learning and teacher identity development in Ghana have to be reimagined for rapid transformation to occur within the pedagogical landscape in early childhood education in Ghana and the whole African region.

Keywords Bourdieu • Early childhood • Ghana • Pedagogy • Quality

32.1 Introduction

This chapter seeks to unpack the notion of pedagogical quality, addressing the question of what it means to be a child learner in a Ghanaian early childhood educational settings in Africa. This chapter is borne out of the realisation that quality early childhood education is essential to building a strong foundation for lifelong learning,

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bridging equity gaps and overcoming intergenerational poverty (Heckman 2006; Heckman and Masterov 2007; UNICEF 2004). In recent times, early childhood education has gained prominence in many African countries. The drive to reduce poverty in particular has led UNICEF and other non-governmental organisations and international donors enhancing their roles as partners to governments in expanding the coverage of quality early childhood development and educational services to all children (UNICEF 2004, 2010). In addition, there has been a call for African countries to integrate early childhood development and education programmes into the design and implementation of education sector plans by taking into consideration the Education for All (EFA) initiative (UNESCO 2012; UNICEF 2004). While many African countries such as Kenya, South Africa, Ghana, etc. have considered this a priority area in their education policy-making, there remain many countries in Africa, particularly those grappling with conflicts (e.g. Sierra Leone, South Sudan and Somalia), that are yet to make significant investments and gains in early childhood education and care (Agbenyega 2008a, b; Agbenyega and Klibthong 2011).

The growing demand for early childhood education and the current high levels of poverty and unemployment have made the opening of early childhood educational centres a lucrative self-employment option for businesswomen and businessmen in many African countries (Agbenyega 2008a). In fact, the vast majority of these entrepreneurs and teachers within most of these centres do not have the required training and experience in early childhood development and education for creating caring and innovative learning environments that can promote optimum child development and learning (Agbenyega 2008a). Although one could argue that 'half is better than nothing', the current pedagogical situation is worrying as many of the children from these centres may not attain the expected levels of development for which early childhood development and care is crucially important (Agbenyega 2013; Agbenyega and Deku 2011).

Studies have shown that investing in early childhood education is a cost-effective strategy that can mitigate childhood disadvantage, producing higher rates of economic return for the individual person, community and country (Heckman 2006; Irwin et al. 2007). The promotion of quality early childhood education in Africa, particularly for children who are vulnerable, faces many complex cultural, political and economic challenges. Negative experiences, such as the exposure to the violence of war, tribal and cultural attitudes, poor quality of teachers and teaching and political instability, are some of the persisting factors inhibiting the full realisation of quality early childhood education on the continent (Agbenyega 2013; Akande 2000). In addition, poor environmental conditions, low family income and chronic corruption in some African states have added to the overwhelming burden of barriers to early childhood development (ECD) and care (Agbenyega 2008a, b).

This chapter utilises Bourdieu's conceptual tools of habitus, field and capital to examine Ghana's comprehensive and universal policy strategies and programmes for early childhood education and care as an African mixed success story, paying particular attention to pedagogic quality. In doing so, it puts forward relevant ideas that could be utilised to reimagine the quality of early childhood education and teacher identity formation in Africa. Before I begin my analysis of the issues around

pedagogic quality in the Ghanaian early childhood settings, I will first present a summary of Ghana's early childhood education policy and programmes.

32.2 Contextualising Ghana's Current Early Childhood Care and Development Policy (ECCD)

Ghana is a post-colonial state in West Africa with a current estimated population of 26.5 million people. Since independence in 1957 from British rule and becoming a republic in 1960, Ghana has promulgated many educational policies to support universal basic education for all children. One of such policies is the Free Compulsory Universal Basic Education (FCUBE) which aims to provide every Ghanaian child free access to basic education. According to Sultan and Schrofer (2008), 'Ghana is a development success story for Africa' (p. 2). This success story is conceptualised in terms of Ghana's stable multiparty democracy, access to education and economic development with the purpose to reduce general poverty to half by 2015.

Ghana also sees the need to develop ECCD as part of a strategy to give all children a strong foundation before they start basic education. Thus, Ghana's approach to ECCD policy development is to connect formerly separate areas of early childhood services at the macro-level, for example, the Department of Social Welfare, Ghana Education Service, Ministry of Health and Ministry of Women and Children's Affairs into one comprehensive operational unit to coordinate education and development services for Ghanaian children. The approach the government of Ghana adopted is consistent with what Berk (2006) argues that 'the priority that the macrosystem gives to children's needs affects the support they receive at inner levels of the environment' (p. 29). Ghana's early childhood policy development was driven by five major concerns:

Concern for the poor situations of children and the urgent need to address this; for example, 90% of children (0–6 years), particularly from deprived communities, have no access to early childhood services.

An internal obligation to ensure the survival, growth, development and protection of children as endorsed by the 1992 Constitution of the Republic of Ghana and by-laws of municipal assemblies.

An obligation to meet the tenets of international conventions and treaties, as Ghana was the first member state to ratify the UN Convention on the Rights of the Child in 1990 (Agbenyega 2008a, b; Boakye et al. 2007).

A strategy for poverty reduction.

Streamlining the fragmented activities of all early childhood service providers (Boakye et al. 2007).

According to Boakye et al.'s (Boakye et al. 2007) report on early childhood education, Ghana prefers to operationalise the policy as 'Early Childhood Care and Development' (ECCD) to make it a holistic and harmonised concept that includes not only cognitive development but the whole child (Boakye et al. 2007).

In October 2002, a government committee's review of education recommended free kindergarten attendance for all children at government-owned early childhood centres. To this end, kindergarten was incorporated into the formal Free and Compulsory Universal Basic Education (FCUBE) system in fulfilment of the government's promise to reduce the financial burden associated with poor families to access early childhood services in the country. Care and education in early childhood (0–8 years) are enshrined in the 1992 Constitution, The Children's Act (1998) and the 2004 Early Childhood Care and Development (ECCD) policy, all of which demonstrate Ghana's commitment to the promotion of the physical, mental and social well-being of the Ghanaian child. The main purpose of this policy implementation was to increase gross enrolment ratio, reduce gender inequity and improve school retention and completion rate (Boakye et al. 2007). The free ECCD policy was launched in August 2004, and a working party was commissioned to disseminate the policy all over the country (Agbenyega 2008a, b).

32.3 Policies and Programmes that Support ECCD in Ghana

Poverty and lack of access to good nutrition are major barriers preventing many parents from sending their children to preschools in Ghana and for that matter Africa (Sultan and Schrofer 2008). The lack of access to ECCD programmes has resulted in widespread neglect, malnutrition and abuse of many children. For example, many young children, instead of accessing early childhood education, are taken to markets, farms, fishing and so on by parents, while some others are often left at home to care for younger siblings. As a national strategy to combat access issues, the government of Ghana introduced a nationwide capitation grant policy in 2005 to provide free meals to children in schools, particularly at the early childhood level to improve the nutritional needs of disadvantaged children (Boakye-Boaten 2010; ECASARD/SNV 2009; Kwadwo-Agyei 2008). Both free ECCD and this school feeding programme (SFP) promise relief for parents, particularly those from disadvantaged and poor communities, to send their children to early childhood centres. These policies and programmes were supported by donor partners such as the New Partnership for African Development (NEPAD) and the government of the Netherlands. The capitation grant and the ECCD policies positioned Ghana as an exemplary case of one of ten countries in Africa (Ethiopia, Kenya, Malawi, Mali, Mozambique, Nigeria, Senegal, Sudan and Zambia) all selected by NEPAD to implement domestically run school feeding programmes for school children on a pilot basis in 2005.

By the beginning of March 2008, the government of Ghana, in collaboration with the NEPAD secretariat, had spent US$21.82 million on the school feeding programme, while its joint funding partner, the Netherlands, had provided US$2.17 million. Hayden (2002) argues that good nutrition is vital for children's brain development. It is reported that by May 2008, 477,714 children in 987 schools across Ghana were benefiting from the SFP. These policies resulted in an average increase of 40% in

primary school enrolment in 2007 (Kwadwo-Agyei 2008). In addition, the government of Ghana in 2004 introduced the National Health Insurance Scheme (NHIS) where all children under 18 years of age are expected to have free NHIS including all pregnant women during their period of pregnancy. This policy is to ensure children are born healthy when they enter the preschool system.

32.4 Prevailing Challenges

Although Ghana has made significant policy steps towards making life better for all Ghanaian children by giving every child equal opportunity to access early childhood education before school entry, what has been lacking is a 'social policy framework that links the various initiatives and policies into a coherent whole' (Sultan and Schrofer 2008, p. 4). The Department of Social Welfare and the Ministry of Education, along with the Ghana Education Service, are the major actors in the implementation of the ECCD and the capitation grant policy. The Department of Social Welfare has the responsibility to register and maintain standards in all crèches and day-care centres for children aged 0–2, and the Ghana Education Service is mandated to develop curriculum and implement it for children aged 3–5 years. The lack of effective collaboration and coordination between the Department of Social Welfare and the Ghana Education Service as envisioned in the policy is a serious inhibiting factor for the effective implementation of ECCD policy and activities. Currently, disjointed and indiscriminate expansions of ECCD services both private and public disregard official policy guidelines on quality and safety. There are high child-teacher ratios (50:1), and many centres, particularly in rural areas, are held under trees and in old dilapidated rooms with poor ventilation and bad lighting. Coupled with this is little or no play spaces. According to some researchers, disregard for standards has been attributed to the lack of monitoring and supervision (Agbenyega 2008a; Mornah 2006).

The school SFP under the capitation grant is bedevilled with disparate allocation of funds to needy communities and high levels of corruption among administrators of the capitation grant amidst bureaucratic bottlenecks that constrain the timely release of capitation funds (CHRAJ 2008; De Hauwere 2007; Ghana News Agency 2014). For example, the Upper East and Upper West regions in Ghana constitute the poorest regions but have the lowest number of child coverage under the school feeding programme (Kwadwo-Agyei 2008). As poverty-stricken communities are being denied agency and a voice in the policy production and implementation process, the ECCD and the capitation grant have demonstrated further exclusion and exploitation of children in vulnerable communities (Brigandi 2008). Of critical concern is the corruption among the law enforcement officials, which poses an obstacle to effective anti-child exploitation measures (CHRAJ 2008).

Despite the prevailing challenges, Ghana has made significant gains in ECCD as summarised in Table 32.1.

Table 32.1 Policy parameters and corresponding achievements

Policy parameters	Achievement indicators
Access	School feeding program and free kindergarten providing access to many children from disadvantaged communities
Teacher education	Upsurge in departments offering early childhood programmes in private and public universities and colleges
Interagency collaboration	Recognition for the need of increased collaboration among Ministries of Health, Education and Women and Children's Affairs, and Department of Social Welfare is working
Public awareness	Increased parental awareness of the importance of ECE
Research	Emergence of ECE research in Ghana

32.5 The Main Challenge with ECCD Practice in Ghana

Although there has been a rapid expansion in ECCD and preschool services, many ECCD centres (both public and private) have poor teaching quality. Both trained and untrained teachers in the majority of early childhood learning centres in Ghana have resorted to teaching and learning by rote including conducting academic testing on children's performance to measure their readiness for school (Asare 2014). A close examination of the current curriculum documents on ECCD and syllabus for the Ghanaian ECCD demonstrated a prescriptive and academic-oriented focus. Coupled with this is a national demand for high-quality early childhood teachers as about 90% of all ECCD teachers have not been trained and the government currently relies on 'school dropouts' to fill vacant teaching positions, particularly in rural areas (Mornah 2006).

Although Ghana's ECCD is a national educational priority for classrooms that include all children regardless of exceptionality or diversity, interestingly, longitudinal observations conducted by the author of this chapter in more than 30 private and public early childhood education centres in remote and urban towns in Ghana for the period (2009–2013) in addition to current research by some Ghanaian scholars (Adu-Gyamfi 2014; Asare 2014) demonstrate the presence of pedagogy of oppression and domination (Freire 1973). This is evident in ways that children are constructed as passive learning and taken through regimented daily routines. Whereas the early childhood education policies and practices advocate for play-based constructivist teaching (Daniels 2001), observations and current research indicate that curriculum, teaching and assessment requirements for children are essentially prescriptive and rigid, leaving little room for teachers to modify it to meet individual children's needs (Agbenyega and Deku 2011; Agbenyega 2014; Asare 2014). Interestingly, teachers are preoccupied with finishing set of activities prescribed in the curriculum followed by summative testing to measure how children have performed on the curriculum (Asare 2014).

To explore the effects of pedagogical barriers to quality early childhood development in Ghana, I operate with particular understandings of pedagogical practices and how these colonise children's selves. Specifically, I draw on Bourdieu's

Table 32.2 Relationship between elements of teacher practice and children's learning

Teachers' current practices	Limitations induced for children
Lack of flexible options for children engagement	Passive and limited interest leading to challenging behaviours (hitting, aggression, tantrums, etc.)
Non-flexible ways of presenting lesson content	Limited options for how children learn
Non-flexible methods of expression and assessing children's learning	One way for how children demonstrate their learning
Use of punishment	Children are timid, are vulnerable and have less opportunity to express themselves

theoretical concepts of habitus, capital and field to explicate children's learning as produced through violence. Violence in this sense describes the punishment regimes that are used in most of the Ghanaian and African EC settings that induce traumatic learning situations for children (Agbenyega and Deku 2011; Agbenyega and Klibthong 2011; Maphosa and Mammen 2011). Common punishment regimes according to my observations from 2009 to date include verbal reprimands using abusive and harsh words, manual tasks such as picking rubbish or giving a portion of the school to sweep, kneeling on the floor and raising arms, sending children out of class corporal punishment either with hands or cane, ignoring and verbal insults. These practices are similar to what Maphosa and Mammen (2011) discovered in their research regarding South African teaching practices in some schools.

In summary, poor teaching mixed with punishment has created a significant barrier that keeps all children away from quality learning in the Ghanaian early childhood education which I have summarised in Table 32.2.

As Table 32.2 shows, the observed practices over an extended period through my yearly visit to the Ghanaian early childhood educational settings (2009–2014) have demonstrated that, generally, the educators' practices do not embed flexible strategies into curriculum during their planning process. Instead, every child irrespective of his/her developmental trajectory has to access the same material in the same way. Pedagogic practices often provided access to generic information based on current nationally prescribed EC curriculum that is academically intensive. The educators often control the method of accessing information and monitoring of children's learning process. Consequently, learning design for children appeared not to work for all the children within the early childhood educational settings where a range of ability levels are present (Agbenyega 2014; Asare 2014).

32.6 Analysing the Emerging Pedagogical Issues Through Bourdieuian Lenses

This chapter draws on the work of Pierre Bourdieu to make the argument that while early childhood education has become a central focus and defining feature of establishing a strong foundation for further learning in Ghana and for that matter Africa,

how teachers understand children and enact pedagogical practices in EC centres and how children experience these practices in terms of quality are quite worrying. Bourdieu's conceptual tools provide a framework for addressing the question of why the majority of the teachers' practices appear still so far away from reaching or even recognising the goals of individual children's differences, preferences and potentials. There are implications for these experiences in terms of its ability to build the foundation needed for children to realise their full potential.

Bourdieu's social-critical theory of practice is especially useful to the analysis of the Ghanaian EC teachers' work as it allows for critical discursive interrogation of the ways in which the quality of early childhood education practices are conceptualised and lived by teachers and children. To this end, Bourdieu's conceptual tools – field, habitus and capital – are considered generative for explicating conceptual and practical trajectories for better teaching and better learning experiences for teachers and children alike.

First, the action taken by the Ghanaian government to produce ECCD policies that allow for universal access to early childhood education is highly commendable; however, I would emphasise that policies alone are not enough when exploring embodiments and the efficacy of early childhood education. Webb et al. (2002) argue that educational practice at any level is both an art and a craft. The art aspect of educational practice brings the unseen or disguised aspects of society into the light of practice, and a craft aspect is embedded in its 'skillful making of a product' (p. 72) (the creative and the innovation that teachers and children co-construct to produce intelligible outcomes). Bourdieu combines theory with practice to show that a critical analysis of practice can help uncover subtle practices that reinforce excluding practices devoid of practice as a craft and creativity. Early childhood education needs to make quality pedagogy a central feature of practice.

32.7 A Maze of Pedagogic Challenges

My explication so far demonstrates that there is a maze of pedagogic challenges produced and lived by Ghanaian EC teachers which can be explained further using Bourdiuian concepts of habitus, field and capital. Schirato and Webb (2003) have stated that these conceptual tools are 'arguably the most significant and successful attempt to make sense of the relationship between objective social structures (institutions, discourses, fields, ideologies) and everyday practices (what people do, and why they do it)' (p. 540). Given this premise is of central importance to an exploration of how early childhood education practices are understood and realised in terms of its quality; these concepts are of critical importance to this analysis and the arguments developed to support it. I am particularly interested in using the tools of Bourdieu, as concepts are 'tools of thought', according to Nash (1999, p. 185), and struggle with concepts such as Bourdieu's field, habitus and capital, are essential in a worthwhile 'intellectual travel' through the maze of pedagogic challenges produced and lived by Ghanaian EC teachers. It is in this critical way of bringing the

unknown or the taken for granted to the fore that can support and progress explanatory offerings of the complexities inherent in early childhood education in Ghana.

32.8 The Beliefs and Values of Ghanaian Early Childhood Teachers

The beliefs and values early childhood teachers hold about young children determine whether they yield to traditional pedagogical practices that conceptualise children as receptacles or adopt constructivist perspective where children are seen as co-constructors of knowledge. Research evidence show that most Ghanaian early childhood teachers consider teaching as a technical exercise delivered by sages to novices (Agbenyega 2014; Agbenyega and Deku 2011; Asare 2014). Good early childhood teachers are able to relate well to children and enjoy working with others. It is argued that the genesis of teachers' positive relationship with children is the habitus (Agbenyega and Klibthong 2012). According to Bourdieu, habitus is a 'thinking tool' or 'conceptual lens' which can be used to analyse relational aspects of lived experiences (Maton 2012). For example, lived experiences are the everyday learning interactions that occur between the Ghanaian early childhood teachers and the children they teach. In critical terms, habitus represents an embodiment of an individual or groups' beliefs, values and dispositions which are 'acquired through the formative experiences of childhood' and also through institutional training (Maton 2012; Nash 1999, p. 177). In this way, habitus is not only visible through a person's dispositions and practice, but it is also generative, in that it reinforces and recreates ways of being, by generating practices that support their explanation. Therefore, there is a strong link between positive relationships and good teaching and between good teaching and childhood constructions.

32.9 Ghanaian Childhood Constructions

According to Mintz (2012), historical and context-specific understandings of childhood are important for making sense of current practices. Although genealogical account of childhood is beyond the scope of this chapter, providing a brief account on how children are viewed in the Ghanaian context is important for explicating the implications for early childhood pedagogical practices in Ghana. The birth of a child is a cheering moment in most Ghanaian families, having children signify status, respect and wholeness of the nuclear family (Sossou and Yogtiba 2008). Childlessness in Ghanaians society is viewed by some people as a curse or caused by witchcrafts, and without a child, life for many couples becomes meaningless and often leads to divorce. According to Adu-Gyamfi (2014), families would do anything to have a child including marrying more women or having a child out of

marriage or consulting traditional healers (witchdoctors), priests and other deities to facilitate the process of having a child.

Interestingly, Ghanaian traditional cultural values provide the framework for relationship between children and parents. Respect for adults, particularly parents, forms the cornerstone of how children are socialised to acquire the cultural mores of the society. It can be argued that respect for parents and other elders as the bedrock of socialisation in Ghana has implications for children's participation in society and education. For example, children from about 8 years take on the responsibility of contributing to household activities including caring for younger siblings and in other micro-economic activities to supplement family income in poorer families, yet they are often treated as immature and incapable of contributing to decision-making in society, particularly in schools. This can be attributed to the culturally demanded respect that flows bottom up from lower age to higher age (Adu-Gyamfi 2014; Twum-Danso 2008). It is therefore considered offensive if children and young people challenge or disagree with decisions or knowledge produced by adults. This also has implication for early childhood learning where children are expected to favour teacher knowledge all the time. The unidirectional cultural value underpinning of childhood construction in the Ghanaian context in which adults demand from children and young people to comply with rules and procedures without questioning is partly responsible for the limitations children experience in contributing to their own learning in early childhood settings as indicated in the previous sections. The image of the child in early childhood educational settings in Ghana can thus be described as subordinate and oppressed.

The domination of children and their oppression in institutions of childhood learning in Ghana can be explained through the habitus of Ghanaian early childhood teachers who by any definition have been historically and institutionally socialised to view children as receptacles in need of control (Agbenyega 2006). This historical and institutional socialisation has become the game of Ghanaian childhood learning. In Bourdieuian theorisation, the domination and oppression of children emanating from the habitus can be referred to as an agent's 'feel for the game' (Nash 1999, p. 176). The game represents the field of social practices and structures, which are underpinned by values and beliefs that regulate enacted practices such as the way we teach, assess, relate to children and so on. In actual fact, the ways of being and doing is constitutive of the habitus. In Ghana one old saying that permeates social practices is that 'children must be seen but not heard'. This type of childhood construction is constitutive of the habitus because habitus operates predominantly on an unconscious level which is more so because people become used to their own beliefs and values that they often act without recognising the existence of their actions (Nash 1999). This is one of the reasons why it is very challenging or difficult to transform or modify traditional social practices such as teaching to dominate and oppress (Freire 1998). From this perspective, the predominant challenge of early childhood pedagogical practice is the way in which power deployed from the habitus induces struggles and issues around respect for children's rights to think and co-construct knowledge with teachers.

32.10 The Relationships Among Different Agencies in Ghana

As has been mentioned previously in this chapter, one notable area the government of Ghana focused on during the development of the ECDC is building relationships among different agencies, say the Ministry of Women and Children's Affairs, the Ministry of Social Welfare, the Ministry of Health and the Ghana Education Service, who oversee the operation of early childhood education in Ghana. This can be conceptualised in Bourdieuian terms as field.

Field is a central component of Bourdieu's social-critical theory of practice. As Webb et al. (2002) would put it, a field 'can be defined as a series of institutions, rules, rituals, conventions, categories, designations, appointments and titles which constitute an objective hierarchy, and which produce and authorise certain discourses and activities' (p. 21). The way in which an early childhood educational setting structures and delivers its practices (curriculum, pedagogy and assessment) is all considered part of the field operations. Klibthong (2012), reaffirming Bourdieu's concept of field, indicated that field is not a 'social location, for example, social milieu, context and social background' but a network of relations among objective positions which characterise social lived experiences (Klibthong 2012, p. 73). In this sense, a field is a social arena in which people interact, manoeuvre and struggle (Bourdieu 1997). Field, therefore, mirrors the network of relations that exist in and around the structures that comprise early childhood practice, which habitus and capital are developed, deployed and experienced.

Fields, like habitus, are also generative, and it is through a 'logic of practice' inherent to the field that promotion of interactions between EC institutions, their rules and practices occur. According to Moore (2012), 'the most important feature of a field is its dynamic nature – it exists in and through time', and capital 'can be understood as the 'energy' that drives the development of a field through time' (p. 102). Therefore, current rigid pedagogical practices can be regarded as barriers to early childhood education practices to become transformative and recognise individual children's rights to belong and do.

32.11 Ghanaian Pedagogical Practices as Reproducers of Existing Capital

The goal of ECCD in Ghana is to support children in their critical period to acquire the forms of capital needed for further learning. A deeper understanding of how capital is acquired and used to exchange for other capitals is important for making sense of how the Ghanaian pedagogical practices perpetually reproduce class positions and unequal social relations and make some children inferior identities (Agbenyega 2006). This is why it is important not to overlook systemic structures and pedagogical practices when analysing potential challenges of any early childhood education system.

Capita is a field tool that serves children, families and educators to determine or transform personal positioning in the field (Webb et al. 2002). The value of one's capital is determined by the field itself, for example, symbolic capital 'depends on people believing that someone possesses these qualities' (Webb et al. 2002, p. xvi) and further that these qualities can be 'traded or exchanged for desired outcomes within their own field or within others' (p. 110). This highlights that early childhood education is an important field because of its capacity to confer on children the capital they need to be capable lifelong learners, able to manage their social situations and counteract disadvantage (Webb et al. 2002).

Quality teaching in early childhood supports children to acquire desirable and valued capital, and valued capital is power in itself. According to Moore (2012), capital 'in action is the enactment of the principle within the field' (p. 102). Where the principle within the field dictates what is acceptable or not acceptable, capital brings it to life and is, therefore, 'the realisation in specific forms of power in general' (Moore 2012, p. 102). For example, my personal observations of EC classrooms in Ghana over the years have demonstrated that the capital in action is the teachers' knowledge and their constructed views about children as receptacles which dictate everyday pedagogical practices. It is important to recognise that institutionalised capital such as formal early childhood education attempts to support children form a habitus which aligns with school and societal practices (Moore 2012). The most critical consideration in this chapter is that capital works to 'buy' positioning in a field, but the ability to make these transactions is dependent on access and engagement with the quality aspect of institutionalised capital. I would argue that whenever early childhood teachers position themselves as sages of knowledge and children as receptacles to be glued to their seat as is often the case in most Ghanaian EC learning centres, early childhood education systems would disintegrate into perpetuating social inequity. Unequal access to and participation in high-quality early childhood educational opportunities is at least in part responsible for struggles some children would encounter later in life.

The recognition and value accorded to children can be linked to Bourdieu's differentiation between two different ways symbolic capital can be understood that is enabling us to engage with a more sophisticated analysis of advantage and value of children. Bourdieu argues that symbolic forms of capital, like cultural capital, can be understood in terms of qualitative differences within social groups and classes not just between social groups and classes and, importantly, highlight points of departure for agents who seemingly share 'well-formed' habitus and therefore capital (Klibthong 2012). In this sense, if EC teachers accord symbolic capital to Ghanaian children as capable citizens and learners in their own right, this could lead to a transformative perspective learning for children as reimagined.

On another front, cultural capital attempts to make habitus align with dominant principles in a field. If the main aim of early childhood education is to 'alleviate social disadvantage' (Webb et al. 2002, pp. 110–111), then both early childhood teachers' and children's habitus need to co-function in support of children's acquisition of capabilities needed for lifelong learning. A more efficient and effective early childhood programmes support the formation of strong habitus and therefore capital

for dealing with social situations which children can then be exchanged for future school success, jobs opportunities and in turn generate economic capital (Bourdieu 1990). This illustrates how capital is implicated in social positioning within and in some cases, across fields, which ultimately supports the enactment of the principle within the field (Moore 2012). In the field of early childhood education, children's as well as teachers' habitus are critical to the acquisition of educational capital that society might value.

32.12 Moving Forward: Reimagining the Ghanaian EC Teachers' Identity and Practice

In the previous sections of this chapter, I have analysed how the pedagogical practices of EC teachers in Ghana can be viewed through Bourdieu's conceptual lenses. The use of a socio-critical approach in analysing how early childhood teachers in Ghana come to understand and practice early childhood education and how children experience these practices in terms of quality is believed to offer new and important insights into how to reimagine children and EC educational practices. The need to live experiences of 'best practice' in the ECCD sector in terms of information, knowledge, belief and value systems creates innovative and liberated meaning for everyday teaching, and learning practices is the basis for this critical analysis to gradually disengage with the oppressive experience of pedagogy not necessarily the foreign but the local forms that view children as receptacles of knowledge.

First, reimagining is about questioning dominating, exclusive and elitist practices of early childhood teaching. By so doing, we can bring fresh life into children's creative thinking and their rightful place in education and social life (Carrington et al. 2010). In this regard, it is important to examine one's identity as an EC teacher and images of childhood as they are constructed in relation to time, space and place. This means, probing deep into particular ways the Ghanaian cultural constructions situate children and examine learning against how children's way of learning is theorised by multiple theories in a range of contexts including the classroom, the home, other informal settings and the wider community and the attendant implications these have for children with different developmental trajectories and capabilities.

Second, reimagining deals with critique and utilises theories to reflect on one's professional practice and conceptions of pedagogy. This has implications for how teachers form their pedagogical and professional identities as an EC educator. Studies on teacher identity formation have identified teaching as a complex process of socialisation (Carrington et al. 2010; Murrell 2001; Proweller and Mitchener 2004; Wenger 1998). With this complexity is the tension between philosophies of teaching underpinned by the teacher's self (values, beliefs, behaviours), which influences what is taught, the policy and curriculum and the structural constraints of school ethos (Goodson 1992; Helms 1998). There is evidence to suggest that teacher

identity development and transformation is shaped by the interrelationship between personal and experience and professional knowledge linked to the teaching environment, students, curriculum and culture of the school (Proweller and Mitchener 2004). This is what Bourdieu refers to as the formation of the habitus and capital in fields (Bourdieu 1998). In Proweller and Mitchener's (2004) view, 'early functionalist frameworks dominating research on teacher socialisation provided linear models of teacher identity development and change' (p. 1045). Fullan (1993) emphasises that 'the way that teachers are trained, the way that schools are organized, the way that the educational hierarchy operates, and the way that education is treated by political decision makers results in a system that is more likely to retain the status quo than to change' (p. 3). The identity of EC teachers draws from their habitus which is developed through training as recognised by Lortie as far back as 1975 that the school as a society shapes and alters the teacher reconstructs teacher socialisation more in terms of structural accommodation than individual agency.

In view of this, reimagining of early childhood teaching needs to start with how EC teachers are educated in Ghana and the African continent. The focus of teacher education needs to take critical step to develop generative who are able to socially interact and reflect back through the independent behaviours of their interaction and knowledge they have co-produced with children. This means, without the habitus and capital that enable teachers to be transformative thinkers, teachers and children's learning would remain traditional and continue to 'legitimate and institutionalize dominant beliefs and values; a process that both undermines critical thinking as a democratic educational and social practice' (Armstrong 2006, p. 8). It is in this context that strong theoretical and practical insights are needed for effective teacher professional identify formation to be relevant to differentiated framings of teaching and learning innovation in EC settings in Ghana and Africa as a whole (Britzman 1991; Hargreaves 1994; Munby and Russell 1994).

Third, reimagining further acknowledges and incorporates the concept of inclusivity with established multifaceted scholarship that deals with value and belief system that invites and celebrates diversity and difference arising from children's family background, social class, gender, language, socio-economic background, cultural origin or ability with a strong focus on human rights and social justice (Bourdieu 1990). To this end, Gardner and Kelly (2008) propose that educators must '…foster learning environments that are integrally attentive to issues of meaning-making, critical reflection, social justice, diversity, care, collaboration, and community' (p. 1).

Fourth, teachers who reimagine themselves all the time are caring. They consider themselves and children as a community, value good interpersonal and personal relationships, value shared thinking and create optimum learning opportunities for all children (Lindsay 2003; Sweetland 2008). Caring teachers are pedagogically responsible and draw inspiration from what Freire (1998) argues:

> our relationship with the learners demands that we respect them and demands equally that we be aware of the concrete conditions of their world, the conditions that shape them. To try to know the reality that our students live is a task that educational practice imposes on us: Without this, we have no access to the way they think, so only with great difficulty can we perceive what and how they know. (p. 58)

In relation to reimagining EC practice, children's development in Ghana and for that matter, Africa can be compromised unless teacher training programmes change course to embrace a new wave of pedagogical practice that inculcates value for all learners (Carrington et al. 2010). Learning to teach children anywhere is a highly complex and dynamic activity and much to do with deep knowledge in child development (Bourdieu 1990). While we cannot claim a definitive form of early childhood education pedagogy, an attempt can be made to stir up a rich and diverse knowledge base that informs the preparation of teachers for teaching that does not reproduce but is generative and focuses on problem posing and problem-solving. Such pedagogic practices do not reside solely with the teacher, but it is distributed across the whole early childhood community.

32.13 Conclusion

In this chapter I have shown that Ghana's commitment to better the conditions of children and vulnerable parents is evident in its push for ECCD and the capitation grant policies. The policy implementation process requires transparency, ongoing monitoring and evaluation. Looking into the future, it makes sense to empower all young children to have a good start in life. Effective pedagogy can alter the effects unfavourable environments have on children and reverse some of the harm of disadvantage and inequality caused by birth and family circumstances. It is by reimagining children's development, their potentials, teaching and learning that EC education can yield a future high economic return that benefits African societies at large. Heckman and Masterov (2007) argue that 'investing in disadvantaged young children is a rare public policy with no equity efficiency tradeoff' (p. 3). It is important that teacher education institutions in Ghana and Africa act swiftly to save the future of children by providing quality ECCD programmes and not just concentrating on enrolment numbers because poor teaching can create learning problems that later interventions may not be able to transform (Heckman and Masterov 2007).

References

Adu-Gyamfi, J. (2014). Childhood construction and its implications for children's participation in Ghana. *African Journal of Social Sciences, 4*(2), 1–11.

Agbenyega, J. S. (2006). Corporal punishment in the schools of Ghana: Does inclusive education suffer? *The Australian Educational Researcher, 33*(3), 107–122.

Agbenyega, J. S. (2008a). Development of early years policy and practice in Ghana: Can outcomes be improved for marginalised children? *Contemporary Issues in Early Childhood, 9*(4), 400–404.

Agbenyega, J. S. (2008b). Early childhood education in Ghana: The policy hiatus. *Journal of Australian research in early education, 15*(2), 25–40.

Agbenyega, J. S. (2012). Early childhood education in Sub-Saharan Africa. In L. Meyer (Ed.), *Oxford bibliographies in education*. New York: Oxford University Press.
Agbenyega, J. S. (2013). *Early childhood education in sub-Saharan Africa*. Oxford: Oxford University Press.
Agbenyega, J. S. (2014). Theorising rural transformation through Bourdieuian lenses: Trumping dominant models with sustainable indigenous practices. *Journal of Education and Research, 4*(2), 20–35.
Agbenyega, J., & Deku, P. (2011). Building new identities in teacher preparation for inclusive education in Ghana. *Current Issues in Education, 14*(1), 1–36.
Agbenyega, J., & Klibthong, S. (2011). Early childhood inclusion: A postcolonial analysis of pre-service teachers' professional development and pedagogy in Ghana. *Contemporary Issues in Early Childhood, 12*(4), 403–414.
Agbenyega, J. S., & Klibthong, S. (2012). Transforming selves for inclusive practice: Experiences of early childhood preservice teachers. *Australian Journal of Teacher Education, 37*(4), 24–36.
Akande, A. (2000). Effects of exposure to violence and poverty on young children: The southern African context. *Early Child Development and Care, 163*(1), 61–78.
Armstrong, D. (2006). Dreaming our future: Developing democratic professional practice? *Australian Educational Researcher, 33*(3), 1–11.
Asare, K. (2014). *Classroom assessment practices of kindergarten teachers in Ghana*. A Master of Philosophy dissertation submitted to the Department of Educational Leadership, Faculty of Education and Communication Sciences, University of Education of Winneba, Ghana.
Berk, L. E. (2006). *Child development* (7th ed.). Boston: Pearson.
Boakye, J. K. A., Etse, S., Adamu-Issah, M., Moti, D. N., Matjila, L. J., & Shikwambi, S. (2007). ECD policy: A comparative analysis in Ghana, Mauritus and Namibia. In M. Garcia, A. Pence, & J. Evans (Eds.), *Africa's future, Africa's challenge: Early childhood care and development in sub-Saharan Africa*. New York: The World Bank.
Boakye-Boaten, A. (2010). Changes in the concept of childhood: Implications on children in Ghana. *Journal of International Social Research, 3*(10), 104–115.
Bourdieu, P. (1990). *The logic of practice*. Cambridge: Policy Press.
Bourdieu, P. (1997). The forms of capital. In A. Halsey, H. Lauder, P. Brown, & A. S. Wells (Eds.), *Education: Culture, economy and society* (pp. 46–59). Oxford: Oxford University Press.
Bourdieu, P. (1998). *Practical reason: On the theory of action*. Cambridge: Polity.
Brigandi, M. (2008). *UN integrated regional information networks school feeding programme mired in corruption*. http://allafrica.com/stories/200806120779.html. Accessed 21 June 2014.
Britzman, D. (1991). *Practice makes practice: A critical study of learning to teach*. New York: State University of New York Press.
Carrington, S., Deppeler, J., & Moss, J. (2010). Cultivating teachers' beliefs, knowledge and skills for leading change in schools. *Australian Journal of Teacher Education, 35*(1), 1–13.
Commission on Human Rights and Administrative Justice (CHRAJ). (2008). *Highlights of the report on the state of human rights in Ghana*. Accessed 12 Oct 2016 from, http://www.chrajghana.com/wpcontent/uploads/2012/08/sohr_2008.pdf
Daniels, H. (2001). *Vygotsky and pedagogy*. London: Routledge.
De Hauwere, K. (2007). *The Ghana school feeding programme: A practical exploration of the 'behind the façade' approach*. Available from file:///C:/Users/jagbenye/Downloads/4._ghana_school_feeding_programme._a_practical_exploration_of_the_behind_the_facade_approach-karen_de_hauwere%20(1).pdf. Accessed 22 Sept 2014.
ECASARD/SNV. (2009). *Ghana school feeding programme initiative and the farmers dream*. Retrieved August 28, 2014, from http://www.snvworld.org/en/countries/ghana/Documents/ECASARD%20Agric.%20baseline%20surv
Freire, P. (1973). *Pedagogy of the oppressed*. New York: Seabury Press.
Freire, P. (1998). *Teachers as cultural workers: Letters to those who dare teach*. Boulder: Westview Press.

Fullan, M. (1993). *Change forces: Probing the depths of educational reform*. London: Falmer Press.

Gardner, M., & Kelly, U. A. (2008). Introduction: Narrating transformative learning in education. In M. Gardner & U. A. Kelly (Eds.), *Narrating transformative learning in education*. New York: Macmillan.

Ghana News Agency (GNA). (2014). School feeding program is a mess. *General News of Monday*, 27 January 2014. Accessed from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=298982

Goodson, I. (1992). *Studying teachers' lives*. New York: Teachers College Press.

Government of Ghana. (1998). *The Children's Act 1998*. Accessed 13 Aug 2016 from, http://www.unesco.org/education/edurights/media/docs/f7a7a002205e07fbf119bc00c8bd3208a438b37f.pdf

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. New York: Teachers College Press.

Hayden, J. (2002). Nutrition and child development: Global perspectives. *Child Care Information Exchange, 5*(2), 38–41.

Heckman, J. (2006). *Investing in disadvantaged young children is an economically efficient policy*. Paper presented at the Committee for Economic Development, New York.

Heckman, J., & Masterov, D. V. (2007). *The productivity argument for investing in young children*. T.W. Schultz Award Lecture at the Allied Social Sciences Association annual meeting, 6 April, Chicago.

Helms, J. (1998). Science and me: Subject matter and identity in secondary school science teachers. *Journal of Research in Science Teaching, 35*, 811–834.

Irwin, L., Siddiqi, A., & Hertzman, C. (2007). *Early childhood development: A powerful equaliser*. Vancouver: Human Early Partnership.

Klibthong, S. (2012). Re-imagining inclusive education for young children: A kaleidoscope of Bourdieuian theorization. *International Education Studies., 5*(4), 71–79.

Kwadwo-Agyei, D. (2008). *Over 447,000 pupils benefiting from school feeding programme*. Accra: Ghana News Agency.

Lindsay, J. (2003). Inclusive education: A critical perspective. *British Journal of Special Education, 30*(1), 3–12.

Maphosa, C., & Mammen, J. K. (2011). Maintaining discipline: How do learners view the way teachers operate in South African schools? *Journal of Social Science, 29*(3), 213–222.

Maton, K. (2012). Habitus. In M. Grenfell (Ed.), *Pierre Bourdieu: Key concepts*, revised edition. London: Acumen.

Mintz, S. (2012). Why the history of childhood matters. *Journal of the History of Childhood and Youth, 5*, 15–28.

Moore, R. (2012). Capital. In M. Grenfell (Ed.), *Pierre Bourdieu: Key concepts* (2nd ed., pp. 98–113). Durham: Acumen Publishing Limited.

Mornah, A. B. (2006). *The blessings and curses of the capitation grant*. Accra: Ghana News Agency.

Munby, H., & Russell, T. (1994). The authority of experience in learning to teach: Messages from a physics methods class. *Journal of Teacher Education, 45*, 86–95.

Murrell, P. (2001). *The community teacher: A new framework for effective urban teaching*. New York: Teachers College Press.

Nash, R. (1999). Bourdieu, 'habitus' and educational research: Is it all worth the candle? *British Journal of Sociology of Education., 20*(2), 175–187.

Proweller, A., & Mitchener, C. P. (2004). Building teacher identity with urban youth: Voices of beginning middle school science teachers in an alternative certification program. *Journal of Research in Science Teaching, 41*(10), 1044–1062.

Schirato, T., & Webb, J. (2003). Bourdieu's concept of reflexivity as metaliteracy. *Cultural Studies, 17*(3–4), 539–553. doi:10.1080/0950238032000083935.

Sossou, M. A., & Yogtiba, J. A. (2008). Abuse of children in West Africa: Implications for social work education and practice. *British Journal of Social Work, 39*, 1218–1234.

Sultan, S. M., & Schrofer, T. T. (2008). *Building support to have targeted social protection interventions for the poorest – The case of Ghana*. Retrieved September 10, 2014, from http://www.unicef.org/socialpolicy/files/Social_Protection_for_the_Poorest_-_Ghana.pdf

Sweetland, J. (2008). Making dissatisfaction divine: An inspired approach to whole school reform. *International Journal of Whole Schooling, 4*(1), 1–9.

Twum-Danso, A. (2008). A cultural bridge, not an imposition: Legitimizing children's rights in the eyes of local communities. *The Journal of the History of Childhood and Youth, 1*, 391–413.

UNESCO. (2012). *EFA global monitoring report 2012 – Youth and skills: Putting education to work*. Paris: UNESCO.ey%20report.pdf

UNICEF. (2004). *The state of the world's children*. New York: UNICEF.

UNICEF. (2010). *Child disciplinary practices at home: Evidence from a range of low- and middle-income countries*. New York: UNICEF www.childinfo.org/discipline.html.

Webb, J., Schirato, T., & Danaher, G. (2002). *Understanding Bourdieu*. Crows Nest: Allen & Unwin.

Wenger, E. (1998). *Communities of practice*. New York: Cambridge University Press.

Chapter 33
Rising from the "Ashes": Quality Early Childhood Education as a Panacea for National Development in Sierra Leone

Joseph S. Agbenyega, Eleni Athinodorou, and Hilary Monk

Abstract The importance of early childhood education has now become the major focus of policy-making in national development agendas in many advanced and majority of poor economies. This push is based on overwhelming research evidence that quality early education builds strong foundation for further learning and reduces economic and social inequalities (Heckman JJ, Investing in disadvantaged young children is an economically efficient policy. Paper presented at the Committee for Economic Development, New York. Retrieved April 16, 2016, from http://jenni.uchicago.edu/Australia/invest-disadv_2005-12-22_247pm_awb.pdf, 2006; Heckman JJ, Moon SH, Pinto R, Savelyev P, Yavitz A, A new cost-benefit and rate of return analysis for the Perry preschool program: a summary, working paper. Retrieved from http://www.nber.org/papers/w16180.pdf, 2010). In Sierra Leone in West Africa, early childhood education is at an embryonic stage, and there are many issues that have impacted on its lack of advancement. This chapter explores the nature of early childhood development and education by focusing on the barriers and possibilities and to place it in center stage in the postwar reconstruction of Sierra Leone. This chapter argued that in a country influenced by a past, present, and future landscape; indigenous tradition; and postcolonial history, a post-conflict recovery can neither ignore early childhood education nor relegate it to the lower end of policy-making in the quest for economic development and national stability.

Keywords Bourdieu • Early childhood • Quality • Sierra leone • National development

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33.1 Introduction

This chapter emerged from an ongoing ethnographic doctoral research to understand the constraints and possibilities of postwar early childhood education development in Sierra Leone, a country of six million people, bordering the north by Guinea and the southeast by Liberia. After the abolition of the slave trade in 1787, by Great Britain, Sierra Leone was established as a settlement for freed slaves, which became a British crown colony in 1808. It is not until the nineteenth century that the British rule extended into the hinterland of the country when a protectorate was declared in 1896 (Aboa 2006). Until this point, formal education in the country had been left largely to Christian missions (Aboa 2006), which produced a highly elitist and geographically uneven education system, where the provision for education was set aside for the elites in urban areas (UNICEF 2011). The colonial era witnessed economic exploitation, reduction of local resistance to white rule, and transformation of indigenous outlooks, in order to service the needs of the colonial masters (Keen 2005). As decedents of freed slaves from America and West Indies, the Creoles were classified as nonnatives and received high posts by the British in civil service because they were seen to be more amendable to Western ways of life (Aboa 2006; Keen 2005). Keen (2005) claims that colonialism disrupted traditional authority and education served to exclude rather than encourage social unity. Keen (2005) adds that colonial educational policy had "set out to strengthen tribal patriotism, reflecting British instincts to divide and rule" (p. 14). This division continued during the colonial period, producing a top-down approach to education and creating class distinctions that still exist (Bourdieu 1986).

33.1.1 The Era of "Ashes"

Sierra Leone gained political independence in 1961, after 150 years of British rule, without improvements to the livelihood of its people. The lack of compulsory education, political instability, and misuse of political power and funds lead to an even steeper decline (Bellows and Miguel 2009). Aside from the lack of schooling and chronic unemployment, the stagnation of the economy during this period caused an economic crisis that according to the World Bank report (2007) exasperated the already fragile legacy of colonial rule. The poverty profile report states:

> While these structural legacies of colonialism and post-colonial mismanagement, corruption and patronage underpinned the grievances that led to war, it was the economic crisis of the 1980s and the resultant International Monetary Fund (IMF) structural adjustment policies that laid the contingent foundations for an upsurge in unrest, with massive increases in fuel and basic food costs combined with cuts in health and education. (The World Bank 2007, p. 22)

Just before the civil war, Sierra Leone had the second lowest living standards of any country in the world (Human Development Report 1993). Added to this is a

growing discontent toward corruption, bad governance, chronic youth unemployment, and political grievances (Bellows and Miguel 2009) as well as the exploitation of diamond and mineral resources (Guo 2014) which became a backdrop for the violent uprising and civil war. The civil war from 1991 to 2002, commonly referred to by locals as the rebel war, left a trail of catastrophic destruction with its effects still very visible today as the first author experienced firsthand in her encounters of amputees on a daily basis. Between 50,000 and 75,000 people were reported to have been killed during the war, and more than half the population displaced either internally or externally (UNICEF 2011). The amputation of limbs as a weapon of war and power (UNICEF 2011), the rape of women and girls, and the recruitment of child soldiers, some as young as 7 years of age (Betancourt et al. 2010), robbed innocent children of their childhoods, their family, and their community. The civil war compelled many young people to commit atrocities (killings, assault) against loved ones and neighbors under threat of death. It is important to note that in contrast to most popular media coverage on African civil wars, Bellows and Miguel (2009) state that neither ethnic nor religious divisions played a central role in the Sierra Leone conflict.

The young Sierra Leone has inherited a brutal and deprived legacy of psychological, economic, and educational devastation that is still being felt today. According to the UNESCO statistics (2015), the civil war has left the country with 60% of the population illiterate and 70 % living below the poverty line. The government has now embarked on a huge task to educate a predominantly youth-oriented illiterate and unemployed society.

33.1.2 Postwar, Post-Ebola Recovery

Postwar, the United Nations Development Programme progress report (2013) ranked Sierra Leone last in human development indicators. While the Human Development Index (HDI 2010) figures have shown some improvement, especially in terms of post-conflict recovery, Sierra Leone still remains among the poorest counties, ranking 177th out of 187 countries (UNDP 2013). Any gains made during this period of post-conflict recovery have been mostly reversed, as a result of the Ebola outbreak in May 2014, weakening an already fragile infrastructure and leaving economic and social devastation. This has to some extent thwarted the government aims for a middle-income society and the reduction of poverty by 2035 espoused in the Government of Sierra Leone's (2013) Agenda for Prosperity document. Priorities have now shifted with the focus being on restoring basic access to health and a "return to school" drive, with an even stronger push for the regrowth of private sector partnerships. While the Ebola outbreak has slowed educational priorities down, it is undeniable that the gaps in education existed pre-Ebola and education by and large in Sierra Leone has been and continues to be less prioritized. The emergent needs of health, security, food, transportation, water, and power have demanded attention from both government and nongovernment organizations (NGOs).

The focus on infrastructure and private partnerships dominates 2013 Sierra Leonian government's agenda for prosperity both in business and education.

There is very little in the way of educational research and most especially related to early childhood education. Early childhood education remains the lowest priority in the education ladder. The commitment of the current government to the 2015 Millennium Goal promising that all children will be able to complete a full course of primary school by 2015 has not been met (United Nations Economic Commission for Africa 2015). Five years prior to the deadline, the UNDP progress report (2013) indicated that this goal would not be met in time.

Despite the plethora of strategic plans, policy, and white papers from the private (nonprofit) and public sector, which do include ECDE goals, there are educational gaps in both accurate data and delays in implementation. This has led to poor monitoring and corrupt practices in government schools, and issues such as *ghost teachers* have created unreliable data and clouded the current picture of teacher numbers (Guo 2014). This has been further exacerbated by the lack of adherence to timelines as set out in strategic plans and changing directions, which appear to be both funded and driven by NGOs and have failed to be implemented by the ministry. There are also other issues related to changing priorities. As the country struggles to educate the masses, priorities are now focused on primary and secondary education. The statement of the problem is, while the current state of ECDE is recognized as needing attention, there appears to be little power in advocacy and economic, social, and systemic barriers operating at both a structural and agency level are thwarting the progress.

33.1.3 Early Childhood

In Sierra Leone, there is general agreement that early childhood covers ages 0–8, but young children enter formal schooling at different ages depending on accessibility and affordability (some starting schooling as old as 10 years of age). The private sector offers early childhood education and categorizes children into three specific age groups: nursery 1, 3 years of age; nursery 2, 4–5 years of age; and nursery 3, 5–6 years of age.

High-quality ECDE programs contribute to future life chances for individuals such as earning capacity (Bartik 2011), and when implemented at a young age, they have high long-term returns on human capital investment (Heckman et al. 2010) becoming a powerful equalizer (Heckman 2006). However, this message is still to permeate the priorities of Sierra Leone. For too long, the aim of Education for All (EFA), especially in Sierra Leone, has focused on access and preschool enrolment numbers (*The African Report on Child Wellbeing*, 2013) at the expense of quality. While attending preschool can facilitate future success in school, simply going to preschool is not enough. In Sierra Leone, Nishimuko (2007) claims that access to education is not just about increasing the number of children going to school, it is about the quality of education provided. This he claims involves a communal effort

and meaningful planned learning outcomes (Nishimuko 2007). Improving the quality of preschool education, therefore, requires a more vigorous and collaborative effort and includes a combination of contextually appropriate early childhood programs, human capital, and material resources (OECD 2012; Shonkoff and Phillips 2000). For Sierra Leone, the key to unlocking quality could well be in the integration of ECDE programs.

Quality opportunities of global concern surrounding the care and education of young children are found to be directly related to the accessibility not just of preschool education but of good health, good nutrition, and appropriate stimulation and interaction with others (Nores and Barnett 2012, *The African Report on Child Wellbeing* 2013). This synergy between all developmental areas is crucial to the survival and optimum growth and development of young children in sub-Saharan Africa. Early intervention programs have lasting effects on learning and motivation (Heckman et al. 2012), and a loss of potential intellectual development in the early years reinforces the emerging gaps between more and less disadvantaged groups (Heckman 2006; Nores and Barnett 2012). This has prompted other countries such as the USA to specifically target disadvantaged children in the early years with an emphasis on the quality of the environment. Heckman (2006, p. 2) points out that "environments that do not stimulate the young and fail to cultivate both cognitive and non-cognitive skills place children at an early disadvantage," and this results in children falling behind. Impoverished early environments are powerful predictors of adult failure socially and economically, and Heckman (2006, p. 2) claims that "impoverishment is not so much about the lack of money as it is about the lack of cognitive and non-cognitive stimulation given to young children." So what type of intervention programs benefit young children the most in the African context? Nores and Barnett's study (2012) reviewed evidence on the benefits of early childhood intervention programs across 23 countries. They found that children from different countries and contexts receive substantial cognitive, behavioral, health, nutrition, and schooling benefits from early intervention. Not surprisingly, these benefits were found to be sustained over time. The intervention programs that were mixed, e.g., care and education or stimulation and nutrition, evidenced the largest statistically significant effect on cognition, compared to say just one intervention, e.g., nutrition (Nores and Barnett 2012, p. 279). The African Report on Child Wellbeing (2013) concurs that children with good health are more likely to have better educational outcomes, and this is evidenced through higher school attendance, performance, and production.

This integration of health, nutrition, and early stimulation appears in many ECDE programs (Young 2010; Kamerman 2005 and another source), but in the case of Sierra Leone, the synergy between health, nutrition, and cognition is even more crucial as it links to physical survival. The benefits of such programs, however, are slow in uptake for Sierra Leone because she battles with multiple social and physical and economic challenges. For Sierra Leone, the most important thing is bringing together the structure of ECDE so that integrated programs fall under the auspice of education.

Caught in between time and space, the current nature of early childhood education in Sierra Leone demonstrates that childhood exists as a pendulum, swinging backward and forward. Bourdieu (1977) describes this in relation to the habitus, as "the past which survives in the present" (p. 83), and the past with its historical traditions, rituals, and parenting practices are important sources of cultural reproduction. The present appears visibly and practically as a constant reminder that children are rarely protected from the external realities of hardship; however, the care and protection of children are regarded as a communal responsibility. Changing economic and societal patterns influenced by globalization appear to constantly position and reposition children, as do parenting decisions around child labor and nonparental care arrangements. It is within this past-present context we explained how children are valued as contributing members of society and where they develop their sense of being and belonging. It is here that agency (linked to an early childhood habitus) has the potential to transform educational opportunities.

33.1.4 Support Agencies and Organizations: Sierra Leone

While statistics paint a less than optimistic picture of ECDE in Sierra Leone, the backdrop for early childhood education advocacy is still a fertile landscape. This has been cultivated by NGOs, private operators, missions, and community-based centers and supported by organizations such as the Nursery School Association, Sierra Leone Teachers Union, the World Bank, and UNESCO.

Beginning in the 1960s and through the 1980s, the Nursery School Association was an active and professional body representing teachers, parents, and their young children. It has struggled to retain its membership in the last decade but is still a strong stakeholder in early childhood reform and consultation. It has been a strong advocate for quality ECDE programs, adequate resources, and teacher education. So much so that the government handed the Association sole responsibility of licensing and supervising new preschools (Hinton 2009). Unfortunately, based on an interview with Mrs. Juliana Paris (June, 2013), who is the head supervisor of the Nursery Schools Association, this responsibility has come with very little financial support. Three supervisors have approximately 250 private ECDE centers working on a part-time basis to conduct visits, training, and inspections. Our discoveries to date corroborate this information and indicate that there has been little progress made since 2008, in relation to the funding of a regulatory system. The Association has also contributed to policies and especially the draft national ECE curriculum (n.d.), but there are obvious frustrations on the lack of progress in terms of ratifying the draft national curriculum.

Faith-based and nongovernment organizations (NGOs) have had a strong foothold in the establishment of preschools. Currently only 14% of children aged 3–5 years attend preschool programs (*Sierra Leone ECD SABER Report* 2013), and almost all of them are privately owned and self-funded (even the nonprofit/charitable organizations, operate on a fee paying service). NGOs have historically collaborated

in providing the country with statistical reports, project reviews, policy documents, and recommendations for early childhood education. In 1994, the Sierra Leone Teachers Union (SLTU) in collaboration with the Danish National Federation of Early Childhood Teachers and Youth Educators (BUPL) began looking at the development of ECDE in Sierra Leone but could not continue due to the serious breakdown of the civil war. It was not until 2010 that the same collaboration was reunited to conduct a small feasibility study of the roles of the unions in both public and private ECDE services (M. S. Abu, Project Officer SLTU, personal communication, 2012). More recently, an Early Childhood Care and Education (ECCE) stakeholders' meeting was held (June, 2013) to discuss the current status of provision of ECCE in Sierra Leone and explore options for further accessibility. This was a collaborative meeting partnered by MoEST, UNICEF, and World Bank and included participants from the Nursery Schools Association. The individual private providers were not included in this meeting, and to my knowledge, no follow-up meetings have yet to occur.

33.1.5 The Current State of ECDE

Through an ethnographic study that spanned over 3 years (2013–2016) in which the first author was fully immersed in the culture of the people of Sierra Leone, we provide the following account of the current state of early childhood education in that country. In Sierra Leone there is an abundance of NGO-funded reports and recommendations as well as government policies. Many have yet to be implemented or are at a standstill. The National Preschool Curriculum, written by local stakeholders in 1993 (funded by NGOs and overseen by MoEST), was reformed in 2005 to include theory and practice but is still awaiting approval. According to the *Sierra Leone ECD SABER Report* (2013, p. 22), "no details are available regarding the time frame or process for implementation for the drafted national curriculum." The Nursery School Association said that the final draft document has been *gathering dust for years*.

Prioritized goals for ECDE in the *Sierra Leone, Education* Sector Plan, 2007, were to increase public and private financial provision for early childhood. Two actions were identified for implementation. One was to increase the number of privately owned childcare centers (*short-term goal)*, and the other (*long-term goal)* was for government to inject much needed funding to ECDE (p. 89). To date, the long-term goal has not been actioned. The National Policy for Inter-sectoral Early Childhood Development in Sierra Leone (draft) is another example. This document is not dated (although one can infer it is post-2007), and there is no evidence of a final policy, yet it openly makes reference to the fragmented approach to policy direction and lack of cohesiveness which has prevented service delivery.

Although the draft National Policy for Inter-sectoral ECD (NPIECD) was developed, it has still not been implemented. The Sierra Leone ECD SABER Report *(*2013, p. 7) states that although the NPIECD aims to achieve high inter-sectorial

synergies "it is important to note that the policy was not designed in a participatory manner and it is unclear whether government is willing to pass the draft policy." Like many policies and action goals, the NPIECD goals pertaining to intervention, access, and quality are ambitious and with no mechanisms in which to facilitate coordination between state and non-state stakeholders, and without financial investment to ensure adequate resources to implement policies, there will be no progress.

The government must build stronger partnerships with the private sector, make efforts to improve preprimary education, invest money, implement ECE programs more widely, and provide regulations to monitor quality assurance, or else policies no matter how well written remain products on paper, not products of action.

The question we keep asking that guided the writing of this chapter is: what are the barriers to and facilitators of early childhood education in Sierra Leone? The findings from the ethnographic study showed that one of the major barriers to early childhood education in Sierra Leone is the reproduction of the status quo, fuelled by the limited access and current exclusivity of preschool. There is no enforced legislation that regulates the number of private preschools and no boundaries or standards (National Education Policy 2010) to adhere to. Interview data alludes to the elite nature of preschool, contributed by government privatization priorities. This lack of supervised provision has created a plethora of what one participant describes as *mushroom preschools* in the capital city designed for profit, thus physically excluding the majority of poor children (especially in rural areas) who cannot afford or are unable to access preschool. This in effect creates a division in society, based on economic and cultural privilege. In addition, bureaucratic delays in advancing a national preschool curriculum and the push for more private partnerships indicate more roadblocks ahead in terms of access and equity and any hopes for quality preschool and affordable provision across the country.

Another barrier is the division in the learning landscape of ECDE in Sierra Leone between informal learning which acts as a facilitator for lifelong learning and formal learning which acts as a barrier for some children. The data and observations in various classrooms showed there is a mismatch between content learning and process learning. One occurs in the home and community and the other in pre- to primary school settings. Outside of schooling, the field notes and interview data showed that children are process driven, highly practical, creative, and involved in their own learning, making daily decisions, managing routines, taking responsibility, and problem-solving. An academic push is favored in most preschool settings with dominant western academic knowledge bases related to child development domains and subject content learning inspired by overseas western models used by some preschools and the national draft ECE curriculum (n.d.). Formal learning provides few or no hands-on free choice materials, and young children sit behind desks waiting for teacher direction. With no distinct curricula based on early childhood educational theory, content relies on primary school syllabus and primary school materials (Sierra Leone Education Sector Plan 2014–2018).

Catholic preschools are defined as nonacademic and purely practical curriculum based, offering industry-based life skills. The interests, biographies, and geographies

of children appear not to be considered as the same content is delivered across the country and the global landscape in which ECDE pedagogical knowledge is derived, and technology has yet to be woven into their pedagogy and practice.

For facilitators we found that through observations and interviews, child agency is mobilized through domestic and industry-driven skills, family responsibilities, and informal learning; child agency enables some children to hoard their own social capital and at times quite independent of family networks; children contribute to their own developmental trajectories, as well as to the well-being of their families through certain competencies; self-care as well as the care of others contribute to family, community, and to society.

In summary, children are regarded as valuable members of society adding to the well-being of family and contributing to community, society, and thus national development, regardless of their age. Previous scholars showed that childhood is relational and children exist alongside and within collective structures and therefore cannot be understood in isolation (Webb et al. 2002), nor can children's competencies be relegated to a future potentiality. Observations from this study indicate how children are socially embedded in the lives of their parents, extended family, community, and society at large from a very young age. Their playfulness is intermingled with industrious obligations and social responsibilities and involves both freedom and obligation to self and others (the makeup of democratic citizenship). Their autonomous social mobility as they move in and out of social, economic, and cultural circles embodies a community of practice. As such, active citizenship has already laid its foundation in early childhood, positioning young children not as citizens of tomorrow but as citizens of today.

33.2 Rising from the "Ashes"

How then can Sierra Leone rise up completely from economic, political, and educational ashes? We argue that child agency under the right circumstances is a nation-building platform, provided that all children have the opportunity to acquire the cultural capital necessary for optimum educational advancement. While a new sociology of childhood has encapsulated children's agency globally (James and Prout 2015; Leonard 2005), this is not a new concept locally. In Sierra Leone, it is evident that children are already social actors in their own right, regarded as both being and belonging rather than beings in the process of becoming (James and Prout 2015). Child agency is enacted in the way young and older children mobilize social capital independent of adults in Sierra Leone. However, certain constraints, such as poverty, status positions, and even schooling itself, make it harder for children to exchange the capital from home/community for the school capital desired by teachers and government thus restricting child agency. While children's acquisition of some forms of capital (especially social capital) is evident, it is not clear if children are able to exchange the capital they accrue into other forms of capital (economic or cultural). In order for this to happen, the exchange value of one type of capital for

another must be perceived valuable by the dominant society for it to be worthy of exchange. It appears that the cultural and social capital accrued by impoverished children is deemed to be a less valued commodity, and this need to change.

Child agency involves actions, thoughts, and situations, and because the child is as much an independent as a collective being, possessing desires and goals, the habitus is therefore a shaped and shaping conduit to development. But the child is also objective – in that he/she is embedded in social relationships, institutions, and hierarchies and so has structural restrictions. In a country such as Sierra Leone, children develop through cultural trajectories, embedded in rules, rituals, and traditions which are largely regulated by where and who they are (or by positions society relegates to them). Understanding how habitus operates individually and collectively contributes to understanding about how children develop within a sociocultural context. It is such understandings that can be integrated into Afro-centric knowledge base, thus contributing to a less dominant Anglo-centric model of child development which currently permeates preschool pedagogy, the draft ECE curriculum, and dominates tertiary HTC syllabus in early childhood studies at teacher training institutions.

Second, preschool in Sierra Leone under the right policy direction can become a great sociocultural and educational equalizer, providing that all children have the opportunity to access quality preschool education that will lay the foundation to carry them into future learning pathways. The local educational blueprints provide a current status review of ECDE policy reforms and directions which have served to highlight the gaps between policy and implementation in the country. The interplay between structure and agency (government and human capital) can both compliment and contribute to strategic policy directions, if spaces and places for dialogue between advocates of ECDE (who demonstrated how much early education is valued) and policy-makers come together. Government policy must be a driving force to advance ECDE, and from a critical social theory perspective, structure and agency are powerful determinants that act to transform – but only when collectively fused.

Thirdly, as observed and discussed throughout this study, not all children share the same educational or life opportunities. For children to access and then succeed in school, they must be provided with instruments of appropriation (Bourdieu 1998) from the dominant culture and support in unlocking the codes that remain hidden until entry. Teachers whether consciously or unconsciously perpetuate the reproduction of social inequality in their pre- and primary school classes by failing to make education relevant to the needs of children and their society, that is, what educational values are most desired to succeed. It is crucial that teachers understand the principles of early childhood education in order to better understand that young children bring to preschool a sense of belonging (regardless of their circumstances) derived from home and community. They also bring competencies learned informally, which have made them resourceful, social, playful, resilient, and process driven in their learning habits. This sense of competency can evaporate for many poorer children when they enter formal schooling if they experience a different reality not practiced by their own family and community. There is an opportunity for Sierra Leoneans to reflect upon their own practices and the way their interactions

with children impact on children's sense of belonging, self-worth, and motivation. Understanding culture and its role in child development (Bourdieu 1998) will assist teachers in being more critical about the way they transmit the dominant cultural norms of society and help them examine the way content learning and process learning can complement each other (Nsamenang 2011).

33.3 Concluding Thoughts

This chapter provides insights into the nature of early childhood education in Sierra Leone and the barriers as well as the facilitators that exist in accessing preschool education and reveals that even the most impoverished agents are advocates of early childhood education. The current private/government structures exist as objective/subjective dichotomies separating the public and private domains, and despite evidence that agency is a mobilizing force, the field of education as a multidimensional social space is leading toward a certain trajectory (Harker et al. 1990). If preschool provision and policy reforms are not given serious attention in the early stages of establishment, it will become a field driven by privatization and a certain class trajectory. Currently, entry points into preschool are generally determined by the amount and type of capital one holds whether it is economic, cultural, or symbolic. In order to transform the current constraints surrounding ECDE into possibilities, there is a need to shift paradigms beyond a universal "one model fits all" for childhood development and learning and embrace diverse ways of how children think and learn, where the everyday cognitive development of children (Rogoff 2003) and the power of socially responsible intelligence (Super et al. 2011) characterize what one teacher described as "under the tree learning."

The global voice of childhood has yet to give priority to such African paradigms despite empirical evidence from the African continent (Nsamenang and Tchombe 2011; Pence and Nsamenang 2008; Rogoff 2003). While there is a tendency to borrow starting points from western theories of child development, it is time to derive starting points from within the continent of Africa and more closer to home. The work of embedding African perspectives into a nationally recognized early childhood education curriculum has already begun in Africa (Nsamenang and Tchombe 2011). Opportunities for including such information in training modules and workshops would provide practitioners with starting points to evaluate their pedagogy and practice and give student teachers firm theoretical foundations to build practice upon. It is imperative that a global model of ECDE in Sierra Leone reflects local knowledge.

In reviewing the educational blueprints for Sierra Leone and the corroborating data from the interviews, it appears that early childhood policy documents as well as the national draft ECE curriculum are currently fragmented and remain stagnant and/or hidden under bureaucratic paper trails. Yet the evidence is compelling that preschool matters intellectually, socially, and economically and produces long-term

benefits for the child, the family, and the society at large (Bartik 2011; Dockett and Perry 2013; Fisher 2012; Graue 2006; Heckman 2006; Young and Mustard 2008). While new legislation was created by the government in order to reform the education system (the new Education Act 2004) stating that its purpose was to assist in raising the standards of preprimary institutions and provide assistance in the development of curricula, neither initiative has become a reality. It is timely that the government (especially MoEST) now take the lead rather than simply assisting in such goals.

Many early childhood targets have not been met in the country (draft Policy on Inter-sectorial Childhood Development (2010) and National Education Policy 2010) hence the changing goal posts and timelines to accommodate such realities. If this is allowed to continue, Sierra Leone will be at great risk of once again returning to the "ashes." The Measuring National Priorities for post-2015 in Sierra Leone report (Braima et al. 2015) have already found gaps between policy and practice and predict that targets, from which development is measured against, currently do not appear to be achievable for Sierra Leone.

Finally, it appears that preschool has practical (teachers) and symbolic (privatization) gatekeepers that decide how society imitates and reproduces itself. Structure and agency currently dictate who has access to preschool and what type of cultural capital and competencies are best suited to school readiness. Cultural capital can easily lose its value from one field to another (home and school), and impoverished children who may be fortunate enough to gain a place in preschool still have to navigate the kind of formal trajectories most valued by teachers and society. Teachers hold power through their own agency to decide and evaluate their own teaching styles and decide how to respond to the cultural capital derived informally by children who enter their classes. For children, there is a danger that gatekeeping the desired cultural capital serves to limit trajectories not just to education but to other related fields of power and influence in the future. Such understandings fuelled by Bourdieu's theoretical concepts of capital and habitus (Bourdieu 1986) contribute to deeper insights into how power relations work in the field of preschool.

We need to understand that children bring to preschool what is available to them – their own social and cultural capital – and it must be harvested and integrated and on occasions exchanged for the kind of capital desired for reproduction by schools. All the good intentions of the habitus to rise above circumstances cannot transform the lives of children without government and schooling structures making explicit what kind of capital is valued and how to obtain it.

In addition, the pedagogical practices and current early childhood knowledge bases of teachers in Sierra Leone are not in line with global understandings of contemporary teaching, or the way content and process learning work together in early learning environments to complement each other. There is a systemic synergy between policy, pedagogy, and practice framed with clear and transparent guidelines for preschool teachers and a curriculum framework that is inclusive of all children's realities, where all children can belong regardless of who they are, what language they speak, where they live, and their economic and social status.

The primary aim would be for Sierra Leone to examine and reflect upon where they want to be in the next 10 years and factor this into their early childhood development agenda and develop pragmatic strategies in facilitating smoother transitions for children who also come from different reality points to build a solid future for all.

References

Aboa, C. (2006). *From Utopia to Dystopia: The legacy of the transatlantic slave trade in Liberia and Sierra Leone*. Retrieved March 20, 2016, from www.brunel.ac.uk/__data/assets/pdf-file/0004/.../ET71AboaED.pdf

Bartik, T. J. (2011). *Investing in kids: Early childhood programs and local economic development* (Adobe). Retrieved April 5, 2016, from http://research.upjohn.org/up_press/207/

Bellows, J., & Miguel, E. (2009). War and local collective action in Sierra Leone. *Journal of Public Economics, 93*, 1144–1157.

Betancourt, T. S., Borisover, I. I., Williams, T. P., Brennan, R. T., Whitfield, T. H., De La Soudiere, M., ... Gilman, S. E. (2010). Sierra Leone’s former child soldiers: A follow-up study of psychosocial adjustment and community reintegration. *Child Development*, *81*, 1077–1095. http://dx.doi.org/DOI10.1111/j.1467-8624.2010.01455.x

Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge: Cambridge University Press.

Bourdieu, P. (1986). The forms of capital. In*Cultural theory: An anthology* (pp. 81–90). West Sussex: Willey-Blackwell.

Bourdieu, P. (1998). *Practical reason: On the theory of action*. Palo Alto: Stanford University Press: Polity Press.

Braima, S. J., Fofana, A. I., Jarret, A. A., Kamara, J. L., Weekes, S., & Wellington, N. S. (2015). *Measuring national priorities for post-2015 in Sierra Leone* (Report). Retrieved March 23, 2016, from www.post2015datatest.com

Dockett, S., & Perry, B. (2013). Trends and tensions: Australia and international research about starting school. *International Journal of Early Years Education*, *21*, 163–177. http://dx.doi.org/10.1080/09669760.2013.832943

Fisher, K. W. (2012). Starting well: Connecting research with practice in preschool learning. *Early Education and Development*, *23*, 131–137. http://dx.doi.org/10.1080/10409289.2012.637877

Graue, E. (2006). The answer is readiness – Now what is the question? *Early Education and Development*, *17*(43–56), 43–56. http://dx.doi.org/DOI:10.1207/10.1207/s15566935eed1701-3

Guo, M. (2014). The vicious circle of data gaps, lack of prioritization and low capacity: A study on post-conflict education in Sierra Leone. *Independent Study project (ISP) collection*. Retrieved January 13, 2016, from http://digitalcollections.sit.edu/isp_collection/1837

Harker, R., Mahar, C., & Wilkes, C. (1990). *An introduction to the work of Pierre Bourdieu*. New York: St Martin’s Press.

Heckman, J. J. (2006). *Investing in disadvantaged young children is an economically efficient policy*. Paper presented at the Committee for Economic Development, New York. Retrieved April 16, 2016, from http://jenni.uchicago.edu/Australia/invest-disadv_2005-12-22_247pm_awb.pdf

Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P., & Yavitz, A. (2010). *A new cost-benefit and rate of return analysis for the Perry preschool program: A summary* (Working paper). Retrieved from http://www.nber.org/papers/w16180.pdf

Heckman, J., Pinto, R., & Savelyev, P. (2012). *Understanding the mechanisms through which an influential early childhood program boosted adult outcomes* (Discussion paper). Retrieved April 2, 2015, from economics.sas.upenn.edu/.../0_PerryFactorPaper_AER_2012-09-07_sjs

Hinton, S. (2009). Questions in the answers to primary school educational reconstruction in Sierra Leone. *US-China Education Review*, *6*(No7), 79–88. Retrieved from files.eric.ed.gov/fulltext/ED506320.pdf

Human Development Index (HDI). (2010). The real wealth of nations: Pathways to human development. UNDP, Author.

Human Development Report (U.N Report). (1993). Retrieved April 2, 2015, from hdr.undp.org/sites/default/files/reports/222/hdr_1993_en_complete_nostats.pdf

James, A., & Prout, A. (2015). *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood* (Classic ed.). New York: Routledge.

Kamerman, S. B. (2005). Early childhood education and care in advanced countries: Current policy and program trends. *Phi Delta Kappan*, *87*(3), 193–195. Retrieved April 2, 2015, from http://www.jstor.org/stable/20441964

Keen, D. (2005). *Conflict and collusion in Sierra Leone*. New York: Palgrave.

Leonard, M. (2005). Children, childhood, and social capital: Exploring the links. *Sociology*, *39*(4), 605–622. http://dx.doi.org/DOI:10.1177/0038038505052490

National Ebola Recovery Strategy for Sierra Leone (White paper). (2015). Retrieved from http://reliefweb.int/report/sierra-leone/national-ebola-recovery-strategy-sierra-leone-2015-2017

National Education Policy. (2010). Sierra Leone: Government of Sierra Leone: Ministry of Education, Youth and Sports.

Nishimuko, M. (2007). Problems behind Education for All (EFA): The case of Sierra Leone. *Educate, 7*(2), 19–29. Retrieved June 20, 2016, from http://www.educatejournal.org/index.php/educate/article/view/115/141

Nores, M. S., & Barnett, W. S. (2012). Investing in early childhood education: A global perspective. *National Institute for Early Education Research*. Retrieved May 20, 2016, from http://eric.ed.gov/?id=ED541832

Nsamenang, A. B. (2011). Developmental learning in African cultural circumstances. In A. B. Nsamenang, & T. M. Ychombe (Eds.), *Handbook of African educational theories and practices* (pp. 233–244). Retrieved April 2, 2015, from http://www.thehdrc.org/Handbook%20of%20African%20Educational%20Theories%20and%20Practices.pdf

Nsamenang, A. B., & Tchombe, T. M. (2011). *Handbook of African educational theories and practices: A generative teachers' education curriculum*. Cameroon: Human Development Resource Centre.

Organisation for Economic Co-operation and Development. (2012). *Starting strong III: A quality toolbox for early childhood education and care* [Policy document]. Retrieved from http://www.oecdilibrary.org/education/starting-strong-iii_9789264123564-en

Pence, A., & Nsamenang, B. (2008). *A case for early childhood development in sub-Saharan Africa* (Working Paper).Retrieved May 20, 2016 from www.bernardvanleer.org/a_case_for_early_childhood_development_in_

Policy on Inter-sectorial Childhood Development. (2010). *National policy for intersectoral early childhood development in Sierra Leone*. The Government of Sierra Leone, Author.

Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.

Sierra Leone, Education Sector Plan. 2007–2015: A road map to a better future. (2007). Retrieved May 20, 2016, from http://planipolis.iiep.unesco.org/upload/Sierra%20Leone/Sierra_Leone_ESP.pdf

Sierra Leone early childhood development SABER country report. (2013). Retrieved May 20, 2016, from https://openknowledge.worldbank.org/handle/10986/20150

Sierra Leone Education Sector Plan 2014–2018: Learning to Succeed. (2013). Retrieved May 20, 2016, from Global Partnership for Education website: http://www.globalpartnership.org/content/sierra-leone-education-sector-plan

Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhood: The science of early childhood development*. Washington, DC: National Academy Press.

Super, C. M., Harkness, S., Barry, O., & Zeitlin, M. (2011). Think locally, act globally: Contributions of African research to child development. *Child Development Perspectives*, *2*, 119–125. Retrieved May 20, 2016, from http://onlinelibrary.wiley.com.ezproxy.lib.monash.edu.au/doi/10.1111/j.1750-8606.2011.00166.x/pdf

The African report on child wellbeing: Towards greater accountability to Africa's children (Policy Forum). (2013). Retrieved February 20, 2015, from http://www.africanchildforum.org/site/

The Education Act, Vol. CXXXV, No. 19 Supplement to the Sierra Leone Gazette. (2004).

UNDP. (2013). *The rise of the South: Human progress in a diverse world* (Human development report). Retrieved February 20, 2015, from http://hdr.undp.org/en/2013-report

UNESCO. (2015). *Regional overview: Sub Sahara Africa* (EFA Global Monitoring report 2015). Retrieved February 20, 2015, from http://en.unesco.org/gem-report/sites/gem-report/files/regional_overview_SSA_en.pdf

UNICEF. (2011). *The role of education in peacebuilding: Case study – Sierra Leone*. Retrieved February 20, 2015, from http://learningforpeace.unicef.org/resources/the-role-of-education-in-peacebuilding-2/

United Nations Economic Commission for Africa. (2015). *MDG report 2015 lessons learned in implementing the MDGS* (Progress Report). Retrieved February 20, 2016, from http://www.undp.org/content/undp/en/home/librarypage/mdg/mdg-reports/africa-collection.html

Webb, J., Schirato, T., & Danaher, G. (2002). *Understanding Bourdieu*. London: Sage.

World Bank. (2007). *Education in Sierra Leone: Present challenges future opportunities* (Report Sierra Leone). Retrieved February 20, 2016, from https://openknowledge.worldbank.org/handle/10986/6653

Young, M. E. (2010). Early child development: A framework for collaboration. *International Journal of Child Care and Education Policy*, *4*, 25–32. Retrieved February 20, 2016, from http://www.researchconnections.org

Young, M. E., & Mustard, F. (2008). Brain development and ECD: A case for investment. In M. Garcia, A. Pence, & J. Evans (Eds.), *Africa's future, Africa's challenge: Early childhood care and development in Sub-Sahara Africa*. Washington, DC: World Bank.

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Canada and the United States*

Artin Göncü and Carollee Howes

Chapter 34
Early Educational Practices in Canada and the United States

Artin Göncü and Carollee Howes

Abstract In this introduction, we provide an overview of the landscape of ECE in the United States and Canada and then discuss contested beliefs about practices and curriculum within ECE. In the United States and Canada, ECE policy and practice is the result of contentious debate in the political sphere over whether mothers should be working, whether "disadvantaged" children "deserve" or "require" early care, and whether the children of undocumented immigrants should receive human services, and in the professional sphere about whether ECE "belongs" to education, child development, or developmental science, whether child care is the same as education, and whether infants and toddlers are to be included in ECE. Perhaps, as a result, the quality of care and education provided in ECE programs is low, and the wages of ECE teachers and caregivers place them at the poverty level. We draw on our own work on attachment and parent involvement, the importance of play both for children's learning and sense of belonging in school communities, and the critical role of teacher-child relationships to discuss how these debates influence the care and education provided for children.

Keywords Early childhood education • Attachment • Play • Parent involvement • Child care

Perhaps the most significant contribution of the three chapters included in this section on North America is that Canada and the United States, while wealthy and powerful players in the global sense, are not global models for early childhood education (ECE) systems. The chapter by Howe, Flanagan, and Perlman on Canada and the two chapters on the United States, one by Hong and Udommana and another

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by Pons-Clifford and Humphries, collectively support the characterization of a reality that is not unknown to scholars in the field of ECE: Within these two countries, systems of care for children too young to begin formal school at age 5 are fragmented, underfunded, and of dubious quality. There are common threads of explanation for these nonsystems: lack of a consensus on early childhood as a common societal good rather than individual problem; contested beliefs regarding women, children, and work; large economic disparities within and between regions; and immigration, especially immigration of children who are of color and poor.

Against this social and economic background, however, the North American region has a rich and deep tradition of careful, elaborated research on children, their development, and the environmental contexts of their development. Furthermore, there are firm bridges between research and certain forms of practice that give way to discussions about early childhood education and child care programs where children are expected to feel secure, trusting, and excited about learning and are able to play and negotiate the world of peer relations. However, while there is probable agreement among practitioners and researchers on the importance of children developing positive social relationships with adults and peers, of learning to work and play together, and to be ready for formal schooling, there are highly contested beliefs and practices around the implementation of early childhood programs. That is, there are controversies regarding which specific curriculum, teaching, and care activities are most supportive of children's development.

In this introduction, we first provide an overview of the landscape of ECE in the United States and Canada and then frame the contested beliefs about practices and curriculum within ECE. This provides rationale for the chapters in this regional section. Howe et al. provide an overview of both the system of education and care in Canada and of issues around curricula within Canadian programs. The two chapters from the United States illustrate concerns within the research community in two distinct areas. Hong and Udommana provide an overview of concerns around teaching within programs and discuss them in relation to sociocultural and attachment theories of development as well as national policies. Pons-Clifford and Humphries present a review of models of parent involvement in ECE and discuss each model with the purpose of illustrating that previous models did not take into consideration the views of low-income parents. The authors propose a sociocultural model as a framework for the collaboration of schools and families.

34.1 Landscape of Early Childhood Education in North America

The landscape of ECE in Canada is elaborated by Howe et al. This section provides a corresponding landscape for the United States while it also notes the similarities between Canada and the United States. There is much in common in these two countries. For example, in both, care and education for children from birth to five is considered a private rather than a common good. There are no national

ECE programs, and unlike education for children old enough to be in formal school at age 5, parents rather than taxpayers are largely responsible for paying for this care. An exception in the United States is the Head Start Program that is funded primarily by federal dollars and has national-level program standards. However, children can attend Head Start Programs only if their parents qualify and if there are slots available. There are strict income standards, and if the parents' income exceeds these standards, the child must leave the program. There are far fewer available Head Start slots than children who qualify.

Other ECE programs in the United States are licensed and, at times, funded at the state level. Like Canada, in the United States, there is a wide heterogeneity in both licensing standards and funding levels. Many states have a mixed system of many different types of ECE programs, some licensed but not funded and others with funding and more regulated standards. Furthermore, not every state regulated all forms of care, e.g., some only require family child care programs to register but not be regulated. Finally, over the last decade, many states have cut their regulation enforcement budgets leaving many programs without regular or any inspections.

Currently both in the United States and Canada, there continue to be sharp and contentious divides among different political entities. Both countries struggle, at varying levels of intensity, with issues such as whether mothers should be working and therefore needing full-day child care, whether "disadvantaged" children "deserve" or "require" early intervention to prepare them for school, and whether the children of undocumented immigrants should receive human services. Add to this list of contentious issues that are particular to ECE professionals and researchers: whether ECE "belongs" to education, child development, or developmental science; whether child care is the same as education; whether infants and toddlers are to be included in ECE; and how much formal education is required to teach or care for young children. Finally, there is increasing concern among parents, policy makers, and professionals in the field that the quality of care and education provided in ECE programs is low and that wages for ECE teachers and caregivers place them at the poverty level. In the United States, the last national-level research into child care quality found care on the average to be of low or mediocre quality (Helburn 1995).

34.2 Contested Beliefs About Practices, Curriculum, and Quality of Care in Early Childhood Education

Notwithstanding critical differences in their respective histories, both the United States and Canada are historically two countries composed of waves of immigrants, whether voluntary or not, each coming to America with beliefs about raising children. Especially in the United States, currently, in many regions of the country, the majority of young children eligible for ECE programs are the children of documented or undocumented immigrants, of color, and of low-income families. Not surprisingly, the question of what to teach, how to teach, and who should teach these

children are contested. In the next section, we draw from sociocultural theory to examine how cultural beliefs and practices about caring for other people's children are negotiated by the participants in care: parents, teachers, and children. The reason for doing so is that contested and negotiated beliefs about practices for caring for children are the background for all three chapters in the regional section. How ECE is organized at the state and local levels and what are the markers of good or good enough care are elaborated within the Howe et al. chapter on Canada and the Hong and Udommana chapter on the United States. The contested negotiations between parents and teachers in the United States are elaborated in the Pons-Clifford and Humphries chapter.

We then turn to practices within ECE classrooms. In both Canada and the United States, what children should learn and how children should learn remain unresolved questions. The interests of economists and politicians in ECE have only heightened these debates, e.g., is the final goal of an ECE program getting children ready for formal school or to achieve optimal development during the infant to toddler age periods? We will once again frame these debates drawing on our own work on attachment and parent involvement and on the importance of play both for children's learning and even more importantly for children's sense of belonging in school communities (Göncü et al. 2009, 2010; Howes 2010; Howes and Ritchie 2002). Our final section examines the premise that the core of children's ability to develop both socially and cognitively lies within the ability of their teachers to guide them in the construction of secure and trusting relationships with adults and peers. These ideas are echoed throughout all three chapters in this section.

34.3 Cultural Communities and Negotiated Practices Within ECE

We maintain that to understand ECE and practices within the programs, we need to use a theoretical framework that integrates sociocultural approaches with traditional theories of child development and early childhood education. To this end, we draw from sociocultural theory the notions of cultural community and practice (for a review, see Göncü and Gauvain 2011). A cultural community is defined as a group of people who share goals, beliefs, and everyday practices (Göncü 1999; Rogoff 2003). By applying this notion to our field, Howes (2010) states that just as it is true for any other community, in the community of early childhood education, practices derive from different belief and value systems, and simultaneous consideration of varying belief systems and the resultant practices allow us to understand the origins of contested beliefs and practices. In the most ideal world, negotiations among different communities lead to consensus about the best practices that support children's development and education. Below we summarize characteristics of a cultural community as they apply to the present collection of chapters.

First, typically, a cultural community is understood as a group of people who share a racial, ethnic, or linguistic background. However, cultural communities are

more dynamic than simply an ethnic or racial label (Rogoff 2003). Cultural communities are defined by practices that are patterned configurations of routine, value-laden ways of doing things that make sense only when they occur together and seem like common sense to the participants in the cultural community (Miller and Goodnow 1995). Defined as such, it is reasonable to argue that depending on one's perspective and goal in mind, what qualifies as a cultural community varies on a continuum from a nation to a small neighborhood of people. In the three chapters included in this section, this flexible usage is adopted. Cultural community sometimes refers to all the participants in care (cf., Howe et al. and Hong and Udommana) and sometimes to a small community of parents (cf., Pons-Clifford and Humphries).

Second, although practices can be articulated as isolated and contested particular ways of doing, e.g., testing children or lining them up in separate lines for girls and boys, our preferred view states that isolating particular practices from the pattern of practices and from the cultural context of the practice reduces the meaningfulness of the practice. Furthermore, the practices emerge as nested entities within the larger economic and regulatory apparatus of the state that oversees ECE. For example, program standards and regulations constructed by stakeholders and policy makers at a federal or state level provide a context for practices around children's play constructed by the parents, the teachers, and the children in a classroom. The chapters by Howe et al. and Hong and Udommana elaborate how the goals and practices of state regulations and initiatives like the US quality rating and improvement systems influence the negotiations of practice within ECE programs.

Third, on analytical grounds, describing and understanding any practice depends on simultaneous attention to practice that is on the foreground along with those that are on the background. For example, understanding the influence on everyday classroom practices of national school readiness goals requires attending to income disparities in readiness, differential parental understanding of the importance of school and of their role in children's school success, and differential teachers' education around school achievement, among other practices. It is impossible to really attend to all of these at one time, but if we arrange the practices so that one set is in focus and the rest are in the background, we can use different angles of vision and eventually a sense of how the parts and whole are related. By shifting our focus, we can describe, for example, both the cultural community of the program and the teacher-child relationships of the program, recognizing a bidirectional relationship between them. It is important to note that all three chapters included in this collection effectively set the stage for the readers for those practices that are on the foreground that are discussed in relation to others in the background.

Fourth, a cultural community provides a context for the practices that it embodies as it is simultaneously defined by them. As such, we maintain that a dialectic exists between race, gender, ethnicity, social class, and the practices that define each of them. It is in this sense that we feel that race, gender, and ethnicity as labels do not describe a cultural community. In addition, the goals, practices, and activities of the participants within the program are not static; they are re-negotiated over time. Practices and activities may change as the participants change. As children from very different home cultural communities enter the program, their and their parents'

ways of doing enter the mix of goals and practices, and as a result, their practices get transformed and lead to transformations of others. See Clifford and Humphries chapter for examples and elaboration of uneasy interaction between parents and teachers with different goals and practices around children's school success.

34.4 Contested Practices Within Early Childhood Education

Of the many issues that can be identified as contested, three are addressed in the present chapters, and they can be discussed in terms of our proposed notion of practice. These are attachment and parent involvement, and play (discussed below), and quality of child care (discussed in the next section).

Regarding attachment and parent involvement, the contested beliefs about both attachment to teachers and parent involvement primarily centered on how family and school relationships can be conceptualized and organized. For some, early education should be nothing more than inculcation of skills into children without attention to social emotional dimensions of development, while for others early education should support children's developing capacities through the use of activities that are expected of schools. Versions of this controversy take different forms in the contexts of attachment within ECE and parent involvement. Consider attachment first. Until recently there have been debates about whether or not young children develop attachment relationships with their peers and teachers away from home, if so, how such relationships are constructed. Do children's attachments at home have any bearing on their school relationships, and, if so, how can we understand these connections and use them in our effort to provide continuities in children's experiences to facilitate their socialization into school?

In order to answer these questions, Howes (2010) integrated the notions of cultural community and practice with Bowlby's (1982) theory of attachment in which it is argued that when teachers and children have warm and caring relationships, children are able to use these trusted relationships to explore other interpersonal relationships and learning opportunities (Howes and Ritchie 2002). However, children's experiences with forming relationships with adults and other children are shaped by cultural practices. Therefore, the proposed theory of relationship development within cultural communities argues that formation of attachment relationships in each cultural community should be understood in order to determine the adjustments the schools can make in bridging "ways of doing" at home with those practiced in school.

Attachment theory assumes that routine and often mundane caregiving interactions are the bases of secure and trusting relationships between teachers and children. Routine interactions within programs include being greeted by the teacher and saying good-bye to parents, eating and toileting routines, seeking comfort after taking a spill on the playground, being told to sit still during circle time, and cuddling with a teacher as she reads a story in addition to consistent application of rules about morality, transitions, and teaching-learning interactions. The challenge that remains

for the teachers is to conduct such practices in a way that will be meaningful for children, i.e., in a way they are connected with children's practices at home so that children ease into potentially secure relationships with their teachers.

According to this theory, children who learn to trust teachers to care for them are willing to approach peers and learning activities in a positive manner, in part because they can rely on the teacher for help if they need it. Children in programs that are diverse in race, ethnicity, and home language often have teachers who do not share their racial, ethnic, or home language. Particularly for these children who experience practices different from home, being emotionally supported in their routine and mundane interactions contributes to their construction of secure and trusting relationships with adults and peers. Hong and Udommana elaborate the role of interpersonal relationships and their role in children's participation in learning activities, offering support for the view that early education can best be understood if we incorporate children's social emotional development into our practice.

With regard to parent involvement in early education, separate from attachment research, contested beliefs center around the degree to which parents' views should be taken into account in making decisions about children's schooling practices. There is sufficient work that indicates that while some schools consider parents as collaborators, others simply see parents as passive recipients of schools' offerings. Based on research findings that show that parent involvement results in benefits in children's development and academic achievement as well as on our commitment that education should be conceptualized as a community affair, we propose to understand and expand parent involvement in children's education.

That said, we also know that parent involvement has often been conceptualized from the perspective of middle-class researchers. It has been often the case that low-income parents whose ways of involvement were not captured in the work of middle-class researchers were labeled as uninvolved. Applying our sociocultural perspective, we are arguing that if we focus on parent involvement from the perspective of each cultural community by taking into account their beliefs and practices, we will recognize that they have their own ways of supporting their children's development and schoolwork. The work of Pons-Clifford and Humphries elaborates the existing notions of parent involvement and proposes a more comprehensive way of taking into account involvement of parents from different cultural and social class backgrounds.

A caveat is in order in advancing these proposals about how ECE research should take into account practices in children's own communities. We wish to emphasize that the interpretations expressed in this introduction and the work summarized in the chapters almost exclusively focus on research, i.e., academic approaches to the study of attachment and parent involvement. The perspectives of teachers, directors, and child care works, i.e., the perspectives of people who actually work with children in the classrooms, are often neglected. It is important to recognize that early childhood educators themselves come from cultural communities and often integrate those practices that make sense to them. It is plausible to advance that they recognize differences between what they believe to be appropriate for child care and education and those the parents expect from them. Therefore, as we introduce the

work of researchers, we already anticipate a conclusion that the views of the practitioners should be included in our efforts to understand the realities of ECE.

Regarding, play and its role in early education and development, contested beliefs about play seem to have their origins in two sources. One source of contention is about the purpose of ECE. According to one community, whose views appear in state and federal policies and therefore practiced mostly in public schools, early childhood education should aim to focus on transmission of skills to children that are deemed to be necessary for their later schooling. Developed as an extension of behaviorist approaches to education, this view emphasizes teaching of isolated skills such as spelling and decoding words in contexts that have no potential meaning for children. In such a view, play has no role in early childhood education, and at best it is used as a reward when children accomplish the tasks that are presented to them by adults. Lately, this approach spilled over into even higher grades where recess, seen as a privilege of modern childhood, is taken away from them.

In contrast, in a different community of scholarship, ECE is considered as a process of socializing children into the institution of school with a focus on creating a safe environment for children in which they explore their worlds through activities that are of interest to them. In this approach, literacy, numeracy, and other tools of children's culture are introduced to them in activities in which children spontaneously engage. As such, play qualifies as the primary candidate to be used as a curricular and instructional medium. It is this view that has been elaborated in the decades long work of the participants of this section. Howe, Howes, and Göncü have committed their careers to the study of play and its role in early educational practice. Thus, in what follows we lay out a few basic notions about play that we have considered as our justification for using play as a safe context in which children's attachment relations at school flourish, and therefore they engage in activities of social and cognitive import.

First of all, it is important to recognize that play is a universal activity of childhood. This has been shown even in the work of many scholars who took issue with previous untested assumptions that play is a universal activity. With regard to North American communities, for example, contrary to the untested assumptions, we have shown that play of all kinds are common in low-income African-American, European-American, (Göncü et al. 2007), and Latino/Latina immigrant (Howes and Wishard 2004) communities of children just as it is in the community of middle-income children. In these communities, children engage in the kinds of play that are often seen in the middle-class communities such as pretend play. In addition, African-American children practice teasing and Latino/Latina children practice sibling caretaking, forms of play that are not so pervasive in the middle-income communities. Equally importantly, children's caregivers, teachers, and parents alike value play and practice it as an activity that contributes to children's physical, cognitive, social, and affective development.

Just like parents and teachers of children, many major developmental theorists put play ahead of any other activity that defines and describes childhood. For example, Vygotsky said that in imaginative play children are a head taller since play serves as a zone of proximal development. That is, the imagined situation enables

children to engage in activities that they otherwise would not. As such, play constitutes an activity of development. Similarly, Piaget said that in play children test their mastery over past experiences. For example, once children explore an object, they then test to see what they can do with it. In a similar vein, once children understand a social role, they adopt such a role in play in order to find out how well they can manipulate their understanding. Finally, Freud saw play as therapeutic medium in which children try to heal or learn to cope with affectively demanding experiences. Basically, then, what we have here is an activity that is seen either as an interpretation of past (Piaget and Freud) or as an anticipation of future (Vygotsky.) Finding truth value in each of these views, we propose that children use play to understand the past, present, and future.

In addition, starting with the germinal work of Parten (1932), there emerged a research trend that focused on the socialization of play, i.e., how play that starts as the activity of the individual child, as it is expressed in solitary play, becomes social and collective with age. Göncü, Howe, and Howes have all contributed to this literature indicating that when children play together, they build on one another's ideas through their extensions, rejections, or acceptances of ideas expressed by their partners. Referred to as the development of shared meanings or intersubjectivity, this line of research illustrated that after 3 years of age children construct shared meanings. That is, by playing together children make what is originally personal and private public, contributing to the construction of a culture that is related to but different from the adult culture. There is evidence that this culture involves not only sharing of symbols, their meanings, and the affect associated with them but also appropriate ways of relating to one another. In other words, play is a medium of constructing a cultural community or community of practice.

A second reason why play should be a part of ECE is because of the exploration opportunities it provides. Acknowledging the theoretical argument that exploration may not always include the elements of play, we argue that when children play, they are always in a quandary about the use and meaning of toys as well as the ideas. Young children's manipulation of toys and objects at their own will gives them the opportunity to find out about their world in an autonomous manner and that is the reason why play should be encouraged. Here, what we draw attention to is that when an adult instructs the child, she/he does so without affording the child the opportunity to explore on his own. When play opportunities are afforded, children would be exploring the world in the way they want, and this relates to the development of intellectual autonomy.

To sum up, what we are arguing for is recognition of play as a window of children's own through which they inform the world of adults and peers about what is important for them to learn. Seen as such, play becomes the most valuable source of curriculum development that children offer to the world of early childhood educators. When a child becomes a doctor pretending to write on a clipboard, she is telling others about her desire to learn about doctors and writing as it relates to this social role. It is indeed our contention that when we take this message and build on it, we will be preparing educational practices that will be relevant to children. Moreover, once they are "hooked" in the practice of schools through what they like

to do, children will be willing to "listen" to what we are willing to offer them as our own educational agenda. To put it bluntly, then, we are arguing that the language of care should be expressed in what we do with children, and this should start with what interests them rather than exposing them to what we want them to learn or to tell them that we care for them. Words alone, however meaningful, will be limited. The real language of care consists of actions and words uttered in the context of activities that interest children. Play is such an activity that enables the construction of attachment and educational practice.

34.5 Quality Child Care and Teacher Practices

Beliefs about child care quality and teacher practices similar to beliefs about children's play have been and continue to be contested within the research and policy context of ECE in the United States and Canada. One root of these contested beliefs lies in the uneasy collaboration of two fields of study, education and child development. From the perspective of child development researchers, in the 1970s, public policy concerns about the development of children faced with the challenges of poverty and about effects of maternal employment on the development of infants and toddlers shaped and elaborated research and programs. Whether mothers should work, if they worked where and who should care for their children, and at what age would out of home care cause irrevocable harm to children constitute the core of research in which child development researchers were engaged. During the same period, educational researchers working within education were researching whether kindergarten should be full day (ending at 3 pm) as parents pushed for traditional well-established preschool programs to become full day (beginning at 7 am and ending at 6 pm). As well, educational research concerned teacher practices, particularly the role of play in instruction, effective forms of instruction, and matters of curriculum. Early research on the expansion of programs for children downward into the domain of birth to three or five reflects these divisions.

The developmentalists' concerns over public policy about maternal employment and its influence on child development combined with educators' concerns over children's school experiences led developmentalists to introduce the construct of quality in child care. This was done in the 1980s as a way of moving the debates around maternal employment and age of entry into a discussion of teacher practices and ideally what should be the content of children's experiences in programs for children under 5 years of age.

Both of the authors of this chapter had teaching practice in and knowledge of ECE programs. Initially as practitioners, but over the years as researchers and teacher educators, along with many other like-minded colleagues, we reasoned that the historical knowledge of how to construct an ECE program existed but what was needed was an ability to differentiate between programs that were potentially harmful and those that enhanced children's development (see earlier discussion of attachment, parental involvement, and play). Advocates then could and did argue that

maternal employment was not harmful to children if the children were cared for in high-quality child care.

Thus, the construct of child care quality and how child care quality influences child development became the central focus of research in ECE, dominated by developmental theory that nested children and their development within the social contexts of home, child care, and later school. Child care quality, defined as the structure and process dimensions of the environment, predicted children's positive experiences with materials, peers, and teachers. Teacher-child and child-child interaction was included in the definition of quality as process quality. Process quality was both the best predictor of children's experience in programs and the most difficult to define and measure (see chapters by Howe et al. and Hong and Udommana). Nevertheless, this body of research helped establish state-level licensing and funding regulations for adult:child ratio, group size, and teacher qualifications as well as for health and safety similarly in the United States and in Canada. Public funding for Head Start, state-funded ECE programs, and for QRIS as discussed by Hong and Udommana is dependent on meeting quality standards as defined by this body of research.

As the quality construct and its definition moved from research to regulation, debates over the definition of quality began to reflect the lack of consensus within ECE on what makes a good program and what makes an optimally developing child. Furthermore as advocates, teachers, program directors, and parents added their voices to the debates over the dimensions of quality, the construct of quality became less parsimonious and more an unwieldy and incoherent set of directives. Most recently policy initiatives and debates over the role of ECE in creating children ready for school further complicated the debates over what is child care quality.

In a manner consistent with our emphasis on attachment and play, we advocate redefining an optimal ECE classroom not in terms of quality assessed in terms of preset standards but in terms of responsive teaching emphasizing consideration of contextual variations in what makes children's school experiences high quality. As such, responsive teaching includes the social and emotional, the organizational, and the instructional climate of the classroom. When teachers are responsive, they attend to the interests and activities of the children and to their home-based social interactive styles. Teachers organize classrooms to maximize learning opportunities through teacher-child and child-peer play-based interactions. In classrooms with responsive teaching, conversations not teacher directives dominate verbal exchanges, social interactions are harmonious, and children feel safe and trusting of teachers and peers. Most importantly teacher practices are not "one size fits all" but are initiations and responses based on not only the practices developed in formal education but as well consistent with the practices brought from home to school and the individual characteristics of the child. Responsive teaching rests on the theoretical assumption that through social interaction children, their peers, and their teachers build relationships that in turn provide support for their learning and development.

As we now lead the readers to the work reporting the state of ECE in Canada and the United States, we invite this introduction to serve as a beginning point of exchanges among young children, their families, teachers, researchers, and policy

makers in understanding children's needs for care, development, and education. We also hope that the work reported in this section enables construction of dialogues between those of us who work to support young children's development and education in North America and other colleagues who work to accomplish the same goals in many other communities of the world. We believe that there is much to learn from one another both in overcoming our ethnocentrism and possibly in advancing our existing practices through dialogues across national and cultural boundaries.

References

Bowlby, J. (1982). *Attachment and loss. Vol. 1. Attachment*. London: Hogarth.

Göncü, A. (1999). Children's and researchers' engagement in the world. In A. Göncü (Ed.), *Children's engagement in the world: Sociocultural perspectives* (pp. 1–22). Cambridge: Cambridge University Press.

Göncü, A., & Gauvain, M. (2011). Sociocultural approaches to educational psychology: Theory, research, and application. In K. Harris, J. Brophy, G. Sinatra, & J. Sweller (Eds.), *APA educational psychology handbook: Contributions to education* (Vol. 1). Washington, DC: American Psychological Association.

Göncü, A., Jain, J., & Tuermer, U. (2007). Children's play as cultural interpretation. In A. Göncü & S. Gaskins (Eds.), *Play and development: Evolutionary, ociocultural, and functional perspectives* (pp. 155–178). Mahwah: LEA.

Göncü, A., Main, C. & Abel, B. (2009). Fairness in participation in preschool In D. Berthelsen, J. Brownlee, J., & E. Johansson, E. (Eds.) Participatory learning in the early years. (pp, 185–202). New York: Routledge.

Göncü, A., Abel, B., & Boshans, M. (2010). The role of attachment and play in young children's learning and development. In K. Littleton, C. Wood, & J. K. Staarman (Eds.), *International handbook of educational psychology: New perspectives on learning and teaching*. Amsterdam: Elsevier.

Helburn, S. (1995). *Cost quality and outcome* (Final report). Vol. University of Colorado at Denver.

Howes, C. (2010). *Culture and child development in early childhood education: Practices for quality education and care*. New York: Teachers College Press.

Howes, C., & Ritchie, S. (2002). *A matter of trust: Connecting teachers and learners in the early childhood classroom*. New York: Teachers College Press.

Howes, C., & Wishard, A. G. (2004). Revisiting shared meaning: Looking through the lens of culture and linking pretend play through proto-narrative development to emergent literacy. In E. Zigler, D. G. Singer, & S. J. Sishop-Josef (Eds.), *Children's play: The roots of literacy* (pp. 173–185). Washington, DC: Zero to three. Excerpted in September 2004 Zero to Three, v25, 10–15.

Miller, P. J., & Goodnow, J. J. (1995). Cultural practices: Toward and integration of culture and development. In J. J. Goodnow, P. J. Miller, & F. Kessel (Eds.), *Cultural practices as contexts for development* (pp. 5–16). San Francisco: Jossey-Bass.

Parten, M. B. (1932). Social participation among preschool children. *Journal of Abnormal Psychology, 27*, 243–269.

Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.

Chapter 35
Early Childhood Education and Care in Canada

Nina Howe, Kathleen Flanagan, and Michal Perlman

Abstract This chapter provides an overview of the childhood education and care (ECEC) landscape in Canada. Canada is a federation of ten provinces and three territories; this constitutional framework gives the provinces and territories full jurisdiction for education and child care (e.g., Canada does not have a federal department of education or child care or a national policy). This model has shaped the development of ECEC policies and programs across the county and contributed to some of the challenges discussed in this chapter. We focus this review on center-based care and public kindergarten and discuss pertinent legislation, policy (including issues of availability, affordability, and children with special needs), and relevant descriptive information of regulation and services across the country. In addition, we provide a brief overview of provincial/territorial ECEC initiatives and include two examples of recent, large-scale policy directions regarding the introduction of full-day kindergarten for 4- and 5-year-olds (Ontario) and the universality of child care services (Quebec). We then present the limited data available about program quality across Canada with a discussion of new initiatives in this area. Emerging trends in ECEC regarding governance, curriculum, and human resources are identified, which indicate the dynamic and continued efforts to improve the quality of services provided for children and families. Finally, the chapter concludes with an analysis of ongoing challenges.

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In Canada, Early Childhood Education and Care (ECEC) is generally understood to refer to regulated programs for children from infancy to school age (up to 12 years) and to encompass "professional practice which includes the assessment and promotion of the well-being and holistic development of children through the planning and delivery of inclusive play-based learning and care program" (College of Early Childhood Educators 2011, p. 29). Following the Organization for Economic Co-operation and Development (OECD) use of the term, ECEC, to emphasize that services "should combine care, developmental and learning opportunities, and that education and care should not exist apart in approaches to young children" (OECD 2006, p. 227), the Canadian Provincial/Territorial Directors of ECEC have generally adopted the term to reflect the scope of children's programs.

Canada is a federation of ten provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador) and three territories (Yukon, Northwest Territory, Nunavut), which have constitutional responsibility for education, including child care and kindergarten. The federal government is responsible for programs for Aboriginal peoples living on-reserve and sometimes for off-reserve programs (see Ball 2012). Although early childhood education and care has been on the political agenda in Canada for many decades (Friendly and Prentice 2009, 2012), the decentralized nature of the federation has made it difficult to establish a unified national ECEC policy, partly because there is no federal department of education or child care. Since ECEC policy and governance, as well as public education, is solely a provincial/territorial responsibility, any federal initiatives to provide leadership have focused on fiscal transfers and varying levels of support for research. Nevertheless, there have been sectoral attempts to develop frameworks related to the quality of the "system" (i.e., access, affordability, human resources), including the Childcare Resource and Research Unit's Quality by Design (2006), the Canadian Child Care Federation's National Statement on Quality Early Learning and Child Care (2007), and the Early Years Study 3's proposed Early Childhood Index (2011).

Canada's decentralized system and lack of a national ECEC policy often result in poor assessments of the broader ECEC system in international reports. UNICEF's 2008 Innocenti Report considered ten indicators including parental leave (both parents), national ECEC services and funding, access (e.g., 80% of 4-year-olds in funded ECE), rates of child poverty, teacher qualifications (e.g., 80% of child care teachers have a basic course), and ratios in public kindergarten. Canada's score (tied with Ireland for lowest score) represented a composite of provincial and territorial data; for some benchmarks, some jurisdictions met the minimum criteria whereas others did not. Not surprisingly, given the lack of a national policy on ECEC, this evaluation varied widely across the country. Friendly and Prentice (2012) provide a critical assessment of the data given the structure of the Canadian system of governance.

Nevertheless, Canadian ECEC programs share common goals regarding children's early learning and development (Howe and Prochner 2012) that generally include a strong emphasis on play-based, active, and discovery learning programs and enhance children's well-being and development via warm, nurturing interactions with adults. High-quality programs also promote inclusive practices for children with different cultural, linguistic, and developmental needs and employ teachers trained in early childhood education (e.g., 2- or 3-year community college programs) or elementary education (BA/B.Ed programs). However, ECEC programs may be structured differently for different purposes (Flanagan et al. 2013); full-day child care programs for children aged 0–5 support parents in balancing family, employment, education, health, and care responsibilities. Full-day child care may be licensed center-based or delivered through licensed or unlicensed family homes and may operate under nonprofit or for-profit auspice. Half- or full-day kindergarten programs are part of the public education system. Community-based programs may be broadly focused on family support or health and wellness, for example, Ontario's Better Beginnings, Better Futures program (see Peters et al. 2012).

In this chapter, we focus on licensed center-based child care and public kindergarten since these settings serve the largest number of Canadian children aged 0–5 years. Legislation, policy, and descriptive information from across the country are reviewed. Throughout the chapter, we use the term "quality" to refer to quality at the program, rather than the system level. We are not aware of a single definition of quality that has been accepted across the country for policy or research purposes. In general, however, we believe that there is consensus that Canadian researchers define and operationalize quality similarly to researchers in the United States. Specifically, researchers focus on structural quality features such as child:staff ratios and teacher training. These features may be easy to regulate, but also impact children only indirectly by setting the stage for the kinds of processes that children come into contact with directly. Process quality refers to the kinds of interactions children have with the adults around them and the way these adults support interactions between children. Process quality is difficult to quantify and therefore regulate (Goelman et al. 2006). This definition of program quality is reflected in the kinds of measures (e.g., ECERS-R that measures global quality) used in the You Bet I Care! (YBIC) study, which, to our knowledge, is Canada's largest study of ECEC program quality (Doherty et al. 2000).

We provide a brief overview of provincial/territorial ECEC initiatives and include two examples of recent, large-scale policy directions regarding the introduction of full-day kindergarten for 4- and 5-year-olds (Ontario) and the universality of child care services (Quebec). We then present the limited data available about program quality across Canada. Finally, we discuss emerging trends in ECEC regarding governance, curriculum, and human resources and conclude with an analysis of ongoing challenges.

35.1 The Landscape of ECEC in Canada

While, provincial and territorial governments have constitutional authority for all education and child care services and policies, the federal government primarily has responsibility for income transfers and tax credits related to ECEC (e.g., Universal Child Care Benefit, child care income deduction).

35.1.1 Kindergarten

All provinces and territories provide public universal access to kindergarten, which may be enshrined in legislation (Table 35.1); jurisdictions that monitor participation rates report that 95–98% of eligible children are enrolled. Teachers generally hold a Bachelor's degree in Education, although the Territory of Nunavut allows for a teacher to hold a post-secondary credential in early childhood education. Kindergarten has traditionally been under the purview of the provincial Ministry of Education in most jurisdictions, although there have been some exceptions; Prince Edward Island was the last jurisdiction (2010) to shift responsibility for kindergarten from the early childhood system into the public school system. In Ontario, kindergarten teachers and early childhood educators work as a team in each classroom, as discussed below.

School-Based Programs for 4-Year-Old Children. Ontario is the only jurisdiction providing universal access for all 4-year-olds in junior kindergarten, whereas Saskatchewan's prekindergarten program is targeted to vulnerable 3- and 4-year-olds living in selected locales. In the last 5 years, there has been a 94% increase in the number of prekindergarten programs in Saskatchewan, with coverage extending to approximately 20% of the total provincial population of 3- and 4-year-old children living off-reserve. In other jurisdictions, school boards are responsible for programs for 4-year-olds, and coverage varies.

35.1.1.1 Case Study of Junior and Senior Kindergarten in Ontario

Historically Ontario offered voluntary part-time junior and senior kindergarten. Children must turn four by December of their junior kindergarten (JK) year and five by December of their senior kindergarten (SK) year. Recently, based on recommendations made as part of a blueprint for Ontario's vision for its youngest citizens (Pascal 2009), the province introduced free full-day JK and SK programs. Given the magnitude of the change, it will be instituted over 5 years, and by 2014, all programs will be full time (except those in First Nations on-reserve communities that are a federal responsibility). To contain costs, the province allowed for an increase in class size from an average of 20 to 26 students; in practice, average class sizes have been 25 students, although 5% of classes have exceeded 30 children. Full-day JK and SK classrooms are staffed by a teaching team of one teacher (with a BA in

Table 35.1 Characteristics of provincial and territorial kindergarten programs

P/T	Legislated entitlement	Mandatory or optional attendance	Age of entry	Full- or part-day attendance	Class size
NL	Yes	Optional	5 years by Dec. 31	Part-day	Maximum 20 children
PE	Yes	Mandatory	5 years by Dec. 31	Full-day	Maximum 15 children; if 18+ children, need extra teacher
NS	Yes	Mandatory	5 years by Dec. 31	Full-day	Maximum 27 children per class, plus 2 for flexibility
NB	Yes	Mandatory	5 years by Dec. 31	Full-day	Maximum 22 children as per collective agreement
QC	Yes	Optional	5 years by Sept. 30	Full-day	Maximum 20 children as per collective agreement
ON	Yes	Optional	Senior k, 5 by Dec. 31; junior k, 4 by Dec. 31	Full-day for all by Sept. 2014	Full-day k: 26 children, with 1 teacher and 1 registered early childhood educator (RECE)
MB	No	Optional	Varies by school board	Varies by school board	Varies by collective agreements within each school board; class size limit of 20 children for k-3 by Sept. 2017
SK	No	Optional	Varies by school board; usually 5 by December 31	Mostly part-day but some urban areas offer full-day	No maximum class size limit
AB	No	Optional	4.6 years by Sept. 1	Varies by school board; mostly part-day	No maximum class size, but funding is available to support smaller class sizes
BC	Yes	Optional	5 years by Dec. 31	Full-day	Maximum average class size is 19 children; no class can exceed 22 children
YT	Yes	Optional	4.8 years by Sept. 1	Varies, but majority are full-day	Maximum for full-day class is 18–20 children; part-day classes are usually very small

(continued)

Table 35.1 (continued)

P/T	Legislated entitlement	Mandatory or optional attendance	Age of entry	Full- or part-day attendance	Class size
NT	Yes	Optional	5 years by Dec. 31	Varies by jurisdiction	No maximum class size limit
NU	Yes	Optional	5 years by Dec. 31	Part-day	No maximum class size limit

P/T province/territory, *NL* Newfoundland and Labrador, *PE* Prince Edward Island, *NS* Nova Scotia, *NB* New Brunswick, *QC* Quebec, *ON* Ontario, *MB* Manitoba, *SK* Saskatchewan, *AB* Alberta, *BC* British Columbia, *YT* Yukon Territory, *NT* Northwest Territory, *NU* Nunavut Territory

Education) and one early childhood educator (with a community college diploma in ECE). A play-based curriculum has been developed (see implementation documents, Ontario Ministry of Education 2013). Given its recent introduction, research on the program implementation and the impact on children and families is not yet available. However, uptake of this voluntary program by parents has been very high.

Anecdotally several implementation issues have arisen. Structural differences between the two classroom staff (i.e., certified teacher with a BA in education and educator with community college ECE diploma) have, at times, resulted in a more hierarchical and less of a team teaching arrangement. For example, in the Toronto District School Board, a certified kindergarten teacher with 10 years of experience earns close to $100,000 CA, while an ECE educator with 10 years of experience working in the same classroom for the same school board earns approximately $40,000 CA. Such earning disparities raise a host of concerns about how this inequity impacts program quality, staff dynamics, interactions with parents, etc. even though role descriptions are outlined in provincial legislation (see Government of Ontario 1990).

Removing 4- and 5-year-olds from the child care sector also creates viability issues for this sector; since older age groups are the least expensive to run, centers have cross subsidized fees from preschoolers to offset the higher costs of infant care. Furthermore, some school boards may be recruiting early childhood educators away from jobs in child care centers. These issues have raised concerns that child care programs will close as a result (Government of Ontario 2012), but the extent to which program closures will actually happen remains to be seen.

35.1.2 Center-Based ECEC Programs for Infants and Preschool-Aged Children

All provincial and territorial jurisdictions license and monitor center-based programs for children 0–12, which typically operate on a full-day/year-round basis. Child:staff ratios (Table 35.2) and staff qualifications (Table 35.3) vary across jurisdictions. Except for some municipally operated child care centers in Ontario and Alberta, there are no publicly operated child care centers in Canada. Centers may be

Table 35.2 Staff:child ratios in center-based ECEC programs

P/T	Infants <2 years	2-year-olds	3- and 4-year-olds	5-year-olds and school age	Other
NL	1:3 children	1:5 children	1:8 children	1:8 for 5 years 1:12 for 6 years+	Mixed age group: age of youngest child determines ratio
PE	1:3 children	1:5 children	1:10 children	1:12 for 5 years 1:15 for 6 years+	In smaller Early Years Centres, ratio may include director half of time, but not in larger centers; private centers, ratio includes director
NS	1:4 children	1:6 children	1:8 children	1:15	Ratios differ in part-time programs
NB	1:3 children	1:5 children	1:7 for 3 years 1:10 for 4 years	1:12 for 5 years 1:15 for 6 years+	Minister may alter ratios for children with special needs
QC	1:5 up to 17 months	1:8 for 18 months to 3 years	1:8 for 3 years 1:10 for 4 years	1:15 for 5 years 1:20 for 6 years+	Mixed age group: age of youngest child determines ratio
ON	3:10 (1:3.3) up to 18 months	1:5 for 18–30 months	1:8 for 30 months to 5 years	1:15 for 6 years+	Mixed ages: 1:10 for 44–67 months; 1:12 for 56–67 months; ratios may be reduced at specific times of day
MB	1:3 for 12 weeks to 1 year; 1:4 for 1 year olds	1:6 children	1:8 for 3 years 1:9 for 4 years	1:10 for 5 years 1:15 for 6 years+	Ratios differ for mixed age groupings
SK	1:3 for 6 weeks to 17 months	1:5 for 18–29 months	1:10 for 30 months to 6 years	1:15 for school-age children	Ratios differ for field trips and mixed age groupings
AB	1:3 for 0–12 months 1:4 for 12 to 18 months	1:6 for 19 months to 3 years	1:8 for 3–4.5 years 1:10 for 4.5–5 years	school age: 1:10 for kindergarten 1:15 for grade 1 and higher	Only certified staff included in ratios; ratios may be reduced during nap

(continued)

Table 35.2 (continued)

P/T	Infants <2 years	2-year-olds	3- and 4-year-olds	5-year-olds and school age	Other
BC	1:4 for children up to 36 months		1:8 for 30 months to school entry	1:10 for kindergarten and grade 1	Manager may be included in ratio
			1:15 for school-aged	1:15 for above grade 1	
YT	1:4 for 0–18 months	1:6 for 18 months to 3 years	1:12 for 3 years to school age		
NT	1:3 for 0–12 months	1:6 for 25–35 months	1:8 for 3 years	1:10 for 5–11 years	Volunteers may be included with permission of director of Child Day Care Services
	1:4 for 13–24 months		1:9 for 4 years		
NU	1:3 for 0–12 months	1:6 for 25–35 months	1:8 for 3 years	1:10 for 5–11 years	Volunteers may be included with permission of director of Child Day Care Services
	1:4 for 13–24 months		1:9 for 4 years		

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operated by nonprofit agencies, religious organizations, Aboriginal peoples (First Nations, Inuit, Métis),[1] and for-profit entities (i.e., single owner/operator to a large national corporation). Increasingly, nonprofit and for-profit organizations hold multiple licenses for child care centers that may also include other programs (e.g., family day care homes); these organizations represent approximately 43% of all child care in Canada (Flanagan et al. 2013). Although parent fees constitute the majority of funding for child care, all jurisdictions provide funding to support the operation of regulated ECEC centers (Table 35.4), which may vary depending on center auspice.

[1] In Canada, there are three distinct groups of Aboriginal peoples, which according to Statistics Canada can be defined in various ways in the national census (http://www.statcan.gc.ca/pub/89-645-x/89-645-x2010001-eng.htm). For our purposes we employ the ancestry definition of the three Aboriginal groups: (a) First Nations peoples are defined as North American Indian; (b) Inuit peoples are defined as the indigenous population living in the Canadian Arctic regions in the Northwest, Nunavut, and Yukon Territories; and (c) the Métis people are of North American Indian and eighteenth- and nineteenth-century European (French, Scottish, English) heritage and mainly live in Western Canada (i.e., Manitoba, Saskatchewan, Alberta).

Table 35.3 Staff training requirements for ECEC center-based programs by province/territory

P/T	ECEC certification/classification levels and requirements for staff and directors
NL	Preschool: to work with children 2–6 years
	Entry level: preschool orientation course
	Level 1: provincially approved 1-year ECE certificate program
	Level 2: provincially approved 2-year ECE diploma program
	Level 3: level 2 plus a post-diploma ECE certificate or specialization or BA plus certificate in ECE (or equivalent)
	Level 4: BA in ECE or BA plus ECE diploma
	Infant: to work with children 0–23 months
	No entry level available; level 1 preschool is minimum qualification
	Level 1: ECE certificate plus infant child care orientation course
	Level 2: ECE diploma plus infant orientation course
	Level 3: ECE diploma plus post-diploma infant-toddler specialization or related BA plus ECE certificate plus infant orientation course
	Level 4: BA in ECE or BA plus ECE diploma
	Other: certified staff, 30 hours of ECE professional development every 3 years
	Requirements for ECEC center-based programs:
	Director: minimum level 2 certification, hold classifications for age groups of center license, and minimum 2 years' experience in licensed center
	Lead staff in a room: level 1 certification for age group of children
	All staff: minimum of entry level certification
NS	Classification levels:
	Entry level: orientation course
	Level 1: orientation and coursework, workplace experience; or 1-year ECE certificate
	Level 2: 2-year diploma in ECE
	Level 3: BA in ECE, or level 2 classification plus BA in any discipline
	Requirements for ECEC center-based programs:
	At least 2/3 of staff: level 1, 2, or 3 classification
	Center director: level 2 or 3 classification.
PE	As of July 1, 2013, new legislation has received royal assent and is awaiting final proclamation. Required qualifications for ECEC staff are impacted by the new legislation
NB	As of July 1, 2013, new legislation has received royal assent and is awaiting final proclamation. Required qualifications for ECEC staff are impacted by the new legislation
QC	No certification or classification levels
	Requirements for ECEC center-based programs:
	Two-thirds of staff: 3-year ECE diploma or 1-year certificate plus 3 years' experience
	Center's license holder must have an employee responsible for management, planning, organization, and program evaluation
	No educational requirements for other staff

(continued)

Table 35.3 (continued)

P/T	ECEC certification/classification levels and requirements for staff and directors
ON	College of Early Childhood Educators is a professional self-regulatory organization for early childhood staff, supervisor, resource teachers. All must join the college http://collegeofece.on.ca/userfiles/file/2009-notices/CECE-TC-008-membershiprequirements.pdf. One general certificate of registration for the title of registered early childhood educator
	Requirements for ECEC center-based programs:
	One staff person per group of children: 2-year diploma in ECE
	Center supervisors: 2-year diploma in ECE plus 2 years' experience
	No educational requirements for other staff
MB	Classification levels:
	Child Care Assistant (CCA): no post-secondary credentials; 40 hours of ECE course work required within first year of employment
	ECE II: 2-year ECE diploma approved by province or 1/5 competency-based assessment programs offered by MB Child Care Program
	ECE III: ECE II program plus post-diploma specialization or approved degree recognized or BA in Developmental Studies
	Requirements for ECEC center-based programs:
	All staff in child care centers, nursery schools, and school-age programs must be classified
	Director: ECE III plus 1-year experience
	Two-thirds of staff in full-time center: ECE IIs or IIIs
	One staff per group of children: ECE II or III
SK	Certification levels:
	ECE I: 120-hour orientation course or equivalent
	ECE II: 1-year early ECE certificate or equivalent
	ECE III: 2-year ECE diploma or equivalent
	Requirements for ECEC center-based programs:
	Center directors: ECE III
	All staff, minimum of ECE I; 30% of staff, ECE II; 20% of staff, ECE III.
AB	Certification levels:
	Child Development Assistant: 58-hour government-sponsored orientation program, High School Career and Technology Studies credit courses on early learning and child care or 45-hour college-level course in child development
	Child Development Worker: 1-year ECE certificate from approved college
	Child Development Supervisor: 2-year ECE diploma from approved college
	Requirements for ECEC center-based programs:
	Program Supervisor: Child Development Supervisor certificate
	At least 1/4 full-time staff: Child Development Worker certificate
	All other staff: Child Development Assistant certificate
	All staff in licensed preschool or out-of-school program: Child Development Assistant

(continued)

Table 35.3 (continued)

P/T	ECEC certification/classification levels and requirements for staff and directors
BC	Licensing levels:
	ECE Assistant: one post-secondary course from approved list, character reference
	ECE: basic certificate from post-secondary ECE program; 1-year ECE with character reference; 5-year ECE (500 hours of supervised work in ECE setting and a competency-based reference)
	ECE infant/toddler and/or ECE special needs: post-basic certificate or diploma in specialized area
	All staff in child care centers or preschool program must have license to practice
	Manager: facility manager, good character, training, experience, and other required qualifications
	Staff:
	Responsible adult: age19+, one course on child care or relevant work experience, good character, and can care and guide children
	Assistant: qualifying for early childhood education license to practice or one early childhood education course, good character, and can care and guide children
	Early Childhood Educator: basic ECE program, 500 hours of work experience under a licensed ECE, good character
	Infant/Toddler Educator: as above plus post-basic infant/toddler training
	Special Needs Educator: as above plus basic special needs training
YK	Certification levels:
	Child Care Worker I: 6-hour introduction to EC development course or equivalent.
	Child Care Worker IA: Child Care Worker I certification with additional courses but less than 1 year of training
	Child Care Worker II: 1-year training in EC development or equivalent
	Child Care Worker IIA: Child Care Worker II certification with additional courses but less than 2 years of training
	Child Care Worker III: 2+ years of training in EC development or equivalent
	All staff in center-based programs and included in the child:staff ratio must hold Child Care Worker certification
	20% of staff: meet or exceed Child Care Worker III qualifications
	An additional 30%: meet or exceed Child Care Worker II qualifications
	No specific regulations for directors
NT	Primary staff person: responsible for daily operation, program of child care center; age 19+ and:
	Post-secondary program in child development satisfactory to Territorial Director or an understanding of and ability to apply developmentally appropriate practices
	Understanding of role, responsibilities, and ethics of professional child care provider
	Fulfill the role, responsibilities, and ethics of a professional child care provider in accordance with any guidelines approved by the director
NU	None specified

P/T province/territory, *NL* Newfoundland and Labrador, *PE* Prince Edward Island, *NS* Nova Scotia, *NB* New Brunswick, *QC* Quebec, *ON* Ontario, *MB* Manitoba, *SK* Saskatchewan, *AB* Alberta, *BC* British Columbia, *YT* Yukon Territory, *NT* Northwest Territory, *NU* Nunavut Territory

Table 35.4 Types of government funding for regulated ECEC center-based programs

P/T	Capital/start up	Operating	Inclusion	Human resources	On-reserve first nations	Parental subsidy
NL	✓	✓	✓	✓	✓	✓
PE		✓	✓	✓		✓
NS	✓	✓	✓	✓		✓
NB	✓		✓	✓		✓
QC	✓	✓	✓	✓	✓	
ON	✓	✓	✓	✓	✓	✓
MB	✓	✓	✓	✓		✓
SK	✓	✓	✓	✓		✓
AB	✓	✓	✓	✓		✓
BC	✓	✓	✓	✓	✓	✓
YT	✓	✓	✓	✓	There are no reserves in the territories	✓
NT	✓	✓	✓	✓		✓
NU	✓	✓	✓	✓		✓

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35.1.3 Access: Availability, Affordability, and Children with Special Needs

Availability. Between 1992 and 2012, the total number of licensed child care spaces in Canada for children 0–12 years increased by 166% (1992, 371,573; 2012, 986,842; Friendly et al. 2013). Across Canada, 22.5% of children 0–5 years of age have access to regulated ECEC center-based programs (Table 35.5), 51% are center-based spaces (ages 0–5), 35% are school-age spaces, and 14% are in family home care. Jurisdictional rates of availability differ due to many factors including distribution of spaces, policy and funding frameworks, and availability of unlicensed options. Unfortunately, access to regulated ECEC programs other than kindergarten is limited in most of Canada and does not begin to meet the demand, particularly for infants, in rural areas, and for parents seeking part-time and/or extended-hour services.

Affordability. Costs associated with provision of services for children age 0–4 and for school-aged care are primarily a parental responsibility. All jurisdictions (except Quebec; see below) provide financial support for families who meet specific eligibility criteria (e.g., family income). Recently, some provinces have introduced policies that recognize the societal benefits of ECEC programs for children and families. To varying degrees, Quebec, Manitoba, and Prince Edward Island provide enhanced base funding for licensed ECEC programs and regulate parent fees – practices that benefit all and not just targeted children. Consequently, parent fees increased in all jurisdictions between 1998 and 2012 except for Quebec and

Table 35.5 Access to regulated spaces across Canada – 2012 Data

P/T	Center-based full- and part-day child care spaces for ages 0–5	School-age child care spaces	Regulated family child care spaces[a]	Total regulated spaces Ages 0–12	Regulated child care[b] space for children 0–12 (%)	Regulated full- or part-time center[c] space for children 0–5 (%)
NL	5638	957	605	7200	11.2	18.9
PE	3071[d]	952	28	4051	20.8	46.5[c]
NS	12,940	3397	984	17,321	15.1	23.9
NB	10,684[c]	10,229	782	21,695	22.9	30.7[c]
QC	153,481[c]	162,992[e]	85,095	401,568	37.4	36.3[c]
ON	176,157	99,743	17,097	292,997	15.4	20.8
MB	18,325	9219	3046	30,614	16.3	20.5
SK	8909	1301	2065	12,275	7.6	11.5
AB	57,808	22,274	11,425	91,884	15.3	19.8
BC	53,644[c]	31,281	15,975	102,908	18.0	23.7[c]
NT[f]	929	456	400	1785	21.7	22.9
NU	949	147	8	1104	11.8	20.8
YT[g]	694	208	236	1440	26.8	28.6
CA	503,229	343,156	137,746	986,842	20.5	22.5

Friendly et al. (2013)

P/T province/territory, *NL* Newfoundland and Labrador, *PE* Prince Edward Island, *NS* Nova Scotia, *NB* New Brunswick, *QC* Quebec, *ON* Ontario. *MB* Manitoba, *SK* Saskatchewan, *AB* Alberta, *BC* British Columbia, *YT* Yukon Territory, *NT* Northwest Territory, *NU* Nunavut Territory, *CA* Canada

[a]Note that regulated family child care does not necessarily use the concept of "spaces" in the same way that it is used in center-based child care; this figure may represent enrolment, not licensed capacity

[b]This calculation uses all regulated child care spaces – center-based and family child care

[c]The total number of regulated spaces including regulated family child care cannot be used here as some of the provinces/territories cannot provide age breakdowns

[d]This number was calculated for children 0–4 years old; PE, NB, and BC 2012 figures are not directly comparable to figures in earlier editions of ECEC in Canada (Childcare Resource and Research Unit, 2010). (Quebec's figures are comparable to figures from previous years.) Five-year-olds in these provinces are included in school-age child care spaces and attend full-day kindergarten in the public education system

[e]The total number of Quebec school-age spaces is from 2008. More recent information was not available

[f]The NT figures represent 2010 data; more recent information was not available

[g]YT provided total occupied spaces and total regulated spaces but breakdown by type of service only for occupied spaces. Thus, the sum of center-based, school-age, and family child care does not equal the total regulated spaces above. Total regulated spaces have been used in the Canada total and in calculating coverage 0–12; the occupied space figure was used for calculating coverage 0–5

Manitoba (Flanagan et al. 2013); Prince Edward Island's introduction of limits for parent fees is too recent to be assessed.

Access for Children with Special Needs. All jurisdictions have policies to support the inclusion of children with special needs in regulated ECEC programs, although there is no federal legislation to guarantee access to such services. Supports include funding for additional staff salaries to reduce staff:child ratios or to purchase equipment, whereas supports for linguistic and cultural diversity are usually addressed through program and curriculum approaches (Flanagan and Beach 2010). Examples include Alberta, the only province to provide inclusive programs for preschoolers with special needs (funded by the Ministry of Education), often through contracts with child care centers. Manitoba's 2009 child care regulations require that all centers have an inclusion policy and provide programing that is developmentally appropriate for all children. Prince Edward Island is the only jurisdiction that requires ECEC centers to register children with special needs and to ensure inclusive practices as a condition for the "Early Years Centre" designation (Halfon and Friendly 2013).

35.1.4 Quebec: The Case for Universality of Child Care

In 1996, the Quebec government announced a new family-friendly policy aimed at reducing poverty, promoting maternal employment, and increasing children's educational opportunities (Japel and Welp 2009). A number of policies were implemented including full-day kindergarten and reorganized child care funding (Japel et al. 2005). The government adopted a policy of universal child care by providing $5/day services in 1997 and established a Ministry of Family and Children. Parents paid the $5/day rate regardless of income, and the government subsidized the remaining costs by direct support to nonprofit centers and for-profit centers (who agreed to supply some reduced cost spaces). The legislation created a new system of early childhood centers called Centres de la petite enfance (CPEs) run by parent boards that were responsible for providing center- and home-based care; in 2005, home-based care was placed under the jurisdiction of other agencies. Although the daily cost for parents was increased to $7/day in 2004, Japel and Welp (2009) argue the "change in policy represented a real commitment by the government to both early learning and child care programs" (p. 59).

This universal approach to providing child care versus a more targeted approach (e.g., children from low SES families) has been extremely popular. Demand has far exceeded the supply, although the number of spaces has increased significantly over time. To increase spaces, in 2003, the government allowed the for-profit sector to expand (Japel and Welp 2009), which raises serious concerns given the findings that quality of care is generally lower in these centers compared to CPE center- and home-based settings, as discussed below.

The introduction of the universal policy was a natural experiment for researchers to assess its impact in terms of availability, auspice, use, quality, and social issues

such as maternal employment. The overall rate of maternal employment has increased dramatically since 1997, particularly for low-income mothers, and more children attend child care (Baker et al. 2008; Cleveland 2012; Haeck et al. 2012; Lefebvre and Merrigan 2008; Lefebvre et al. 2009). Japel (2012) provided a critical assessment of the Quebec child care policy based on four key ECEC principles: universality, accessibility, quality, and developmental programming (issues regarding quality and programming are discussed below). Japel used data from the Quebec Longitudinal Study of Child Development (QLSCD), a cohort of 2223 children born between October 1, 1997 and July 31, 1998, who would all start school in the same year. The study focused on factors associated with the transition to school and included information on the quality of center- and home-based CPEs, for-profit, and unlicensed home care settings (n = 1540) assessed four times when the children were aged 2.5–4 years (Japel 2008; Japel et al. 2005; Jetté and Des Groseilliers 2000).

Regarding the universality and accessibility principles, in 2009, fewer than half of Quebec preschoolers had access to affordable and licensed child care (Japel 2012). In concert with increased maternal employment in the past 15 years and thus the need for child care, many parents rely on unlicensed home or for-profit center care that is more expensive than $7/day. In recognition of the increased demand, the government recently announced an additional 28,000 new $7/day spaces for a total of 250,000 spaces by 2016.

Higher SES parents are more likely to use licensed care than lower SES parents (Japel et al. 2005; Japel 2008). Yet, attending licensed center or home child care was associated with significant cognitive, language, behavioral, and school readiness benefits for low SES children (e.g., Côté et al. 2007; Geoffrey et al. 2010), although Baker et al. (2008) reported that greater child care utilization was associated with an increase in children's behavioral problems.

Japel and Welp (2009) critiqued Quebec's universal policy to glean some important lessons. On the positive side, attending licensed child care has (a) had positive cognitive and behavioral outcomes, especially for low-income children; (b) increased maternal employment and school attendance rates, thus increasing the provincial tax base; and (c) required a larger child care workforce resulting in greater employment and tax revenue. Yet, a number of problematic issues remain to be addressed. First, as discussed below, the overall quality of most care is "minimal" and indicates that the system may not be achieving its potential in enhancing optimal development for all children, particularly in for-profit centers and unlicensed homes. Second, the expansion of both for-profit and unlicensed home care to meet the increased need for spaces has critical implications for human resources and staff training (Jacobs and Adrien 2012); the provincial requirements for staff training for home care are minimal, and some centers hire the minimum number of trained staff required by legislation (Table 35.3). Moreover, Quebec has the highest child:staff ratios in the country (Table 35.2). These are factors known to be associated with quality. Third, low SES children who would most likely benefit from attending child care are least likely to be enrolled, due to a number of factors (e.g., limited number of CPE spaces, long waiting lists, CPEs tend to be located in higher SES areas).

35.1.5 Quality of ECEC in Canada

Regulatory Frameworks. Provincial and territorial regulatory frameworks for licensing and monitoring are, for the most part, consistent in their approaches to regulating child care. Canada has reasonable staff:child ratios and group sizes, and there is an emerging trend for increasing requirements for staff training and qualifications. Although there is limited published information about program quality across Canada, two large-scale empirical studies have been conducted in Quebec. To our knowledge, although some school boards monitor kindergarten classrooms, no published data are available about program quality.

What Do We Know About ECEC Program Quality in Canada? Despite a recognition of the importance of ECEC, there are no common pan-Canadian indicators of progress, and there is very limited empirically based research examining the quality of ECEC programs as defined earlier. McCain et al. (2011) have noted consistent pan-Canadian monitoring regimes, and measures of policy, financing, and quality in ECEC programs are lacking.

An early report, the You Bet I Care! (YBIC) study (Doherty et al. 2000; Goelman et al. 2000) compared a sample of Canadian ECEC programs on a number of measures of quality. We present some results from the YBIC study, but we note the data were collected in 1998 with a participation rate of approximately 55%. Thus, this sample may not be representative of programs across Canada. Standardized measures of process (e.g., Caregiver Interaction Scale, Arnett 1989; Early Childhood Environment Rating Scale-Revised ECERS-R, Harms et al. 1998) and structural (e.g., staff:child ratios) factors were included.

Data from the YBIC sample (234 centers in six provinces) suggested that the majority of centers provided care that met children's basic physical and emotional safety needs, but did not provide strong learning environments to foster their optimal development. The low level of care in infant/toddler rooms, where children are the youngest and most vulnerable, is of concern. Moreover, in keeping with the more recent Quebec studies cited below, quality was higher in nonprofit than for-profit centers, and there was a correlation between the strength of regulatory frameworks and higher quality scores.

Reflecting the reasonable regulatory systems across Canada, in the YBIC sample, 87.9% of teachers had post-secondary ECE education or an ECE-related BA or higher. Further, all of the classrooms were well within jurisdictional regulatory limits regarding group size and adult:child ratios. However, ratios and group size cannot alone ensure quality but merely provide a certain minimal baseline of "custodial" care that is essential to protect children's health and safety (Doherty et al. 2000; Goelman et al. 2000).

Although, there have been no pan-Canadian studies of quality in regulated ECEC centers since the YBIC study, more recent (unpublished) evaluations are focused at the municipal or provincial level. For example, Perlman and Falenchuk (2010) studied a randomly selected sample of approximately 80 subsidized centers that are part of the City of Toronto's quality assurance program, which comprise about 70% of

all centers in Toronto. Quality scores were somewhat lower than they were for the YBIC centers, while classroom interaction scores were comparable or somewhat higher than reported in US studies (e.g., Mashburn et al. 2008). The paucity of research findings about the quality of ECEC programs in Canada highlights the need for more empirical research, but the limited data suggests there is much room for improvement.

Nevertheless, a number of quality improvement efforts are currently under way across the country; we highlight three initiatives. Alberta is the only province with a voluntary accreditation program for regulated ECEC and school-aged programs and family home care agencies. Accreditation requires adherence to quality standards that exceed provincial requirements using a self-assessment process (Alberta Association for the Accreditation of Early Learning and Care Services 2013). Funding is provided to accredited programs for wage enhancement and professional development. Manitoba has a quality monitoring program based on annual assessments of one classroom per center using the ECERS-R by trained observers. Finally, the City of Toronto operates a Quality Rating and Improvement System using a measure that they have developed and are now testing; trained analysts assess all participating classrooms annually, and scores are posted online (Toronto Operating Criteria Ratings 2013). Other Ontario municipalities have adopted (Thunder Bay) or are considering (Region of Peel) similar programs using the Toronto system.

What Do We Know About ECEC Program Quality in Quebec? The QLSCD study (Japel 2008; Japel et al. 2005; Jetté and Des Groseilliers 2000) using French versions of the ECERS-R (Harms et al. 1998) and the Family Day Care Rating Scale (Harms and Clifford (1989)) and the Quebec Grandir en qualité study (Drouin et al. 2004) employing a Quebec-developed measure of quality that is similar to the ECERS-R both demonstrated that the overall quality of child care settings was in the "minimal" range (Japel 2012). For example, in the QLSCD study, 61% of settings fell in the "minimal" range, 12% were rated as inadequate, and only 27% were "good" or better. Overall, these settings met children's basic custodial needs, but were failing to enhance their developmental needs. The two studies also revealed auspice differences; CPE centers were rated higher in quality than for-profit centers, while CPE homes were rated higher than unlicensed homes. These differences were even more striking when examined at the high end of the quality ratings: 35% of center-based CPE and 29% of home-based CPE care were rated as "good" or better compared to 14% of for-profit and 10% of unlicensed home care. For-profit centers and unlicensed home settings were more likely to be rated as "inadequate" than the two CPE settings (Japel et al. 2005; Japel 2012; Bigras et al. 2010).

Japel (2012) also addressed the principle of developmental programing (i.e., curriculum) designed to facilitate children's social, emotional, cognitive, language, and physical development (Jacobs and Adrien 2012). As Japel notes, developmental programing is an aspect of quality and was assessed in both the QLSCD and Grandir studies with disappointing results, which was also replicated for infants by Bigras et al. (2010) and for preschoolers by Howe et al. (2011). The QLSCD data also revealed that both center- and home-based CPEs offered more developmentally appropriate programing than for-profit or unlicensed home settings (Japel et al. 2005;

Japel 2012). The Ministry introduced a plan to improve center-based quality in 2004, but placed responsibility on the centers and did not provide funding to support the initiative (Japel 2012). To our knowledge, this initiative has not been evaluated, and it is uncertain if the quality of ECEC services in Quebec has improved.

35.2 Emerging Trends

A number of emerging trends in Canadian ECEC are evident, which indicate the dynamic and continued efforts to improve the quality of services provided for children and families.

35.2.1 Governance

In the past 10 years, there has been a significant policy shift in how Canadian provinces and territories regulate, fund, and administer ECEC programs. The Northwest Territory government mandated their Department of Education to have full responsibility for ECEC programs in 1994, as did the Territory of Nunavut (1990). Since 2006, five more provinces have shifted responsibility to their Ministries of Education, although the scope and depth of the integration of ECEC services within Education ministries varies, since kindergarten and child care programs are regulated by separate pieces of legislation. Curriculum is distinct for each program, although some jurisdictions have worked toward establishing linkages between the two programs. The cause for the shift in policy to Education ministries is not clear, but regardless of the governance model, jurisdictions are attempting to develop a more systematic approach to ECEC. Further, in 2012, the Council of Ministers of Education of Canada endorsed a position statement on the importance of play-based learning, highlighting the importance of curriculum in ECEC programs in Canada.

35.2.2 Curriculum

Curriculum is at the heart of the child's day and is focused on the range of learning activities provided for children. All jurisdictions have regulations regarding children's programing (Jacobs and Adrien 2012). Quebec was the first to develop a pedagogical plan in 1997 (revised in 2007) to complement the policy of universal child care (Government of Quebec 2007). By 2013, eight other jurisdictions had developed early learning curriculum frameworks (see Langford 2012 for a discussion of the first four provinces to embark on this trend). Across the country these frameworks are intended to promote reflective practice, be sensitive to cultural and linguistic differences, be representative of families and communities, and are not a

list of required activities. They include statements about primary goals that include child well-being, fostering relationships, and learning environments with an emphasis on children's play. This trend for social-constructivist, postmodernist frameworks has been influenced by international developments (e.g., Italy's Reggio Emilia, New Zealand's Te Whāriki approaches), although provincial and territorial officials have also collaborated on their initiatives. Langford argues that this trend was partly prompted by the desire "to foster the integration of the traditional divide between care and education" (p. 209).

Currently, ongoing collaborative efforts among provinces regarding early learning curriculum frameworks are focusing on the development of monitoring tools for implementation, communication with parents, bridging early learning curriculum frameworks with school-based kindergarten curriculum, and the development of assessment approaches to determine the impact on children. To date, only a few provinces are evaluating the implementation strategies; in many, the process is unfolding.

35.2.3 Human Resources

Human resource is one area that has received research attention. Recently, a study of human resources in regulated center-based ECEC programs across Canada called the You Bet We Still Care! study was conducted (Flanagan et al. 2013), which built on two earlier studies (Canadian Child Day Care Federation, Canadian Day Care Advocacy Association of Canada 1992; Doherty et al. 2000). Similar to all occupations in Canada (Carrière and Galarneau 2011), the ECEC workforce is aging, yet ECEC wages and retention have improved, and overall, staff report high job satisfaction except regarding wages and benefits; unionization was also associated with increased employee benefits (Flanagan et al. 2013). However, the experienced and aging workforce raises concerns about the needs of older workers and for developing recruitment strategies for new ECEC graduates.

Human Resource Strategies. To address the ongoing human resource challenges in the ECEC sector, all jurisdictions have introduced strategies to support recruitment and retention of educators, especially those with post-secondary ECE credentials. Strategies include the introduction of provincial wage grids, wage enhancement grants, bursaries, professional development grants, recruitment initiatives, and training supports. Some provinces have introduced workplace initiatives that support untrained staff in licensed centers to earn an ECE credential while maintaining their regular wages.

Staff Qualifications and Certification. In recent years, most jurisdictions now require most staff to hold some type of ECE certification, which ranges from an entry level (e.g., basic courses) to post-secondary education (Table 35.3; see Jacobs and Adrien 2012). Overall, the educational requirements for staff training and for the number in each center that require training vary widely, factors known to be associated with quality. For kindergarten teachers there is obviously less variation

since almost all have university degrees in education, but there may be variability in their ECE training; whether this variability in training impacts the quality and delivery of developmentally appropriate kindergarten programing remains to be addressed.

35.3 Conclusion

As a federated state, Canadian provinces and territories have constitutional jurisdiction for education and social services, including ECEC policy. Nevertheless, recent federal regimes have provided leadership via the promise of fiscal transfers in negotiating ECEC agreements with provincial and territorial governments. The Liberal government's 2003 Multilateral Framework Agreement on Early Learning and Child Care set goals for child care and for fiscal transfers to all jurisdictions; intergovernmental negotiations in 2004 resulted in "agreements in principle" regarding funding, quality, universality, access, and developmental nature of programs. When the Conservatives won the 2005 election, these agreements were canceled and replaced by a focus on tax incentives and direct payments to parents. Different political philosophies that view ECEC as either a national social priority or an individual parental responsibility pose challenges for the ongoing development of ECEC in Canada (Friendly and Prentice 2012).

Further, the ECEC sector faces a number of important challenges including financial pressures on the provincial and territorial governments, recruitment issues, and the loss of funding (and thus reduced operations) for organizations influential in shaping evidence-based policies by their support for research (e.g., Child Care Human Resources Sector Council; Canadian Council on Learning) and advocacy (e.g., SpeciaLink Centre for Inclusion; Child Care Advocacy Association of Canada).

However, since 2005, provincial and territorial governments have created a number of new initiatives, reflecting their leadership and collaboration. This activity has focused on the expansion of spaces, investments, increasing full-day kindergarten, establishing more systematic policy and program oversight of ECEC programs (sometimes under one ministry), and developing curricula to guide children's daily experiences. The Quebec experiment of a universal child care system has been watched intensely by the Canadian public and politicians, and its popularity has meant that publicly funded child care is now "occupying a growing place on political agendas in the rest of Canada" (Kottelenberg and Lehrer 2012, Executive summary, p. 1). For example, Prince Edward Island is instituting a new model of a publicly managed/community-based system of ECEC (Government of Prince Edward Island 2010). Alberta is moving forward with a Children's Charter including ECEC policy, while British Columbia has announced an Early Years Strategy, and the Northwest Territory has a new Early Years Policy Framework. Other governments are moving forward with expansion of their ECEC sectors, including Manitoba, Saskatchewan, Quebec, and Newfoundland and Labrador.

Of course, it remains to be seen whether these changes will facilitate their desired effects (e.g., more optimal developmental outcomes for children, integration of services). One critical issue is the need for greater investment in rigorous, published ECEC research across Canada to monitor and understand the impact and effectiveness of these changes over time. Although there are similarities across jurisdictions, there continues to be significant differences in the ECEC landscape across Canada in issues such as the cost to parents, availability, universality of ECEC programs, and future policy directions. These differences raise many unanswered questions about the implications of citizens of the same country having radically different ECEC experiences.

References

Alberta Association for the Accreditation of Early Learning and Care Services. (2013). Retrieved from http://www.aelcs.ca

Arnett, J. (1989). Caregivers in day-care centers: Does training matter? *Journal of Applied Developmental Psychology, 10*(4), 541–552.

Baker, M., Gruber, J., & Milligan, K. (2008). Universal child care, maternal labor supply, and family well-being. *Journal of Political Economy, 116*, 709–745.

Ball, J. (2012). Federal investments in strengthening indigenous capacity for culturally based early childhood education and care. In N. Howe & L. Prochner (Eds.), *Recent perspectives on early childhood education and care in Canada* (pp. 337–366). Toronto: University of Toronto Press.

Bigras, N., Bouchard, C., Cantin, G., Brunson, L., Coutu, S., Lemay, L., Tremblay, M., Japel, C., & Charron, A. (2010). A comparative study of structural and process quality in centre-based and family-based child care services. *Child & Youth Care Forum, 39*, 129–150.

Canadian Child Care Federation. (2007). *National statement on quality early learning and child care*. Ottawa: Canadian Child Care Federation.

Canadian Child Day Care Federation, Canadian Day Care Advocacy Association. (1992). *Caring for a living: A study on wages and working conditions in Canadian child care*. Ottawa: Canadian Child Day Care Federation.

Carrière, Y., & Galarneau, D. (2011). *Delayed retirement: A new trend?* Perspectives on labour and income, component of Statistics Canada catalogue no. 75–001-X. Retrieved from http://www.statcan.gc.ca/pub/75-001-x/2011004/article/11578-eng.pdf

Childcare Resource and Research Unit. (2010). *The state of early childhood education and care in Canada 2010: Trends and analysis*. Toronto: CRRU Publisher; www.childcarecanada.org

Cleveland, G. (2012). The economics of early childhood education and care in Canada. In N. Howe & L. Prochner (Eds.), *Recent perspectives on early childhood education and care in Canada* (pp. 80–108). Toronto: University of Toronto Press.

College of Early Childhood Educators. (2011). *Code of ethics and standards of practice: Recognizing and honouring our profession*. Toronto: College of Early Childhood Educators.

Côté, S. M., Boivin, M., Nagin, D. S., Japel, C., Xu, Q., Zoccolillo, M., & Tremblay, R. E. (2007). The role of maternal education and nonmaternal care services in the prevention of children's physical aggression problems. *Archives of General Psychiatry, 64*, 1305–1312.

Doherty, G., Lero, D., Goelman, H., LaGrange, A., & Tougas, J. (2000). *You bet I care! A Canada-wide study on wages, working conditions, and practices in child care centres*. Guelph: Centre for Families, Work, and Well-Being, University of Guelph.

Drouin, C., Bigras, N., Fournier, C., Desrosiers, H., & Bernard, S. (2004). *Grandir en qualité 2003. Enquête québécoise sur la qualité des services de garde éducatifs*. Quebec: Institut de la statistique du Québec.

Flanagan, K., & Beach, J. (2010). *Examining the human resource implications of emerging issues in Early Childhood Education and Care (ECEC)/communications strategy development: Inclusion*. Ottawa: Child Care Human Resources Sector Council.

Flanagan, K., Beach, J., & Varmuza, P. (2013). *You bet we still care! A survey of centre-based early childhood education and care in Canada: Highlights report*. Ottawa: Child Care Human Resources Sector Council.

Friendly, M., & Prentice, S. (2009). *About Canada: Childcare*. Winnipeg: Fernwood.

Friendly, M., & Prentice, S. (2012). Provision, policy, and politics in early childhood education and care in Canada. In N. Howe & L. Prochner (Eds.), *Recent perspectives on early childhood education and care in Canada* (pp. 50–79). Toronto: University of Toronto Press.

Friendly, M., Doherty, G., & Beach, J. (2006). *Quality by design: What we know about quality in early learning and child care, and what do we think? A literature review*. Toronto: Childcare Resource and Research Unit.

Friendly, M., Halfon, S., Beach, J., & Forer, B. (2013). *Early childhood education and care in Canada 2012*. Toronto: Childcare Resource and Research Unit.

Geoffrey, M. C., Côté, S., Giuère, C.-E., Dionne, G., Zelazo, P. D., Tremblay, R. E., Boivin, M., & Seguin, J. R. (2010). Closing the gap in academic readiness and achievement: The role of early childcare. *Journal of Child Psychology and Psychiatry, 51*, 1359–1367.

Goelman, H., Doherty, G., Lero, D. S., LaGrange, A., & Tougas, J. (2000). *You bet I care! Report 2: Caring and learning environments: Quality in child care centres across Canada*. Guelph: Centre for Families, Work, and Well-being, University of Guelph.

Goelman, H., Forer, B., Kershaw, P., Doherty, G., Lero, D., & LaGrange, A. (2006). Towards a predictive model of quality in Canadian child care centers. *Early Childhood Research Quarterly, 21*(3), 280–295.

Government of Ontario. (1990). Education Act, R.S.O., Chapter E.2, Section 264.1. (2013). Retrieved from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e02_e.htm

Government of Ontario. (2012). *Modernizing child care in Ontario: Sharing conversations, strengthening partnerships, working together. Discussion paper*. Toronto: Ministry of Education.

Government of Prince Edward Island. (2010). *Securing the future for our children – Preschool excellence initiative*. Charlottetown: PEI: Author.

Government of Quebec. (2007). *Meeting early childhood needs: Quebec's educational plan for childcare services*. Quebec: Government of Quebec.

Haeck, C., Lefebvre, P., & Merrigan, P. (2012, September). Quebec's universal childcare: The long term impacts on parental labour supply and child development. *Journal of Labor Economics*, Retrieved from http://www.er.uqam.ca/nobel/r15504/pdf/ChildcareV55.pdf

Halfon, S., & Friendly, M. (2013). *Inclusion of young children with disabilities in regulated child care in Canada. A snapshot: Research, policy and practice*. Toronto: Childcare Resource and Research Unit.

Harms, T., & Clifford, R. (1989). *Family day care rating scale*. New York: Teachers College Press.

Harms, T., Clifford, R., & Cryer, D. (1998). *Early Childhood Environmental Rating Scale-Revised*. New York: Teachers College Press.

Howe, N., & Prochner, L. (2012). *Recent perspectives on early childhood education and care in Canada*. Toronto: University of Toronto Press.

Howe, N., Jacobs, E., Vukelich, G., & Recchia, H. (2011). In-service professional development and constructivist curriculum: Effects on quality of child care, teacher beliefs, and interactions. *Alberta Journal of Educational Research, 57*, 353–378.

Jacobs, E., & Adrien, E. (2012). Canadian child care regulations regarding training and curriculum. In N. Howe & L. Prochner (Eds.), *Recent perspectives on early childhood education and care in Canada* (pp. 109–146). Toronto: University of Toronto Press.

Japel, C. (2008). *Factors of risk, vulnerability and school readiness among preschoolers: Evidence from Quebec. Choices, 14, 1–42*. Montreal: Institute for Research on Public Policy.

Japel, C. (2012). The Quebec child care system: Lessons from research. In N. Howe & L. Prochner (Eds.), *Recent perspectives on early childhood education and care in Canada* (pp. 285–307). Toronto: University of Toronto Press.

Japel, C., & Welp, C. (2009). Lessons to be learned from Québec's child care system. In *Beyond children's play: Caring for and educating young children in Canada*. Canadian Centre for Policy Alternatives.

Japel, C., Tremblay, R. E., & Côté, S. (2005). *Quality counts! Assessing the quality of daycare services based on the Quebec longitudinal study of child development. Choices, 11, 1–42*. Quebec: Institut de la statistique de Quebec.

Jetté, M., & Des Groseilliers, L. (2000). *Description and methodology. Quebec Longitudinal Study of Child Development (QLSCD 1998–2002)* (Vol. 1, pp. 1–60). Quebec: Institut de la statistique de Quebec.

Kottelenberg, M. J., & Lehrer, S. F. (2012). *New evidence on the impacts and access to and attending universal child care in Canada* (Working paper No. 105). Canadian Labour Market and Skills Researcher Network. http://www.nber.org/papers/w18785

Langford, R. (2012). Innovations in provincial early learning curriculum frameworks. In N. Howe & L. Prochner (Eds.), *Recent perspectives on early childhood education and care in Canada* (pp. 206–228). Toronto: University of Toronto Press.

Lefebvre, P., & Merrigan, P. (2008). Childcare policy and the labor supply of mothers with young children: A natural experiment from Canada. *Journal of Labor Economics, 26*, 519–548.

Lefebvre, P., Merrigan, P., & Verstraete, M. (2009). Dynamic labour supply effects of childcare subsidies: Evidence from a Canadian natural experiment on universal child care. *Labour Economics, 16*, 490–502.

Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D., et al. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development, 79*, 732–749.

McCain, M. N., Mustard, J. F., & McCuaig, K. (2011). *Early years study 3: Making decisions, taking action*. Toronto: Margaret & Wallace McCain Family Foundation.

OECD. (2006). *Starting strong II early childhood education and care*. Washington, DC: Organization for Economic Co-operation and Development: Author.

Ontario Ministry of Education. (2013). *Full-day kindergarten*. Retrieved from http://www.edu.gov.on.ca/kindergarten/memosummary.html

Pascal, C. E. (2009). *With our best future in mind: Implementing early learning in Ontario*. Special report to the premier by the special advisor on early learning.

Perlman, M., & Falenchuk, O. (2010). *Does the City of Toronto's measure of child care centre quality work as intended?* Report written for the city of Toronto, Ontario.

Peters, R. D., Howell-Moneta, A., & Petrunka, K. (2012). Community-based early child development projects. In N. Howe & L. Prochner (Eds.), *Recent perspectives on early childhood education and care in Canada* (pp. 308–336). Toronto: University of Toronto Press.

Territory of Nunavut: Government of Nunavut. 1990. *Child Day Care Act: Consolidation of Child Day Care Standards regulations*. R.R.N.W.T., c.C-3.

Toronto operating criteria ratings: Quality child care. (2013). Retrieved from http://www.toronto.ca/children/quality.html

United Nations Children's Fund (UNICEF). (2008). *The child care transition. Innocenti report card 8, 2008*. Florence: Innocenti Research Centre http://unicef.ca/portal/Secure/Community/502/WCM/HELP/take_action/Advocacy/rc8.pdf.

Chapter 36
Early Childhood Teacher-Child Relationships in the United States: Theory, Practices, and Regulation

Sandra Soliday Hong and Promjawan Udommana

Abstract Early care and education (ECE) programs in the United States are increasingly focused on children's school-readiness skills in addition to early socialization, and quality rating and improvement systems (QRIS) have highlighted the important role of teacher-child relationships in supporting children's learning in ECE programs. This chapter describes the role of high-quality teacher-child relationships for ECE and QRIS in the US context. Based on developmental theory and research, we define effective teacher-child interactions as teachers who are warm, sensitive, and responsive to the needs of children while providing well-organized classroom experiences and intentional interactions with children. With an increasing number of children from bilingual households participating in the US ECE programs, we also discuss teachers' sensitivity to children's language, home culture, and backgrounds as it promotes learning and creates trusting relationships among teachers and children in ECE.

Keywords Child care quality • School readiness • Early care and education

In past decades, parents and practioners agreed that the mission of early childhood care and education (ECE) was to design programs where children feel safe, have positive relationships with teachers and peers, and are motivated to learn. However, in the United States the mission has shifted to also include school readiness, defined as children's cognitive, academic, and socio-emotional achievement (Howes 2010). An increased emphasis on school readiness rather than exclusively focusing on early socialization as the primary outcome of early care and education services in the United States has resulted in a reconceptualization of the role of teacher-child

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relationships (Gilliam 2009; Pianta et al. 2002). Safe, trusting relationships with teachers and peers in early learning settings are now considered to lay the foundation for children to access learning across developmental domains, including helping children learn what they need to know in order to be successful in the formal k-12 schooling context.

A focus on positive teacher-child relationships to facilitate children's early socialization with teachers and peers can be linked to observed moderate to high levels of emotional support in most early care and education classrooms (Howes et al. 2008; La Paro et al. 2004; Mashburn et al. 2008). Unfortunately, these same observational studies report primarily low to moderate levels of instructional support where teachers appear less able to responsively guide children's learning (Pianta et al. 2009).

Theoretical perspectives on early care and education maintain that the focus on the instruction of academic content is effective only when it is embedded within high-quality teacher-child interactions with the goal of simultaneously supporting social and emotional development (Göncü et al. 2010; Pianta et al. 2009). Teachers who engage in sensitive and responsive interactions with children lay a foundation to also provide effective instruction in school-readiness activities. In this chapter we discuss child-teacher interactions that promote school readiness within the context of positive teacher-child relationships. First, we begin by describing the policy context of ECE in the United States. Next, we discuss the theoretical foundations and current practical definitions of the construction of positive teacher-child relationships, and the ways in which children from different backgrounds, languages, and experiences are influenced by their relationships with teachers and peers. Finally, the chapter examines how different systems of state or ground-up stakeholder systems attempt to regulate the quality of classroom environmental context and the consequences of this regulation for the formation of relationships.

36.1 The Early Care and Education Context

Early care and education (ECE) for young children in the United States is delivered through a variety of formal and informal child care settings that comprise a loose network of services for young children within a range of program settings, goals, oversight, and funding sources until kindergarten entry at approximately age five. During the remaining early childhood years, children in the United States largely participate in the formal public education system. Many states also include kindergarten-third grade in their definition of early education, but this refers mostly to a philosophical position than one related to regulations that govern care for young children. Although recent federal policy initiatives have sought to unify services for children prior to kindergarten entry into a more cohesive system through the development of quality rating and improvement systems (QRIS; U.S. DoE &

U.S. DHHS 2011), it is difficult to describe any one setting as prototypical of children's experiences in ECE in the United States.

For lack of a better term, Kagan (2012) described this loose-knit set of services for children prior to kindergarten entry as the "Early Care and Education System." ECE settings prior to kindergarten entry include public prekindergarten classrooms (pre-k), private center, and home-based licensed care that are regulated for compliance to health and safety standards to varying degrees of quality and a variety of unregulated care provided by family, friends, and neighbors (Barnett et al. 2009). These various care settings also view themselves as having different purposes and goals for the families and children that they serve which may include socialization and/or education of children for school entry, care for children while their parents work, or as targeted interventions for children growing under adverse circumstances. Additionally, they may be funded in part or wholly by private fees paid by parents or public and private dollars from varying sources. Young children may experience multiple regular care arrangements across a day, week, or month (Morrissey 2009).

At the national level, the federal government oversees several ECE programs that provide oversight and funding which states may use toward services for young children before kindergarten entry. All of these ECE systems participate in the QRIS umbrella that attempts to build a discrete set of criteria by which to judge and improve the quality of ECE services in the United States and to encourage the development of a more formalized system through a competitive grant process established by the federal government (Tout et al. 2010; U.S. DoE & U.S. DHHS 2011; Zellman and Fiene 2012). QRIS are intended to bring together ECE systems that exist at the local and state level (Clifford 2012).

36.1.1 *Significance of Children's Relationships with Teachers Within the Context of United States ECE Quality*

The increased participation of young children in ECE programs has raised public concerns about whether children receive high-quality care in out-of-home care settings that can support both their social-emotional development and school readiness. Results from large-scale studies in the United States have shown that children, regardless of their socioeconomic backgrounds, do well in school socially and academically if they attend high-quality ECE programs where they can interact with and are cared for by adults in a responsive and respectful manner (Howes et al. 2008; Mashburn et al. 2008).

ECE quality is a multilevel and multidimensional construct that includes various program and classroom features that are related to positive child outcomes in the academic and social domains (Göncü et al. 2009; Mashburn et al. 2008; Pianta et al. 2005). Two broad dimensions are often used to capture quality in the US ECE

programs. The first dimension is commonly referred to as structural quality, or aspects of the classroom environment that can be regulated, such as space and furnishings, learning activities, and services available for children and families. It also includes features of the program such as a class size, teacher-to-child ratio, teachers' educational backgrounds, and years of teaching experience which are legally regulated in licensed programs. The latter dimension, which involves children's direct experiences, has been defined as process quality. Process quality includes both interactions and relationships between teachers and children.

36.2 Theories on Teacher-Child Relationships

In order to understand the reality of teacher-child relationships, we must examine how children form them and how theories and how knowledge about child development inform us about the multiple factors influencing children's relationships. In order to provide a full picture of what ECE quality involves and requires, we seek to integrate theories of different orientations related to the definition of ECE quality in the United States.

36.2.1 Affective Theories

The affective and trust dimensions of high-quality teacher-child relationships are rooted in attachment theory (Ainsworth et al. 1978; Bowlby 1982; Bretherton 1985). Much like the process children go through in forming attachment relationships with their parents, the hypothesized criteria for young children to develop attachment relationships with caregivers other than their mother are (1) provision of physical and emotional care, (2) continuity or consistency in a child's life, and (3) emotional investment in the child (Howes and Spieker 2008). As children experience sensitive responses from caregivers to their bids for attention and comfort when they are distressed, tired, or hungry, they are more likely to form secure relationships with their mother and other caregivers and subsequently have access to interactions that support their learning and development (Göncü et al. 2010; La Paro et al. 2004; Stuhlman and Pianta 2002). In a similar vein, children need to feel safe to try new things, make mistakes, engage in scaffolded interactions with caregivers, and form secure attachment relationships to develop the schema through which children can access learning in ECE programs (Göncü et al. 2010; La Paro et al. 2004; Stuhlman and Pianta 2002).

The affective and trust dimensions of high-quality teacher-child relationships can be understood from teacher-child attachment quality. In the United States, the research that has been done on teacher-child relationship found that children who are securely attached to their teachers seek and accept comfort from them. Children who have conflicted relationships with their teachers, on the other hand, do not seek

help from them or are still fussy when teachers respond to them (Howes and Ritchie 2002). The observed and perceived quality of teacher-child relationships can be described through different types of attachment quality classifications (Howes and Ritchie 1999). The teacher-child relationship can also be captured by how a teacher perceives his/her relationship with a child. Using the Student Teacher Rating Scale, Pianta classified the quality of teacher-child relationship into closeness, conflict, and dependency (Pianta 2001).

36.2.2 Systems Theory

The focus of definitions of ECE quality on relational and institutional systems draws upon Bronfenbrenner's ecological theory of human development (Bronfenbrenner 1979; Bronfenbrenner and Morris 1998). According to systems theory, a child's experiences are shaped by his/her proximal and distal environments, which are influenced by one another in a bidirectional manner. Systems theory provides contextual dimensions to understand the nature of teacher-child relationships. First, it explains what factors directly and indirectly influence how teachers respond to children's needs, which in turn affect the quality of teacher-child relationships. For example, research has shown that in classrooms with low adult-child ratios, teachers were more supportive of children's needs, respectful of the child's autonomy, developed a better classroom structure, and expressed less negative instructions, especially for younger children (De Schipper et al. 2006). As reflected at a policy level, many states have issued child care regulations, such as teacher-to-child ratio and teacher qualifications to ensure the quality of teacher-child interactions, which in turn affect the quality of teacher-child relationships. Alternately, focusing on the classroom context as a whole provides information about the interactions between teachers and peers at the group level. When teachers and children come from different cultural backgrounds, unconscious bias or a mismatch in interaction styles may prevent teachers from forming positive relationships with children (Wishard et al. 2003). Therefore, teacher-child relationship cannot be understood only when focusing on an individual child but also at the within the class as a group and external factors that influence the child's experience within the group.

36.2.3 Sociocultural Theories

Sociocultural theorists suggest that to understand a child's experience in ECE programs, we must also pay attention to how children and teacher participate in their cultural communities (Göncü et al. 2009; Howes 2010). Cultural communities in the United States are defined as groups of people who share common values, understanding, history, and practices (Rogoff 2003). A cultural community can be defined as a single ethnic community, a community that consists of people from different

backgrounds or even a group of early childhood professionals that share their practices, values, and goals. In order to understand how teachers and children participate in their cultural community, we must pay attention to children, teacher, and program everyday practices as secure relationships are formed through rituals and routines that allow children to predict what is going to happen next. Children, teachers, and directors engage in practices and activities that reflect their values in the cultural community. For instance, in the study of teacher and program practices across ECE programs in the African American, Latino, Caucasian, and multicultural communities in the United States, children across these cultural communities did form positive relationships with their teachers, even though there were various degrees to which adults expressed warmth toward children, levels of the child's accessibility in receiving attention, and the number of adults that the child expected to seek comfort from (Howes 2010). This suggests that there are multiple pathways for children to form positive and secure relationships with teachers which facilitate their learning by allowing them to feel safe to access the teacher and explore the classroom environment.

To sum up this section, the three perspectives must be integrated in order to provide a full picture of the construct of teacher-child relationships defined in the United States. Attachment theory provides the affective and trust dimensions of high-quality teacher-child relationships. Systems theory broadens our understanding of teacher-child relationship by including multiple factors associated with how teachers and children form their relationship beyond the classroom level. Sociocultural theory informs us that children and teachers construct their relationships through their practices within cultural communities.

36.2.4 Broadening the Theoretical Frame for the Role of Teacher-Child Relationships in Child Care Research in the United States

Taking these theoretical lenses into the US ECE context, we can define effective teacher-child interactions as those which are warm, sensitive, and responsive to the needs of individual children, to the groups of children, and to the classroom as a whole while promoting children's learning (Göncü et al. 2010; Howes et al. 2008, 2013; Pianta et al. 2005, 2008a, b, 2009). Within effective interactions, teachers have specific learning goals in mind and skillfully set up and facilitate learning experiences using a variety of instructional strategies, including explicit instruction. Within classrooms children are actively engaged with materials, lessons, and activities that promote their individual growth and development through interaction with the teachers and peers. Teachers have an understanding of each child's knowledge and developmental level and design content that is engaging and of interest to the children in his or her classroom. Rote memorization of facts is deemphasized while children's engagement in exploration and construction of meaning.

Using these guiding theories, several measures of teacher-child interactions and relationships have been designed and used in large-scale observational studies of ECE in the United States. The Observation Ratings of the Caregiving Environment (ORCE) was based on attachment theory and was developed by the National Institute of Child Health and Human Development (NICHD) for observations of caregiving across both parental and nonparental contexts. Positive caregiving behaviors measured by the ORCE, both in terms of quality and quantity ratings, can be defined as sharing positive affect, responding to infants' behavior, and stimulating cognitive and social development. The Adult Involvement Scale (Howes and Stewart 1987) captures the intensity of caregiver-child involvement, which ranges from low level of involvement such as monitoring and having minimal contact with the child to high levels of involvement such as touching, having an elaborated conversation, or engaging in focused pretend play with the child.

In addition, measures of global classroom quality include teacher-child relationships and interactions as a part of a contextualized definition of child care quality. Both the Environment Rating Scales (ERS; Harms et al. 1998) and the Emerging Academic Snapshot (EAS; Ritchie et al. 2001) include ratings of teacher-child interaction. The ERS include the infant/toddler, preschool, and family child care versions and are widely used in the national studies of child care quality across the United States (Early et al. 2006; Pianta et al. 2005). The measure includes several domains including space and furnishings, personal care and routines, language, activities, interactions between and among children and teachers, program structure, and provision for parents and staff.

Unlike the ERS, which is commonly used to describe an overall quality of the ECE settings, the EAS is focused more on defining a moment to moment of children's direct experiences in the ECE programs. Based on a time-sampling procedure, the EAS is used to capture aspects of the activities in which children are engaged, teacher-child engagements in pre-academic activities, and types of teacher-child interactions. The activity settings described in this measure include free choice, basics, meals, whole group, small group, individual time, outdoor, or unengaged. The pre-academic engagement involves children's engagement in pre-reading, letter-sound, math/number, social studies, oral language development, gross motor, and others. The teacher-child interaction domain describes different types of the interactions including teacher's engagement in routine caregiving of a child, teacher's engagement in child's physical response, teacher's scaffolding, and teacher's didactic approach in giving instruction.

It was not until recently that research on child care quality in the United States specifically focused on the interactions of teachers and children at the classroom level. This might come from the fact that targeting interactions at the classroom level allows teachers to reflect, evaluate, and improve their teaching behaviors as a whole. With the use of the Classroom Assessment Scoring System (CLASS), teacher-child interactions fall into three domains including the social-emotional and instructional climate of a classroom and classroom organization (Pianta et al. 2008a, b). Based on this perspective, a classroom with high levels of social-emotional support is comprised of children who feel safe, play, and work cooperatively with others and have

lower levels of aggression. On the contrary, a classroom with a negative emotional-climate consists of a classroom with high levels of behavior problems and lower levels of teacher-child closeness (Howes 2000; Howes and Ritchie 2002). Classrooms that score high on instructional support involve teachers who provide a higher order of thinking, are responsive to children's feedback, and encourage children's language development. Well-organized classrooms indicate the teachers' ability to effectively manage routines, redirect a child or children's behavior, and maximize learning activities (La Paro et al. 2004; Pianta et al. 2008a, b).

In summary, the construct of teacher-child relationships and interactions is used to define quality within the US ECE programs. They can be understood from different dimensions ranging from specific caregiving behaviors to interactions among individuals in a classroom. The quality of teacher-child relationships and interactions can be observed, rated, and classified on individual, dyad, and classroom levels, and these measures influence the multifaceted construct definition of teacher-child relationships in US research which will be integrated and described more broadly in the next section.

36.3 Quality of Teacher-Child Relationships and Effective Teaching

Skillful teaching is much more than teaching lessons through rote memorization, but instead involves the application of beliefs about how children learn through strong instructional and emotional support that is sensitive to the needs of students (Hamre and Pianta 2005). A skilled teacher of young children will build an individualized teaching plan that incorporates the interests of all children to support academic learning such as math, science, and social studies, in addition to social skills, confidence, and an enthusiasm for learning (Göncü et al. 2009; Grunlund 2001; Pianta et al. 2009).

Skillful or effective teacher-child interactions are important for children's learning during early childhood, but are also predictive of children's learning into the early elementary years. In one study, children's ability to form relationships with their teachers in kindergarten remained a significant predictor of academic and behavioral outcomes in early elementary school, with mediated effects through the eighth grade (Hamre and Pianta 2001). When kindergarten teachers reported a high degree of conflict and overdependency, especially for boys, this was associated with academic outcomes through elementary and middle school. Additionally, emotional support was positively associated with social competence and negatively associated with problem behaviors (Mashburn et al. 2008). The implementation of high-quality instructional support in first grade was also related to improvement of student scores for children identified as at risk in kindergarten in another study (Hamre and Pianta 2005).

Other studies linking teacher-child relationships to children's social outcomes, children who develop positive earlier relationships with their teachers, were found

to later display pro-social behavior toward peers, had a lower levels of anxiety, and were less likely to become a victim of peer aggression than children who had less positive previous relationships with their teachers (Howes 2000; Howes et al. 2011). Moreover, in a study of family child care centers, toddlers and preschoolers' positive social integration with peers, engagement in activities, and displays of positive mood were associated with caregiver provider's behavior of supportive and structured care (Kryzer et al. 2007).

In alignment with systems theory, previous definitions of child care quality took into account the physical environment of the child care setting and assessed the availability of learning materials. However, simply having materials and classroom environments in place may not translate into effective implementation (Gilliam 2009; Zaslow et al. 2006). Several large studies in the United States have found a lack of association between classroom environments and significant effect sizes on development even when programs have an explicit focus on education (Burchinal et al. 2000; ßGordon et al. 2012; Pianta 2003; Pianta et al. 2009). Therefore, a more explicit emphasis on aspects of teacher-child relationships that promote school readiness may be warranted in addition to the more easily measured and improved aspects of structural quality.

Language and literacy are related academic domains where there is need for effective instructional support, as language and literacy skills are highly related to children's academic outcomes (Snow 2006; Pianta et al. 2008a, b). High-quality teaching practices in the domain of language and literacy include "meaningful literacy" activities, including reading books aloud and then talking about them, embedding reading and writing activities in language-rich play, and encouraging children to use mixtures of drawing and unconventional writing to express themselves (Snow 2006). Other evidence-based strategies are modeling advanced vocabulary, explicitly describing phonological structures and print concepts, asking open-ended questions, and repeating and extending children's utterances (Justice et al. 2008). The whole language and literacy instruction, even in publicly funded preschool programs with bachelor's level teachers, tends to be of low quality (Justice et al. 2008).

While a focus on academic content in ECE can be implemented effectively within the basis of developmental theory, the use of highly focused and scripted curriculum with young children has led to concerns about the disappearance of exploration-based play in ECE settings in the United States (Göncü et al. 2010). For example, one strategy to increase children's scores on standardized tests has been to increase the amount of time given to didactic instruction or the dosage of instruction in the classroom schedule that children receive which is scripted and not in direct response to student needs (Thames et al. 2006). The "time factor" is considered to be one of the most important components of these programs. Given the high proportion of the day that children are required to be in their seat receiving direct instruction in reading, it is to be expected that children would be learning reading skills at a higher and faster rate (Donat 2006). However, kindergarteners who began an intense direct reading curriculum and continued consistently through third grade underperformed on measures of independent and oral reading skill, comprehension, word

recognition, and decoding and had higher frustration levels compared to students who began direct reading instruction at later grades (Thames et al. 2006). A potential reason for this is that very little emphasis in these curricula is given to decoding new words, reading comprehension, or even enjoyment which could occur in the midst of child-centered instruction and play in a balanced classroom schedule, but instead focuses almost exclusively on standardized measures of pre-reading such as letter recognition, rhyming, letter sounds, and spelling.

While effective teacher-child interactions with a focus on academic content and scripted, high-dosage academic curricula seem to be carried out in opposition of one another, developmental theory would suggest that skilled teachers can facilitate all domains of children's development through intentional, scaffolded interactions. The reality is that teachers do not always know how to do so (Howes et al. 2013; Pianta et al. 2009). Therefore, intentional teacher-child interactions within positive teacher-child relationships that facilitate children's learning and development have been incorporated into recent system-building initiatives in the United States.

36.4 Differential Effects of Teacher-Child Relationships for Children from Diverse Backgrounds

Children may experience teacher-child relationships within ECE contexts differently based on the ways that their current and former experiences have shaped their development. Individual factors that may influence children's experiences in ECE include socioeconomic risk, language and migration experiences, and participation in various cultural communities. As such, the following section will address the experiences of children from diverse backgrounds in the view of US research.

36.5 Teacher-Child Interactions as a Mediator of the Association Between Being at Risk and Low School Readiness

The compensatory hypothesis posits that children may derive greater benefits from higher quality and effective teacher-child interactions if aspects of their temperament, experiences, home environment, and greater developmental context place them at increased risk for lower school readiness than other children who face lower levels of risk and relatively higher levels of developmental advantage (Sameroff and Chandler 1975). For example, any detrimental effects associated with poverty have a greater effect during early childhood on cognitive development and educational attainment, and poor children are more likely to display problem behaviors and social-emotional problems, resulting in classroom environments with more aggressive peers (Dearing et al. 2006). The research base on child care quality and

specifically intervention programs like Head Start provide some support for this hypothesis including risk related to socioeconomic status/uneven development, language, ethnicity, and migration backgrounds of children (Burchinal et al. 2000; Dearing et al. 2009; Gormley et al. 2005; Keys et al. 2013; Magnuson et al. 2007; Peisner-Feinberg et al. 2000).

Intervention efforts have the strongest rate of economic return with disadvantaged families (Bierman and Erath 2006; Dearing et al. 2006; Heckman 2006). Several studies in the United States have demonstrated the positive long-term benefits of ECE programs as interventions for low-income children and children at risk (Campbell et al. 2001; Schweinhart 2005; Zill et al. 2003). These benefits included higher scores on cognitive and academic tests, as well as higher attainment in adult education levels, economic performance, crime prevention, family relationships, and health in experimental and scaled-up programs that are designed as interventions for low-income children, including the Abecedarian Intervention Project, High/Scope Perry Preschool Project, and Head Start. However, children from lower-income families tend to experience less sensitive teacher-child interactions in typical ECE environments and caregiving that is more likely to be detached and harsh (Phillips et al. 1994). Conversely, interactions with adults within the context of ECE settings can at least partially mediate the effect of poverty-related adversity on long-term development (Blair and Raver 2012). Classrooms that run efficiently and spend less time in transitions support self-regulation skills and provide consistent classroom routines that establish clear expectations for children's behavior (Bierman and Erath 2006; Downer et al. 2010). Classroom organization is most successfully executed within a warm and supportive relationship between the teacher and the child in which the child can feel safe that the teacher will respect and show concern for their emotional state (Calkins and Hill 2007).

36.5.1 Migration and Children of Immigrants

Children growing up in immigrant families are more likely to speak a language other than English at home and are less likely to be enrolled in center-based child care or preschool than children of native-born mothers raising concern for their later school success (Magnuson et al. 2006). In the United States, the ability to understand English language is especially important because "children from different cultures and low-income households who enter school programs speaking little or no English are highly vulnerable to chronic academic underachievement and eventual school failure" (Espinosa 2005, p. 837). Given that high-quality early childhood education (ECE) has been shown to be beneficial for children of all backgrounds, and particularly for bilingual children (La Paro and Pianta 2000; Lindsey et al. 2003), and provides an opportunity for children from immigrant families to learn English (Magnuson et al. 2006), the remainder of this section examines how to best promote and support the development of children learning English as a second language within the ECE context.

36.5.2 Migration and Dual Language Acquisition Within the US ECE Context

Language interactions in the classroom are critical for children's development, and the emphasis is not on the particular language being used but the concepts and vocabulary that are being developed through those interactions (Nixon et al. 2007). The tendency is for teachers who speak little or no Spanish in US classrooms to interact less with language minority children (Chang et al. 2007). Therefore, it is important for teachers to be aware that children need to receive language support in a language-rich environment that allows for development of vocabulary and narrative skills in the chosen language even if the teacher does not speak the child's home language (Uccelli and Paez 2007). In a classroom with children who spoke Spanish, teachers who spoke at least some Spanish had closer teacher-child relationships, and children had better social skill ratings (Chang et al. 2007; Lindsey et al. 2003). Some success has been observed when bilingual instructional support was also be provided by paraprofessionals, instructional assistants, parent volunteers, or older and more competent students when the lead teacher did not speak the child's home language (Espinosa 2005). Additionally, teachers in the United States can utilize the following strategies to support bilingual language development in the classroom:

1. Incorporate children's home language into the daily classroom activities.
2. Embed instruction in contextual cues or "double the message."
3. Rrepeat words and directions frequently focusing on simple nouns and high-frequency verbs in the second language.
4. Modify/simplify second language use to be more accessible: use short, simple sentences with more gestures, movements, and facial expressions.
5. Speak at a standard speed with some pausing between phrases.
6. Communicate respect for the child's home language and culture by learning and using even just a few words of the students' home language.
7. Use language to describe and narrate child and classroom activities (Espinosa 2005; Tabors 1998; Wong Kwok Shing 2006). Finally, teachers can encourage parents and other family members to continue to use the home language during family activities (Espinosa 2005).

Additionally, there is often an ethnic and linguistic discrepancy between largely Caucasian ECE teachers and minority students in the United States (Espinosa 2005; Howes and Shivers 2006). When children have a caregiver that does not share their ethnic/racial heritage, it may be harder for caregivers to deal with problem behaviors in a culturally familiar way (Göncü et al. 2009; Howes and Shivers 2006). Alternately, having positive, supportive relationships with teachers can help children to thrive academically and socially so cross-cultural competence is an important skill for teachers to develop (Espinosa 2005).

36.6 Regulation of the Classroom Environmental Context and Implications for Teacher-Child Relationships

The strong focus on teacher accountability for children's pre-academic gains in the Elementary and Secondary Education Act, also known as the No Child Left Behind Legislation (NCLB), in the United States implemented during the early part of the twenty-first century left many worried that a push-down effect of didactic, academic curriculum might be imposed upon programs that serve children prior to school entry (NCLB 2001). Although the spirit of NCLB that emphasized accountability for gains in children's learning does seem to have some lasting effects at the program and systems levels, the individual focus on teacher accountability has not translated into policies that affect early learning. As such, the remainder of the chapter will serve to summarize the current legislative focus as it pertains to ECE in the United States, its influence on child assessment, evaluation, and the construction of classrooms that allow for harmonious and playful relationships.

36.6.1 Quality Rating and Improvement Systems

In 2009, the American Recovery and Reinvestment Act (ARRA) was signed into law by President Barack Obama to stimulate the US economy and make investments including the education sector. In late 2011, the Race to the Top Early Learning Challenge (RTT-ELC) grant initiated a competitive grant process administered by the US Department of Education which grew out of the ARRA legislation (US DoE & US DHHS 2011). Fourteen states with some form of existing ECE infrastructure were awarded varying grants as part of the RTT-ELC in 2012.

The major method by which states intended to achieve the primary goals of the RTT-ELC was the development of statewide quality rating and improvement systems (QRIS). QRIS collect information about the quality of ECE programs, assign program-level ratings, and provide benchmarks which support programs in improving their ratings (Tout et al. 2010; Zellman and Fiene 2012). These program ratings are made publicly available to parents and policy-makers, with the intention of incentivizing voluntary improvement (Schaack et al. 2012; Zellman and Perlman 2008). Other incentives include reimbursement rates for state and subsidized programs that increase in relation to the program's QRIS rating (Tout et al. 2010). QRIS are both voluntary and compulsory depending on state requirements, and many are structured so that basic health and safety standards that are required for a program to be licensed to legally operate form the anchor at the lowest end of the rating structure and accreditation by a nationally recognized early childhood agency form the requirements for the top rating (NAEYC 2011). Ratings vary in the criteria that they include, but some of the most common elements are licensing compliance, learning environment, staff qualifications, efforts to strengthen and form partnerships with families, administration and management, and accreditation (Tout et al.

2010). Additional criteria include the use of research-based curricula, teacher-child ratios and group size, child assessment, health and safety, cultural and linguistic diversity, provisions for children with special needs, and community involvement. States have myriad goals associated with their QRIS: systems building, improving compensation for teachers and staff, and building an infrastructure of support for children and families among others, but one common, unifying goal is to improve children's school readiness and, particularly, children's growing-up contexts that place them at risk for school failure and other adverse outcomes (Mitchell 2005, 2009; Schaack et al. 2012).

A few recent studies have examined the predictability of QRIS ratings on children's outcomes and found mixed results. In a simulation study utilizing data collected before QRIS rolled out, QRIS rating criteria from 11 counties and states were applied to data from public pre-k programs, and the predictability on children's learning was examined (Sabol et al. 2013). Overall QRIS scores were not predictive of children's learning across the school year. However, examination of variations in ratings across state criteria showed that states that streamlined their ratings to focus on teacher-child relationships were more predictive of child outcomes than rating systems that were inclusive of additional criteria that may be only loosely related to children's outcomes. Another study examining a countywide QRIS which included a variety of quality measures was simulated using data collected in the same community and also found small, but statistically nonsignificant associations with children's learning (Soliday Hong et al. 2015).

36.6.2 Implications of QRIS on the Formation of Teacher-Child Relationships

Quality rating and improvement systems have been built on developmental principles; therefore QRIS design provides a renewed focus on the centrality of teacher-child relationships in shaping children's development. This emphasis has highlighted the importance of teacher-child relationships that are based on warm, secure, and responsive practice and also emphasized engaging with children in an intentional manner to nurture their learning, growth, and development within an enriched classroom environment. As discussed earlier in this chapter, quality measures that provide the strongest prediction of children's school readiness are based upon effective teacher-child interactions. Additionally, the structural and ecological contexts that support teachers' ability to construct positive and effective relationships with children are supported within the design of QRIS, including group sizes, ratios, and even environmental rating systems such as the ERS (Harms and Clifford 1989; Harms et al. 1998, 2000) that are differential by age group as well as by form of care setting; family child care and center-based care are included in QRIS design.

36.6.3 Effect of US Legislation and QRIS on the Push for Children's Pre-academic "Gains" in ECE

Education reforms in the United States during the last two decades related to the NCLB legislation led to a focus on teacher accountability for children's learning in the k-12 education system, and young children being "ready for school" (No Child Left Behind (NCLB) 2003). Unlike point-in-time academic tests used to test older children, a more comprehensive set of readiness factors were defined for young children: health and physical/motor development, emotional well-being and social competence, approaches to learning, communicative skills or language development, and cognition and general knowledge (National Education Goals Panel 1997; National Governors Association 2005). Furthermore, these goals were defined with a systemic focus on schools' readiness for children, and family and community supports and services in addition to the readiness of individual children have translated into the more recent focus on providing high-stake QRIS ratings at the school or program level rather than the teacher or child level (Child Trends 2001; Tout et al. 2010). Other accountability measures targeted at federally funded ECE programs, like Head Start, have also been implemented at the program level (U.S. DHHS & ACF 2011).

In addition to the program-level emphasis for the purposes of accountability, many states have attempted to articulate specific content knowledge and developmental goals for young children birth through school entry (Bodrova et al. 2004). These early learning standards provide a pedagogical framework and define the developmental progression of academic concepts and related developmental goals with the intention of providing consensus definitions of the skills and competencies that teachers need to have in order to achieve stated goals for children within their programs (Kagan 2012; Tout et al. 2010). Having a common pedagogical framework is essential for the many different types of programs that serve young children in the United States to begin to come together to function as a more cohesive system.

Within a QRIS framework, early learning standards have translated into the inclusion of evidence-based curriculum in ECE programs which support the teacher's ability to provide scaffolded instruction that is directly related to school-readiness goals for children as a factor in quality ratings and assessments of child outcomes which are related to early learning standards (Schultz 2009). Additionally the use of early screenings for special services and individualized instruction is also incorporated. Although there are many ways in which early learning standards and assessments of children's outcomes might serve to positively influence the quality of teaching and learning, there are also plenty of concerns. For example, standards might be set too high or too low, controversy over who sets the standards, and their potential misuse by teachers, administrators, and policy-makers (Kagan 2012).

36.7 Classrooms that Allow for Harmonious and Playful Relationships Within the Current US Policy Climate

The ways in which teachers construct relationships with children and design their classroom instruction form the foundation for classrooms that are harmonious and playful. Classrooms where children feel safe, cared for, and experience predictable classroom expectations and routines, combined with effective interactions around learning, provide the groundwork for classroom experiences that are both harmonious and playful in nature while at the same time provide intentional teacher-child interactions that promote children's development (Göncü et al. 2009; Hamre and Pianta 2001; Howes et al. 2013; Keys et al. 2013). Ideally when these practices are in place, they push the level of professionalism and sophistication of care that teachers provide for the children in their care. However, programs that require the use of multiple curricula that is highly scripted and does not allow much room for responsive interactions with children, or consumes a large portion of the program day, may restrict opportunities for playful interactions that require a closer relationship and more time.

In summary, while we know that effective teacher-child interactions that promote children's learning and development can be implemented within the context of harmonious, playful relationships, this type of teaching practice will require a level of intentionality and sophistication of caregivers and teachers for which they may not have been well equipped within our current US teacher-training system (Barnett et al. 2009; Pianta et al. 2011). Therefore, federal, state, and local policies in addition to QRIS are designed to both be realistic and aspirational in order to reward practices that promote children's school readiness in the United States.

36.8 Summary

Children regardless of age group, socioeconomic status, and cultural backgrounds benefit from having positive relationships with teachers. Based on developmental theory and its application in the research in the United States, children require repeated, predictable, and sensitive interactions to build trusting relationship with their teachers. Effective teacher-child interactions that promote school readiness within the context of positive teacher-child relationships are a reasonable expectation of ECE when done well. However, many ECE programs fall short of this goal. As such, the policy climate in the United States has shifted toward supporting high-quality ECE programs that promote the formation of positive teacher-child relationships and the overall well-being of children with the additional explicit goal of preparing children to be successful in their academic careers, particularly children growing up in contexts that may place them at risk for school failure.

References

Ainsworth, M. D. S., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale: Erlbaum.

Barnett, W. S., Friedman, A. H., Hustedt, J. T., & Stevenson-Boyd, J. (2009). An overview of pre-kindergarten policy in the United States: Program governance, eligibility, standards, and finance. In R. C. Pianta & C. Howes (Eds.), *The promise of pre-K*. Baltimore: Paul H. Brookes Publishing Co..

Bierman, K. L., & Erath, S. A. (2006). Promoting social competence in early childhood: Classroom curricula and social skills coaching programs. In K. McCartney & D. Phillips (Eds.), *Blackwell handbook on early childhood development* (pp. 595–615). Malden: Blackwell.

Blair, C., & Raver, C. C. (2012). Child development in the context of adversity: Experiential canalization of brain and behavior. *American Psychologist, 67*, 309–318. doi:10.1037/a0027493.

Bodrova, E., Leong, D., & Shore, R. (2004). Child outcome standards in pre-k programs: What are standards; What is needed to make them work? *National Institute for Early Education Research Preschool Policy Matters, 5*, 1–12.

Bowlby, J. (1982). *Attachment & loss: Vol. I. Attachment* (2nd ed.). New York: Basic Books.

Bretherton, I. (1985). Attachment theory retrospect and prospect. In I. Bretherton and E. Waters (Eds.), *Growing points of attachment theory and research monographs of the Society for Research in Child Development*, 209, 3–35.

Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. American Psychologist, 34, 844–850. doi:0003-066X/79/3410-0844.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5th ed., pp. 993–1028). Hoboken: Wiley.

Burchinal, M. R., Peisner-Feinberg, E., Bryant, D. M., & Clifford, R. (2000). Children's social and cognitive development and child care quality: Testing for differential associations related to poverty, gender, or ethnicity. *Applied Developmental Science, 4*, 149–165.

Calkins, S. D., & Hill, A. (2007). Caregiver influences on emerging emotion regulation: Biological and environmental transactions in early development. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 229–248). New York: The Guilford Press.

Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology, 37*, 231–242. doi:10.1037//0012-1649.37.2.231.

Chang, F., Crawford, G., Early, D., Bryant, D., Howes, C., Burchinal, M., Barbarin, O., Clifford, R., & Pianta, R. (2007). Spanish-speaking children's social and language development in pre-kindergarten classrooms. *Early Education and Development, 18*, 243–269.

Child Trends. (2001). *Child trends research brief: School readiness: Helping communities get children ready for school and school ready for children*. Washington, DC: Child Trends Retrieved from http://www.childtrends.org/files/schoolreadiness.pdf.

Clifford, D. (2012). Local-level system building. In S. L. Kagan & K. Kauerz (Eds.), *Early childhood systems: Transforming early learning*. New York: Teachers College Press.

Dearing, E., Berry, D., & Zaslow, M. (2006). Poverty during early childhood. In K. McCartney & D. Phillips (Eds.), *Handbook of early childhood development* (pp. 399–423). Malden: Blackwell Publishing.

Dearing, E., McCartney, K., & Taylor, B. A. (2009). Does higher quality early child care promote low-income children's math and reading achievement in middle childhood? *Child Development, 80*, 1329–1349.

Donat, D. J. (2006). Reading their way: A balanced approach that increases achievement. *Reading & Writing Quarterly, 22*, 305–323. doi:10.1080/10573560500455745.

Downer, J., Sabol, T. J., & Hamre, B. (2010). Teacher-child interactions in the classroom: toward a theory of within and cross-domain links to children's developmental outcomes. *Early Education & Development, 21*, 699–723. doi:10.1080/10409289.2010.497453.

De Schipper, E. J., Marianne Riksen-Walraven, J., & Geurts, S. A. (2006). Effects of child–caregiver ratio on the interactions between caregivers and children in child-care centers: An experimental study. *Child Development, 77*(4), 861–874.

Early, D. M., Bryant, D. M., Pianta, R. C., Clifford, R. M., Burchinal, M. R., Ritchie, S., Howes, C., & Barbarin, O. (2006). Are teachers' education, major, and credentials related to classroom quality and children's academic gains in prekindergarten? *Early Childhood Research Quarterly, 21*(2), 174–195.

Espinosa, L. M. (2005). Curriculum and assessment considerations for young children from culturally, linguistically, and economically diverse backgrounds. *Psychology in the Schools, 42*, 837–853.

Gordon, R. A., Fujimoto, K., Kaestner, R., Korenman, S., & Abner, K. (2012). An assessment of the validity of the ECERS–R with implications for measures of child care quality and relations to child development. *Developmental Psychology, 49*, 146–160. doi:org/10.1037/a0027899

Gilliam, W. S. (2009). Preschool promises: An introduction, commentary, and charge. *Psychological Science in the Public Interest, 10*, 1–5. doi:10.1177/1529100610387083.

Göncü, A., Main, C. & Abel, B. (2009). Fairness in participation in preschool In D. Berthelsen, J. Brownlee, J., & E. Johansson, E. (Eds.). Participatory learning in the early years (pp, 185–202). New York: Routledge.

Göncü, A., Abel, B., & Boshans, M. (2010). The role of attachment and play in young children's learning and development. In K. Littleton, C. Wood, & J. K. Staarman (Eds.), *International handbook of educational psychology: New perspectives on learning and teaching* (pp. 3–25). Cambridge: Elsevier.

Gormley, W. T., Gayler, T., Phillips, D., & Dawson, B. (2005). The effects of universal pre-K on cognitive development. *Developmental Psychology, 41*, 872–884.

Hamre, B., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72*, 625–638.

Hamre, B. K., & Pianta, R. C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? *Child Development, 76*, 949–967.

Harms, T., & Clifford, R. (1989). *The family day care rating scale*. New York: Teacher's College Press.

Harms, T., Clifford, R. M., & Cryer, D. (1998). *Early childhood environment rating scale* (Rev ed.). New York: Teachers College Press.

Harms, T., Cryer, D., & Clifford, R. M. (2000). *Infant/toddler environment rating scale*. New York: Teachers College Press.

Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science, 312*, 1900–1902. doi:10.1126/science.1128898.

Howes, C., & Ritchie, S. (1999). Attachment organizations in children with difficult life circumstances. *Development and Psychopathology, 11*(02), 251–268.

Howes, C. (2000). Social-emotional classroom climate in child care, child-teacher relationships, and children's second grade peer relations. *Social Development, 9*, 191–204.

Howes, C. (2010). *Culture and child development in early childhood programs: Practices for quality education and care*. New York: Teachers College Press.

Howes, C., & Ritchie, S. (2002). *A matter of trust: Connecting teachers and learners in the early childhood classroom*. New York: Teachers College Press.

Howes, C., & Shivers, E. M. (2006). New child–caregiver relationships: Entering childcare when the caregiver is and is not an ethnic match. *Social Development, 15*, 574–590.

Howes, C., & Spieker, S. (2008). Attachment relationships in the context of multiple caregivers. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment theory and research* (2nd ed., pp. 317–332). New York: Guilford Publications.

Howes, C., & Stewart, P. (1987). Child's play with adults, toys, and peers: An examination of family and child-care influences. *Developmental Psychology, 23*, 423–430.
Howes, C., Burchinal, M., Pianta, R. C., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Children's classroom engagement and school readiness gains in prekindergarten. *Early Childhood Research Quarterly, 23*, 27–50.
Howes, C., Fuligni, A. S., Soliday Hong, S., Huang, Y. D., & Lara-Cinisomo, S. (2013). The preschool instructional context and child–teacher relationships. *Early Education & Development, 24*(3), 273–291.
Howes, C., Guerra, A. W., Fuligni, A., Zucker, E., Lee, L., Obregon, N. B., & Spivak, A. (2011). Classroom dimensions predict early peer interaction when children are diverse in ethnicity, race, and home language. *Early Childhood Research Quarterly, 26*(4), 399–408.
Justice, L. M., Mashburn, A. J., Hamre, B. K., & Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly, 23*, 51–68. doi:10.1016/j.ecresq.2007.09.004.
Kagan, S. L. (2012). Early learning and development standards: An elixir for early childhood systems reform. In S. L. Kagan & K. Kauerz (Eds.), *Early childhood systems: Transforming early learning*. New York: Teachers College Press.
Keys, T. D., Farkas, G., Burchinal, M. R., Duncan, G. J., Vandell, D. L., Li, W., Ruzek, E. A., & Howes, C. (2013). Preschool center quality and school readiness: Quality effects and variation by demographic and child characteristics. *Child Development, Online Only*. doi:10.1111/cdev.12048.
Kryzer, E. M., Kovan, N., Phillips, D. A., Domagall, L. A., & Gunnar, M. R. (2007). Toddlers' and preschoolers' experience in family day care: Age differences and behavioral correlates. *Early Childhood Research Quarterly, 22*, 451–466. doi:10.1016/j.ecresq.2007.08.004.
La Paro, K. M., & Pianta, R. C. (2000). Teachers' reported transition practices for children transitioning into kindergarten and first grade. *Exceptional Children, 67*, 7–20.
La Paro, K. M., Pianta, R. C., & Stuhlman, M. (2004). The classroom assessment scoring system: Findings from the prekindergarten year. *The Elementary School Journal, 104*, 409–426.
Lindsey, K., Manis, F., & Bailey, C. (2003). Prediction of first-grade reading in Spanish-speaking English-language learners. *Journal of Educational Psychology, 95*, 482–494.
Magnuson, K., Lahai, C., & Waldfogel, J. (2006). Preschool and school readiness of children of immigrants. *Social Science Quarterly, 87*, 1241–1262.
Magnuson, K. A., Meyers, M. K., & Waldfogel, J. (2007). Public funding and enrollment in formal child care in the 1990s. *Social Service Review, 81*, 47–83.
Mashburn, A. J., Pianta, R. C., Barbarin, O. A., Bryant, D., Hamre, B. K., Downer, J. T., Burchinal, M., Early, D. M., & Howes, C. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development, 79*, 732–749.
Mitchell, A. (2005). *Stair steps to quality: A guide for states and communities developing quality rating systems for early care and education*. Alexandria: United Way Success by 6.
Mitchell, A. (2009). *Quality rating and improvement systems as a framework for early care and education system reform*. Boston: BUILD Initiative.
Morrissey, T. W. (2009). Multiple child-care arrangements and young children's behavioral outcomes. *Child Development, 80*, 59–76.
National Association for the Education of Young Children (2011). *NAEYC revised policy statement on QRIS*. Retrieved from http://www.naeyc.org/files/naeyc/2011_QRIS_Statement.pdf
National Education Goals Panel. (1997). *The National Education goals report: Building a nation of learners, 1997*. Washington, DC: U.S. Government Printing Office.
National Governor's Association (2005). *Final report of the NGA task force on school readiness: Building the foundation for bright futures*. Retrieved from http://www.doe.k12.de.us/infosuites/students_family/earlychildhood/files/0501TASKFORCEREADINESS.pdf

Nixon, S. M., McCardle, P., & Leos, K. (2007). Implications of research on English language learners for classroom and clinical practice. *Language, Speech, and Hearing Services in Schools, 38*, 272–277.

No Child Left Behind (NCLB) Act of 2001, 20 U.S.C.A. § 6301 et seq. (West 2003).

Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., Yazejian, N., Byler, P., Rustici, J., & Zelazo, J. (2000). *The children of the cost, quality, and outcomes study go to school: Technical report*. Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center.

Phillips, D., Voran, M., Kisker, E., Howes, C., & Whitebook, M. (1994). Child care for children in poverty: Opportunity or inequity? *Child Development, 65*, 472–492.

Pianta, R. C. (2001). *Student-teacher relationship scale: Professional manual*. Lutz: Psychological Assessment Resources.

Pianta, R.C. (2003). *Standardized classroom observations from pre-K to third grade: A mechanism for improving quality classroom experiences during the P-3 years*. Retrieved from http://fcd-us.org/sites/default/files/StandardizedClassroomObservations.pdf

Pianta, R. C., Hamre, B., & Stuhlman, M. (Eds.). (2002). *Relationships between teachers and children* (Vol. 7). New York: Wiley.

Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R. M., Early, D. M., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Prediction of observed classroom quality and teacher-child interactions. *Applied Developmental Science, 9*, 144–159.

Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008a). *Classroom assessment scoring system (CLASS) pre-K version*. Baltimore: Brookes.

Pianta, R. C., Mashburn, A. J., Downer, J. T., Hamre, B. K., & Justice, L. (2008b). Effects of web-mediated professional development resources on teacher–child interactions in pre-kindergarten classrooms. *Early Childhood Research Quarterly, 23*, 431–451.

Pianta, R. C., Barnett, W. S., Burchinal, M., & Thornburg, K. R. (2009). The effects of preschool education: What we know, how public policy is or is not aligned with the evidence base, and what we need to know. *Psychological Science in the Public Interest, 10*, 49–88.

Pianta, R. C., Hamre, B., & Downer, J. (2011). Aligning measures of quality with professional development goals and goals for children's development. In M. Zaslow, I. Martinez-Beck, K. Tout, & T. Halle (Eds.), *Quality measurement in early childhood settings*. Baltimore: Paul H. Brookes Publishing Co..

Ritchie, S., Howes, C., Kraft-Sayre, M., & Weiser, B. (2001). *Emerging academic snapshot*. Los Angeles: University of California, Department of Education.

Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.

Sabol, T. J., Soliday Hong, S. L., Pianta, R., & Burchinal, M. (2013). Can ratings of pre-K programs predict children's learning? *Science, 341*, 845.

Sameroff, A. J., & Chandler, M. J. (1975). Reproductive risk and the continuum of caretaking causality. In F. D. Horowitz, M. Hetherington, S. Scarr-Salaptek, & G. Siegel (Eds.), *Review of child development research* (Vol. 4, pp. 187–244). Chicago: University of Chicago Press.

Schaack, D., Tarrant, K., Boller, K., & Tout, K. (2012). Quality rating and improvement systems: Frameworks for early care and education systems change. In S. L. Kagan & K. Kauerz (Eds.), *Early childhood systems: Transforming early learning*. New York: Teachers College Press.

Schultz, T. (2009). Assessing the school readiness needs of a state. In R. C. Pianta & C. Howes (Eds.), *The promise of pre-K*. Baltimore: Paul H. Brookes Publishing Co..

Schweinhart, L. J. (2005). *The High/Scope Perry Preschool Study through age 40: Summary conclusions, and frequently asked questions*. Retrieved from http://www.highscope.org/Research/PerryProject/PerryAge40_SumWeb.pdf

Snow, C. E. (2006). What counts as literacy in early childhood? In K. McCartney & D. Phillips (Eds.), *Handbook of early childhood development* (pp. 274–294). Malden: Blackwell Publishing.

Soliday Hong, S., Howes, C., Marcella, J., Zucker, E., & Huang, Y. (2015). Quality rating and improvement systems: Validation of a local implementation and children's school-readiness. *Early Childhood Research Quarterly, 30*, 227–240.

Stuhlman, M. W., & Pianta, R. C. (2002). Teachers' narratives about their relationship with children: Associations with behavior in classrooms. *School Psychology Review, 31*, 148–163.

Tabors, P. O. (1998). What an early childhood educators need to know: Developing effective programs for linguistically and culturally diverse children and families. *Young Children, 53*, 20–26.

Thames, D., Kazelskis, R., & Reeves Kazelskis, C. (2006). *Reading performance of elementary students: Results of a five-year longitudinal study of direct reading instruction*. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Birmingham, AL.

The No Child Left Behind Act of 2001, Public Law 107–110, 107th Congress, 2nd Session, Jan. 8, 2002.

Tout, K., Starr, R., Soli, M., Moodie, S., Kirby, G., & Boller, K. (2010). *Compendium of quality rating systems and evaluations*. Washington, DC: Administration for Children and Families, Department of Health and Human Services.

U.S. Department of Education & U.S Department of Health and Human Services. (2011). *Race to the top – early learning challenge executive summary*. Washington, DC Retrieved from http://www2.ed.gov/programs/racetothetop-earlylearningchallenge/exec-summ.pdf

U.S. Department Of Health And Human Services, Administration for Children and Families (Wednesday, November 9, 2011). 45 CFR Part 1307 RIN 0970–AC44, Head Start Program. Federal Register (76). Retrieved from http://eclkc.ohs.acf.hhs.gov/hslc/standards/Head%20Start%20Requirements/1307/Part%201307-FRNotice_2011-28880.pdf

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE). (2008). Child care eligibility and enrollment estimates for fiscal year 2005. ASPE Issue Brief. Retrieved from http://aspe.hhs.gov/hsp/08/cc-eligibility/ib.htm

Uccelli, P., & Paez, M. M. (2007). Narrative and vocabulary development of bilingual children from kindergarten to first grade: Developmental changes and associations among English and Spanish skills. *Language, Speech, and Hearing Services in Schools, 38*, 225–236.

Wishard, A. G., Shivers, E. M., Howes, C., & Ritchie, S. (2003). Child care program and teacher practices: Associations with quality and children's experiences. *Early Childhood Research Quarterly, 18*(1), 65–103.

Wong Kwok Shing, R. (2006). Enhancing English among second language learners: The preschool years. *Early Years an International Journal of Research and Development, 26*, 279–293.

Zaslow, M., Halle, T., Martin, L., Cabrera, N., Calkins, J., Pitzer, L., & Margie, N. G. (2006). Child outcome measures in the study of child care quality. Evaluation Review, 30, 577–610. doi:10.1177/0193841X06291529.

Zellman, G. L., & Fiene, R. (2012). *Validation of quality rating and improvement systems for early care and education and school-age care, research-to-policy, research-to-practice brief OPRE 2012–29*. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Zellman, G. L., & Perlman, M. (2008). *Child care quality rating improvement systems in five pioneer states: Implementation issues and lessons learned*. Santa Monica: RAND Corporation.

Zill, N., Resnick, G., Kim, K., O'Donnell, K., Sorongon, A., McKey, R. H., Pai-Samant, S., Clark, C., O'Brien, R., & D'Elio, M. A. (2003). *Head start faces 2000: A whole child perspective on program performance*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces00_4thprogress/faces00_4thprogress.pdf

Chapter 37
Parent Involvement in US Early Childhood Education: Benefits, Limitations, and Reconceptualizations

Angela Pons Clifford and Marisha L. Humphries

Abstract This chapter aims to broaden interpretations of how families in low-income, immigrant, and minority communities in the United States are involved in their early childhood age children's learning. By examining the benefits and limitations of previous conceptualizations of US parent involvement and studies that employ them, the chapter presents an argument for an expanded, sociocultural approach to involvement that incorporates a range of childhood activities such as play and work at home, at school, and in the community as well as social-emotional learning and childrearing lessons that are facilitated by parents and other adult caregivers. In addition to these contextual variations, the chapter advocates for a conceptualization of US parent involvement that takes into account parents' cultures, values, and expectations for their children's learning. The chapter provides implications for research, theory, and practice that give greater consideration to the educational contributions of diverse US families as well as the school practices that support them.

Keywords US parent involvement • Early childhood education • Sociocultural approach • Diverse families

Education professionals, politicians, community members, parents, and other stakeholders labor to improve children's learning outcomes across the nation. The involvement, or support, that parents give their children in their learning and development has been at the forefront of recent debates and discussions regarding achievement levels of children in US schools. As such, there have been numerous calls for "increased parent involvement" in schools to ameliorate the woes of the US

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public school system and the greater society, as well (Abdul-Adil and Farmer 2006; Apple 1996; Fine 1993).

Indeed, US parents' involvement in their children's educational lives in and outside of school settings has been found to positively impact children's adjustment to school as well as their academic learning (Fantuzzo et al. 2004; McWayne et al. 2004; Miedel and Reynolds 1999; Pianta and Kraft-Sayre 2003; Reynolds et al. 1996). These benefits have extended to children's families in developing parents' capacity to work effectively with their children and their schools while also impacting their learning throughout children's early childhood and later school years (Hill and Taylor 2004; Miedel and Reynolds 1999; Reynolds et al. 1996). In light of these benefits, many stakeholders in children's learning and development grapple with how to increase parent involvement in US schools, while they decry communities, typically minority and lower income, in which parent involvement is considered lacking or nonexistent (Davies 1993; Delpit 1995; Edwards et al. 2003; Graue and Hawkins 2010; Ladson-Billings 1994). Unfortunately, this portrayal does not adequately or fairly characterize the involvement efforts and commitment of parents in these communities. Otherwise stated, while the United States is made up of diverse cultural groups that are manifested within the educational context, US schools typically promote a White, middle-class orientation. The present chapter will illustrate this issue as it is represented in early childhood literature and practices through a review and critique of common conceptualizations of US parent involvement in the service of developing a case for a more expanded, sociocultural approach.

Due to our focus, many of the studies discussed in this chapter take place in US early childhood level classrooms (e.g., prekindergarten, kindergarten, and first grade) and early childhood programs that emphasize family support (e.g., Head Start, the US federal school readiness program for preschoolers from low-income families, or a similar citywide program in Chicago, Illinois, known as the Chicago Child-Parent Centers). However, most studies regarding parent involvement in the United States have directed little attention to the early childhood (as well as adolescent) years. Perhaps the lack of attention has been due to the incorrect perception that the field is examining parent involvement due to the US federal mandate of Head Start, which requires a parent involvement component. It's important to remember that the majority of young children in the United States do not attend Head Start programs, so we have a limited picture of parent involvement during the early childhood years across programs, socioeconomic statuses, and racial/ethnic groups. Therefore, we include some additional examples of studies that focus on other ages (e.g., García Coll et al. 2002; López 2001; McKay et al. 2003) as well as some conceptual work (Hoover-Dempsey et al. 2005a, b; López and Stoelting 2010) that we determined was useful in thinking about both early childhood parent involvement in the United States and our goal to broaden our interpretations of it.

While we respect the diverse families in which a network of individuals raise and care for their children, we use the term parent instead of caregiver to refer to the adults who assume this role since the term caregiver is often used to refer to early childhood professionals who participate in the care of children in school settings.

We begin our chapter with a focus on previous conceptualizations that, while contributing to our understanding of parent involvement in the United States, have limitations that require further consideration. We explicate the limitations, as well as the benefits, associated with these conceptualizations through a review of studies that employ them. Next, in an effort to make a case for a more expanded, sociocultural approach to parent involvement, we discuss the barriers to school involvement experienced by culturally diverse parents in the United States. To further develop our argument, we present conceptualizations that incorporate cultures, experiences, and perspectives of US parents. We end with implications for research, theory, and practice as we expand our ideas about US parent involvement in young children's learning and development.

37.1 Conceptualizations of Involvement

37.1.1 Traditional Involvement

Definitions of parent involvement vary widely across US institutions, individuals, and studies; some consider involvement to be a range of practices that exist within a larger framework, while others consider it to be a selection of clearly defined activities, a more traditional view adopted by most institutions and studies in the United States. These views have several common features. One such feature is that parent involvement is viewed as specific, isolated activities although the selection of activities may vary from one study to another. Another feature is that parent involvement activities are managed by the schools with the expectation that families will participate in the specific activities offered (e.g., direct contact between parents and staff through school-sanctioned events; McKay et al. 2003). Third, parent involvement activities are clearly visible to school personnel.

In studies adopting this traditional view, usually mothers or other female family members were asked about their attendance at events such as parent-teacher conferences, fundraising and volunteering opportunities, or committee meetings as well as other involvement activities requested by the school such as helping with homework, providing school supplies, or ensuring children's attendance at school. In turn, the frequency of US parents' participation in such activities was characterized along a range, such as low, medium, high or active/passive (e.g., Lamb-Parker et al. 2001; Marcon 1999; Miedel and Reynolds 1999; Stevenson and Baker 1987). Associations were then sought between parents' frequency of involvement in a selection of activities and specific student outcomes with the assumption that parents considered highly involved will most likely have children with more favorable outcomes. As a result, these traditional views shaped the conceptualization of parent involvement in the United States into something that assumes both universality and passivity regarding parents' roles as well as something that can be characterized in terms of distinct, prescribed categories (López and Stoelting 2010).

Admittedly, it is not always possible to classify studies as fitting into one model. For example, Shivers et al. (2004) developed a typology of three different expectations for parent involvement by early childhood educators in two US communities in Los Angeles and North Carolina. While two of these expectations, namely, parent education (i.e., teacher fixes parent's inadequacy) and no involvement (i.e., teacher does not expect parental involvement), fall under traditional views, the third expectation, namely, parent partnership, fits into the partnership model described in the next section.

Regarding the outcomes of parental involvement, decades of research have documented the importance of traditional parent involvement on US children's academic success, experiences, and achievement (e.g., Broussard 2003; Fan and Chen 2001). For example, parents' participation in involvement activities at school was found to positively impact children's academic and social development (Lawson 2003; Marcon 1999; Stevenson and Baker 1987) as well as provide possible long-term academic advantages such as less grade retention, less school mobility, increased reading achievement, and a lower rate of special education placement (Miedel and Reynolds 1999; Reynolds et al. 1996).

Traditional parent involvement is highly valued and accepted by both researchers and educators in the United States for both its assumed positive outcomes and observable qualities (García Coll et al. 2002; López 2001). However, there are some limitations associated with this view. It presents a unidimensional view by representing a top-down approach where researchers and school staff decide parents' roles in the home-school connection (Doucet 2008). Therefore, when parents operate outside of their traditional role and are not visibly seen at school, or they are engaging in visible activities that are beyond those prescribed by the traditional view (i.e., challenging school staff or administrators regarding their child or the running of the academic institution), they are often characterized as lacking in involvement and, oftentimes, lacking concern for their children (Cooper 2009; Doucet 2008; López 2001). There is little acknowledgment of the types of activities that US parents do outside of schools that support their children's academic engagement and achievement.

Furthermore, the expectations of traditional views of parent involvement do not reflect the realities of most US parents' lives. A number of everyday responsibilities such as work, childcare, transportation, as well as a lack of interest in certain school-identified parent involvement activities and many others make participation in school-based involvement activities difficult for parents (Davies 1993; Lamb-Parker et al. 2001; Tinkler 2002). Parents in the United States who experience difficulty with school-based involvement activities have been found to be involved in a number of additional ways (e.g., Clifford and Göncü 2010; Cooper 2009; Fantuzzo et al. 2000; Mapp 2003; Weiss et al. 2003), which raises questions about limiting measures of involvement to school-sanctioned activities, especially in light of current employment demands of dual-income families, single parents, US welfare to work initiatives, and cultural differences between families and schools in the United States. Therefore, it is important to consider the limitations of designing programs

of research, policy, and practice in the United States that exclude the varied ways parents are engaged with their children's development and learning.

In consideration of these limitations and in view of work that aims to establish bridges between traditional views and partnership models (e.g., Shivers et al. 2004), we outline next the emergence of more expansive models of parent involvement in the United States.

37.1.2 Partnership Models

Some models in the United States conceptualize involvement as a "partnership" among the home, school, and community and, therefore, provide alternatives to the standard school activities suggested in traditional involvement. They emphasize the sharing of information between homes and schools (Baker et al. 1999). They are also regarded as more comprehensive than the fragmented traditional parent involvement definitions and offer additional important contributions (e.g., meaningful interactions between home and school, parent familiarity with school structures, increased flexibility, and higher quality participation; Baker et al. 1999).

The most widely known partnership model of parent involvement in the United States was developed by Epstein (1994), who promoted the term "school, family, and community partnership." According to Epstein, this approach recognizes all family members and structures that offer support to children, the community organizations that contribute to the well-being of families and schools, and, lastly, the children and their right and ability to communicate with their families and schools. In concert with this stance, Epstein developed a typology of six major features of involvement and the practices that support them. These include parenting (e.g., creating a healthy and safe home environment), communicating between home and school (e.g., conferences, newsletters, phone calls), volunteering (e.g., parent patrols, assisting in classrooms, attending school functions), learning at home (e.g., homework, summer learning packets, family night programs), decision-making (e.g., local branches of the US Parent-Teacher Associations, local school councils in Chicago, Illinois, school improvement committees), and collaborating with the community (e.g., informing families of recreational and support opportunities or service programs).

In addition to serving as a foundation for other conceptualizations of parent involvement in the United States (e.g., Fantuzzo et al. 2000; McWayne et al. 2004), Epstein's model offers a number of contributions that have been significant in expanding more traditional ideas regarding parent involvement. For example, her model includes opportunities at home, in the community, and at school. Further, her representation serves as a network of choices for involvement, including the personal skills and feelings of the students' families and expanded opportunities for involvement promoted by the schools in order to accommodate varying work schedules, transportation, and childcare constraints. Lastly, Epstein emphasizes that the opportunities for parent involvement are all considered equally important, and there

is no hierarchy of involvement activities. This conceptualization suggests that parent involvement efforts may be different across families in the United States, and the involvement efforts of one family should not be afforded more legitimacy than those of another.

A number of studies have used partnership models of parent involvement while still addressing questions regarding the frequency, barriers to, and impact of US parents' involvement practices. Often in these studies, parents continue to be characterized within a range of involvement (e.g., high, medium, or low); however their involvement practices outside of the school building are taken into account (e.g., Bulotsky-Shearer et al. 2012; Wen et al. 2012).

The consideration of a more expansive view of parent involvement that addresses some of the limitations of the more traditional views has led to the identification of additional benefits of nontraditional parent involvement. Several studies found home involvement to impact US children's acquisition of social and academic skills necessary for transitioning from home to school and from classroom to classroom in the early school years (Fantuzzo et al. 2004; Fitzgerald and Göncü 1993; McWayne et al. 2004; Pianta and Kraft-Sayre 2003). Additionally, several others found parents' home involvement to be positively related to academic competencies (e.g., reading and mathematics performance, intellectual functioning, receptive and other vocabularies, alphabetic knowledge, letter word identification) and social and behavioral competencies (e.g., motivation, attention, persistence, play interaction, self-control) in early childhood settings in the United States (Bulotsky-Shearer et al. 2012; Fantuzzo et al. 2004, 2013; McWayne et al. 2004; Wen et al. 2012). These findings speak to the potential of parents' home involvement as a protective factor in supporting children's academic learning (e.g., see Henderson and Mapp 2002 for a review of specific studies) especially for economically and racially/ethnically diverse families in the United States.

Despite these contributions, criticisms of partnership models have been raised. Conceptually, even with their expanded view of involvement, the partnership models, as with the traditional definitions of involvement, make assumptions regarding the roles of schools and parents in the United States. Although the approach of partnership models is less unilateral than that of its traditional counterpart in that it includes parent involvement occurring outside of the school, the expectation remains that parents participate in involvement opportunities as supporters of the schools' aims rather than of their children's overall lives (Doucet 2008; Graue and Hawkins 2010; Lawson 2003; López 2001; López and Stoelting 2010). The result of this school-centered or institution-driven focus in US parent involvement makes it less likely that the voices – the needs, expectations, and cultural perspectives –of the families will be considered in determining how families will be involved (Doucet 2008; Lawson 2003; López 2001; López and Stoelting 2010). Methodologically, by approaching parent involvement from this limited perspective, the manner in which families are already involved as well as the meanings they attribute to their involvement practices may go unnoticed and unmeasured (Clifford and Göncü 2010; Cooper 2009; Lawson 2003; López 2001; McWayne et al. 2013). Ultimately, the emphasis on institution-driven activities, initiatives, and measurements, rather

than those determined by both the home and school as beneficial and important, has limited the potential of partnership models in the United States.

In an effort to advocate for conceptualizations of parent involvement that take into consideration the needs, experiences, and cultural perspectives of the families with whom they aim to establish a connection, we present models of involvement in the next section that take into consideration the perspectives of diverse US families. We also propose recommendations to consider as the field continues to develop its thinking about involvement that is mutually conceptualized by families and schools.

37.2 Sociocultural Models of Parent Involvement

37.2.1 The Case for Sociocultural Models

Despite the positive outcomes linked to parental involvement efforts, many US parents experience demands within their daily lives that make traditional school involvement difficult. Tinkler (Tinkler 2002) identified five categories of barriers for parent involvement: (1) school environment, (2) culture and language, (3) parent's educational level, (4) psychological issues (e.g., past negative school experiences), and (5) logistical issues (e.g., incompatible work hours, childcare, transportation, etc.). For example, the types of jobs held by low-income parents in the United States can create logistical issues and impact their involvement in educational activities, especially traditional school activities, due to a lack of flexibility in work schedules (e.g., second and third shift work or an inability to take off or reduce hours to attend school-based events; Diamond 2000; Diamond and Gomez 2004). This was the case for parents of children in two communities in New York City attending the US federal program known as Head Start who identified scheduling conflicts as well as having a younger child at home as the most frequently experienced barriers to their participation in the Head Start program (Lamb-Parker et al. 2001).

Furthermore, minority parents in the United States can experience additional barriers in the form of discrimination, challenging or intimidating relationships with school personnel, a lack of parent voice or power in the school, feeling undervalued by school staff, and a lack of awareness as to the benefits of parental involvement (McKay et al. 2003; Smalley and Reyes-Blanes 2001). In a study of the involvement practices of a group of African American parents of elementary age children from urban communities, McKay et al. (2003) found their levels of school and home involvement were influenced by parents' perceptions of racism. Parents who reported greater awareness of racism were less likely to engage in school-based involvement activities; however this increased awareness of racism by African American parents was associated with increased at-home involvement activities. It appears that African-American parents in this study were attempting to protect their children from potential racial discrimination in schools by engaging in more home involvement activities.

Often cultural issues, specifically differences between the school and home culture, lead to involvement barriers (Tinkler 2002). Numerous scholars (e.g., Broussard 2003; Cooper 2009; Graue and Hawkins 2010; Li 2010; Mapp 2003) have noted that US schools are representative of White, middle-class values and beliefs and, in turn, privilege parent involvement efforts and behaviors that represent White, middle-class culture. For instance, US schools typically emphasize competitivism and individualism, whereas Latino, African American, and Asian American communities may endorse an interdependent orientation (collectivism and communalism, respectively). Immigrant parents from Latin American countries often have cultural orientations regarding parental involvement that are divergent from those in the United States. From this cultural perspective, schools are seen as the authority on educating children with little input from parents, while parents are seen as the nurturers of children with minimal influence from school (Osterling and Garza 2004). These cultural issues are affirmed by Wilson and Banks (1994) who contend that "the emphasis of traditional education has been on molding and shaping these [African American] children so they fit into an educational process designed for children of another race or class" (p. 1). As a result, schools often don't value the culture or knowledge that racially and economically diverse families in the United States bring to schools (Broussard 2003; Coleman and Wallinga 1999).

Due to the cultural difference that can exist between families and teachers, there is a lack of agreement between parents and educators on what qualifies as best practices for parental involvement (Shivers et al. 2004). Many of the teachers in the United States are middle-class, White women who come into school spaces unprepared to communicate effectively, understand, and empathize with children and families from minority and lowered socioeconomic statuses (Broussard 2003, 2000; Coleman and Wallinga 1999). These issues contribute to barriers that diminish the partnership and connection between homes and schools in the United States. The dominant model of parent involvement does not address issues of race, ethnicity, class, gender, sexual orientation, and marital status as well as how these social identities influence parent involvement (e.g., Doucet 2008; Graue et al. 2001; O'Connor 2001).

Graue and Hawkins (2010) illustrate the role of such identities in their study of a diverse group of Hmong, African American, Latino, and White parents' perspectives regarding what they perceived the school knew about them and what they would ideally like the school to know. The Hmong, African American, and Latino parents recommended that the school develop a deeper understanding of their cultures and histories to best meet the needs of their children and build a meaningful partnership with parents. Alternatively, the middle-class, White parents recommended that the school focus on their individual children and their family circumstances and characteristics in order to meet their children's needs and develop relationships. The authors suggest that because the White, middle-class parents share a common culture with the majority of US schools, they were able to direct their involvement to focus on advocating for their individual children's needs, while the racial and ethnic minority parents were tasked with both advocating for their children and negotiating the US school culture.

In another example, Lareau (1987) found that socioeconomic status affected the manner in which White US parents managed their concerns with their children's schools. While all of the parents in the study valued educational success and viewed themselves as supportive, the parents from a lower socioeconomic background demonstrated patterns of discomfort and reluctance in dealing with the schools, tended to focus on nonacademic matters, and responded to the staff members as professionals. White US parents from middle-class backgrounds showed patterns of frequent communication with staff members regarding academic matters, had greater attendance at school events, and demonstrated an increased knowledge about their children's peers, teachers, and school experiences. They tended to respond to staff members as partners. This is similar to Graue and Hawkins' (2010) description of parents "who are savvy and know the code," meaning they present their families as positively as possible to the school as a tool for managing their children's educational experiences effectively. In both examples, parents who possessed knowledge about the inner workings of schools and the expectations for behavior for both families and children enjoyed a significant advantage in negotiating educational terrains. Because of this, lower-income parents in the United States with less experience and opportunities within school settings, who had less predictability in their work or school schedules and fewer financial resources to address family and health issues, were often viewed by schools through a deficit perspective, despite their overall efforts to support their children (for additional examples, see also Bernhard et al. 1998; Cooper 2009; López and Stoelting 2010; Mapp 2003; Nzinga-Johnson et al. 2009; Shivers et al. 2004). Further, this deficit characterization of involvement may be reinforced if institutions neglect to search for alternative ways in which parents actually are involved in school (Cooper 2009; López and Stoelting 2010).

In support of this possibility, Clifford and Göncü (2010) found that African American parents of early childhood age children in a low-income, urban US community demonstrated their presence in their children's education through activities that took place primarily in the home and community. Their nontraditional parent involvement activities developed in response to the demands of their daily lives and often served to address the limitations of their children's experiences with their teachers, school, and other community institutions.

Consistently, Tinkler (2002) reported that Latino parents had their children participate with them in their jobs that involved hard physical work. Specifically, immigrant Latino families exposed their children to physical work in the fields as a means to highlight the importance of education. This differed from traditional forms of involvement adopted by US teachers. As a result, such differences led to misguided notions about parent involvement among this group of Latino immigrant parents (for additional examples, see also Cooper 2009; Jaime and Russell 2010; Li 2010; López and Vàzquez 2006; McKay et al. 2003; Scribner et al. 1999).

In summary, schools and school staff in the United States often define parent involvement with little to no input from parents (Doucet and Tudge 2007; Russell

1991) leading to misperceptions about the efforts of both parents and schools. Some scholars (e.g., Doucet 2008; Gillanders et al. 2012) suggest that schools should initiate the development of family-school partnerships, especially those that foster both awareness and validation of the many ways in which parents already participate in children's education beyond the traditional parental involvement practices that are less visible to school staff. In addition, as Lawson (2003) notes, if schools and parents are helped to recognize that they both focus on children to advance their development, not only will collaborations increase but positive outcomes will emerge for children, also. This is evidenced in the work of Jeynes (2005) who reported that when school and parent initiated involvement efforts match, positive educational outcomes for racially diverse, urban samples of children in elementary school (K-sixth grades) are maximized. Following this line of work, we contend that a "successful" partnership in US schools entails the inclusion of parents into the discussion and development of culturally appropriate involvement strategies.

37.2.2 Sociocultural Conceptualizations of Involvement

These models view involvement as a dynamic process that develops in response to individual family and cultural needs as well as collaborations among the home, school, and community. Therefore, everyone who takes part in the process negotiates the definition and meaning of parent involvement.

One such model was initially proposed by Hoover-Dempsey and colleagues (2005b). In their conceptualization, parent involvement decisions in the United States are driven by three major factors: parents' motivational beliefs, invitations for involvement opportunities received from the school or from their children, and the life experiences of the parent that encourage involvement. The first factor, parents' motivational beliefs, refers to whether parents construct their parental role as either active or passive. An active role construction is characterized by behaviors that demonstrate engaged support for children's learning and by a belief that parents are primarily responsible for their children's education. Parents who reflect an active role construction view learning and development as either parent focused (the ultimate responsibility of the parents) or partnership focused (a shared responsibility between home and school). A passive role construction is characterized by parents' personal behaviors that demonstrate general support for decisions made by the schools and by the belief that schools are ultimately responsible for the learning and development of their children. School-focused parents generally respond to requests or initiations made by the school, rather than initiate contact on their own. Hoover-Dempsey et al. (2005a) note that, despite the obvious differences among the active (parent-focused and partnership-focused) and passive role constructions, parents can demonstrate beliefs and behaviors that are represented by more than one depending on their varying circumstances.

Parents' motivational beliefs also include their sense of efficacy, or their belief in being able to provide support for their children to accomplish desired results.

Parents develop self-efficacy in terms of experiencing success in helping children learn, observing similar parents successfully helping children learn, being encouraged by important others, and receiving support and understanding for both positive feelings that result from success and for doubts as they arise. In these ways, parents consider their capabilities and the potential outcome of their efforts as they negotiate their involvement decisions (Hoover-Dempsey et al. 2005a, b).

The second motivator for involvement focuses on invitations from the schools and their children to be involved. Invitations for involvement can reflect the school climate indicating an environment that welcomes parents to participate at school, provides consistent and organized communication with families, and encourages or provides specific suggestions for parents being engaged with their children at home or school. School invitations are especially meaningful for parents who would not typically feel comfortable at the school, such as parents with negative past school experiences, parents who are non-English speaking, or parents from minority or lower-income backgrounds. Invitations from children include requests that are general (e.g., attendance at an event) or reflect individual needs (e.g., a child asking for help with homework or a parent initiating contact with a teacher on a child's behalf). According to Hoover-Dempsey and colleagues, since US parents typically respond to the explicit needs of their children (e.g., needing help with a problem or assignment), these invitations carry with them a great deal of potential as motivators for involvement (Hoover-Dempsey et al. 2005a, b).

The third motivator for involvement is parents' life contexts. Hoover-Dempsey and colleagues define life contexts as the knowledge, skills, time, and energy of parents. Although these contexts exist in relation to overarching life issues like socioeconomic status and family culture, the authors argue that concentrating on the areas of knowledge, skills, time, and energy directs the focus of schools, teachers, and families toward facilitating more manageable involvement opportunities (e.g., creating opportunities that respond to parents' varying skill levels or inflexible schedules). According to the authors, parents consider these life contexts as they make decisions about their involvement practice. For example, if parents feel they possess the knowledge and skill resources to be successful in their attempts to support their children's learning, they approach their involvement more positively. Conversely, if parents feel unprepared, they are often motivated to seek support from other sources, such as a family member or their child's teacher. In the same reflective manner, parents often search out involvement opportunities that accommodate the time and energy pressures of their daily lives (Hoover-Dempsey et al. 2005a, b).

The model developed by Hoover-Dempsey and colleagues contributes to evolving definitions of parent involvement that view the perspectives of parents as an essential component. Through its focus on role constructions, self-efficacy, and individual life contexts, this model focuses intently on the subjective and personal nature of parents' involvement experiences (López and Stoelting 2010). This model begins to shift the focus away from specific activities and move toward a conceptualization of how parents in the United States negotiate their support of their

children's learning in accordance with their personal beliefs, expectations, and life constraints.

Fitzgerald and Göncü (1993) put forth another model of involvement that considers the perspectives and experiences of parents in the United States that is based on Vygotskian theory. This conceptualization utilizes a family-school partnership orientation that emphasizes collaboration and communication as children transition from the family institution to less familial institutions, like school. As students decipher each institution's unique skills and understandings, connections among the institutions are established leading to intersubjectivity, or shared understanding. Fitzgerald and Göncü noted that intersubjectivity is constructed only when the strengths of the home and school are equally valued, thereby increasing the possibility for collaboration.

This model summarizes the involvement practices of parents whose children were attending publicly funded, early childhood programs in a low-income, urban community in the Midwestern United States. Based on a review of the literature, the authors characterized five types of involvement that were presented along a continuum anchored by passive involvement on one end and active involvement on the other. The five types of involvement from passive to active are (1) parents as recipients of parent education (e.g., attending a workshop about parenting strategies), (2) parents as silent participants (e.g., observing a lesson), (3) parents as collaborators in their own education (e.g., attending a parent discussion group or interactive workshop), (4) parents as active in the community (e.g., using an educational setting to learn about medical or social service agencies), and (5) parents as active in school governance (e.g., participating in school policy or curriculum decisions). The active end of the continuum represented involvement practices that emphasize the perspectives of parents and, therefore, foster intersubjectivity among the home, school, and community. By calling attention to the need for shared communication and understanding, or intersubjectivity, in the family, school, and community partnership, Fitzgerald and Göncü recognized the cultural contributions of US families to their children's education.

The two models (e.g., (Hoover-Dempsey et al. 2005a; Fitzgerald and Göncü 1993) described in this section present parent involvement as a pursuit motivated by the personal beliefs, expectations, experiences, and cultures of parents and families that continually develop and change. Further, these models acknowledge the importance of US schools in considering the personal nature of parent involvement in order to develop with parents a vision of involvement that goes beyond participation in activities scripted by the school to include options considered meaningful across various homes, schools, and communities, which further emphasizes shared understanding and collaboration.

A number of studies have been offered that aim to describe the variations and adaptability that characterize US parents' actual involvement decisions as opposed to the insufficiency of their involvement when viewed through the perspectives of schools and other institutions. For many parents in these investigations, parent involvement at school included practices such as informal visits to the school, unscheduled communication with teachers, and efforts to advocate for a child (e.g.,

Clifford and Göncü 2010; Lareau and Horvat 1999; Mapp 2003). As a result, ideas surrounding parent involvement in the United States are undergoing a reconceptualization that considers involvement practice within the context of the daily demands, priorities, and needs of family life.

Mapp (2003) found among parents whose children attended an elementary school in Boston, Massachusetts, that parents who interacted with the schools, either formally or informally, were more familiar with the nature of their children's learning experiences at school and, therefore, were better equipped to assist them with their schoolwork at home through direct, individualized help. In addition to encouraging and helping with homework, parents were involved at home through consistent verbal support to encourage their children's commitment and hard work in their schooling. For a number of families in this study, extended family members also participated in these forms of home involvement along with the parents as a way to provide support. Additionally, some parents involved their children in extracurricular activities within the community. In this way, parents developed their understanding of their children's school experiences and used the skills they acquired to better support their children educationally.

Clifford and Göncü (2010) found parents' home and community involvement took place through planned activities in which families made time and space provisions for children's learning (e.g., creating a sight word wall in a child's room or arranging a family visit to a museum) or spontaneous activities in which families used activities that emerged as a part of everyday life as learning opportunities (e.g., counting the money needed to pay a bill or exploring outdoors during a family walk). Most of the parents engaged in social/moral lessons that taught children specific life values and skills (e.g., discussing moral lessons from a television program or attending church events).

In another example of involvement in the community, Weiss et al. (2003) investigated the ways in which a group of low-income, working mothers in the United States negotiated their involvement and found that often the workplace served as one of the family's sites for educational activity. The workplace was used as a hub for many of their involvement efforts like communicating with their children about school experiences, communicating and meeting with their children's schools and teachers, and engaging children in direct learning opportunities. In some cases, children received educational support and guidance from the mothers' coworkers or employers. Additionally, the authors found the US workplace to offer economic, social, and instructional resources that indirectly supported parents' involvement in their children's learning.

Additionally, US parent involvement from a sociocultural perspective addresses who is involved in the children's education as well as the manner and meaning behind their involvement noting how some parents organized and employed a network of extended family and friends to assist in supporting their children educationally. Examples of ways in which members of these networks offered their support included caring for children so other parents were able to attend school functions or attending functions at school in place of the parents, assisting with homework, providing verbal support and encouragement to children regarding

their learning, and jointly advocating for children with special needs (Mapp 2003; Weiss et al. 2003).

In each of these examples, US parents' and their families engaged in varying involvement practices that developed in response to their daily lives. As such, both the involvement practices and those who participated in the practices were flexible and personal in nature. These practices were often negotiated in consideration of the school's expectations; however they also were negotiated among family members, other parents and caregivers, and the community because of their collaborations.

These evolving views of parents' involvement practices are influencing many institutional definitions of involvement. For example, the Office of Head Start, which oversees the federally funded preschool program in the United States, has begun using the term "family engagement" which refers to the relationship between families and staff members and focuses on collaboration and cultural responsiveness (U.S. Department of Health and Human Services 2012). Additionally, the US National Parent Teacher Association (PTA) has updated its National Standards for Parent/Family Involvement Programs and renamed them the National Standards for Family-School Partnerships. Their previous focus on strategies for schools to involve parents has been expanded to focus on what schools, communities, and families can do collaboratively to support student growth and success (National Parent Teacher Association 2009).

37.3 Implications for Theory, Research, and Practice

The underlying principle associated with the expanded view of US parent involvement discussed in this chapter is that all parents are involved in their children's learning in some manner and want their children to be successful in school. The studies we refer to, as well as many others, collectively show that parents of diverse education levels, economic backgrounds, or cultural backgrounds in the United States are involved in their children's learning at home. These studies also collectively suggest that the defining factor in parents' involvement at school is the schools' effort to not only involve but also to understand the varied contributions of families. However, despite the argument in support of an expanded view of parent involvement, a more limited view continues to exist in the realms of both research and practice in the United States. With this disconnect as well as these guiding assumptions in mind, we outline a selection of implications for research and practice that grow from the expanded view of parent involvement presented in this chapter.

In consideration of the goal to affect the manner in which schools, families, and communities practice family involvement, it is necessary to expand how involvement in the United States is defined in relevant research. While typologies have proven their usefulness, there are some overall characteristics to consider as we work to expand our conceptualizations of involvement that follow recommendations

of various researchers and authors (e.g., Cooper 2009; Doucet 2008; Graue and Hawkins 2010; Henderson and Mapp 2002, 2003).

The first characteristic to consider is that involvement is a relational concept. As noted by Graue and Hawkins (2010), relationships are collaborative, built over time, and, to be positive, require consideration and effort by all of those involved. In other words, it is unfair to expect a relationship, professional or personal, to exist without time and effort. Considering involvement as a relationship, it is then unfair to expect involvement to take place without taking the time and effort to understand each other's experiences, knowledge, and values to support children's learning and growth, as well.

A second characteristic to consider is that parent involvement is culturally driven. A number of studies described in this chapter (e.g., Doucet 2008; Graue and Hawkins 2010; Henderson and Mapp 2002; Lareau and Horvat 1999; López and Stoelting 2010) have demonstrated that involvement in the United States is often measured through the lens of a school culture that assumes universality in participation of its families, which leads to many involvement efforts going unnoticed. In turn, the manner in which people are perceived and treated at both the societal and school level affects the ways they become involved (Hoover-Dempsey et al. 2005a, b). Therefore, it is evident that investigations of involvement must consider the cultural variations of the parents and children, especially given the diversity present in the United States' population.

Third, by considering the relational and cultural aspects of parent involvement in the United States, investigations would also recognize its dynamic nature. Collaborations between parents, students, and schools strengthen and weaken as a result of different experiences and a growing understanding of one another. Further, while parent involvement in the United States fluctuates based on cultural and community variations, it also fluctuates due to the individual needs and experiences of children, parents, and their families (Clifford and Göncü 2010; Cooper 2009; Weiss et al. 2003). Considering involvement as a dynamic process that incorporates the variations associated with being relational, cultural, and individual in nature would provide a more in-depth understanding of involvement practices and how parents are actually supporting their children's learning and growth.

Lastly, investigations of parent involvement in the United States should consider it as an empowering action (Cooper 2009). While investigations often describe more obvious practices of advocacy like participating in decision-making at the school or district level, there are other practices that parents participate in regularly that are often afforded less legitimacy. For example, addressing an individual child's needs by working on specific skills or concepts at home and voicing dissatisfaction with a school policy are examples of involvement efforts that advocate for a child's education, but are often unrecognized by schools. As Cooper (2009) notes, dissent and resistance by parents have a legacy of lasting and profound effects on access to and quality of education in the United States. New models must recognize these parent actions in order to fully understand parent involvement, especially among culturally diverse families in the United States who often have to use dissent and resistance efforts to get their children's educational needs met.

In consideration of these characteristics, attention should be paid to the mutually negotiated aspects of parent involvement rather than the isolated practices suggested by the schools and acted upon by the parents. Likewise, school sites and districts can begin bridging this expanded view of parent involvement to their practice by assessing the reciprocity within their relationships with families. Specific recommendations include investing time and effort to develop staff to work more effectively with diverse US families and community organizations as well as to mutually develop thoughtful programming that supports children and families throughout their school years.

In conclusion, we contend that involvement in the United States should be conceptualized as inherently relational, cultural, dynamic, and empowering. An expanded sociocultural view that builds upon the perspectives and contributions of all parents provides a more accurate depiction of how and why parents are involved than that which is provided in traditional views. As such, a sociocultural approach offers two distinct benefits. First, it enables us to more fully describe the nature of parent involvement by asking questions regarding how they are involved in their individual family contexts, in collaboration with school professionals, in the service of the school community, and in support of their greater community. It is also important to keep in mind that investigations of parent involvement would be enhanced by more frequently asking not only why and how parents are involved but how their involvement is linked to children's learning and growth, especially during the early childhood years (Henderson and Mapp 2002; Hoover-Dempsey et al. 2005b). Second, the field would greatly benefit from a broader understanding of the strengths and contributions of both parents and schools as we strive to jointly support young children in their learning and development. Seeking out opportunities to collaborate and learn from one another's strengths impacts our ability to form partnerships that embody respect. This collaborative perspective is more positive than the more typical assumption that caregivers are incompetent or apathetic when they are characterized as uninvolved and uninterested. Considering involvement as relational, culturally driven, and dynamic, as opposed to an isolated activity, requires more inclusive systems for practice and research, which ideally leads to more open and effective partnerships on behalf of the children we all hold dear.

References

Abdul-Adil, J. K., & Farmer, A. D. (2006). Inner-city African-American parental involvement in elementary schools: Getting beyond urban legends of apathy. *School Psychology Quarterly, 21*, 1–12.

Apple, M. W. (1996). *Cultural politics and education*. New York: Teachers College Press.

Baker, A. J. L., Kessler-Sklar, S., Piotrkowski, C. S., & Parker, F. L. (1999). Kindergarten and first-grade teachers' reported knowledge of parents' involvement in their children's education. *The Elementary School Journal, 99*, 367–380.

Bernhard, J. K., Lefebvre, M. L., Kilbride, K. M., Chud, G., & Lange, R. (1998). Troubled relationships in early childhood education: Parent-teacher interactions in ethnoculturally diverse child care settings. *Early Education & Development, 9*, 5–28.

Broussard, C. A. (2000). Preparing teachers to work with families: A national survey of teacher education programs. *Equity and Excellence in Education, 33*, 41–49.

Broussard, C. A. (2003). Facilitating home-school partnerships for multiethnic families: School social workers collaborating for success. *Children & Schools, 25*, 211–222.

Bulotsky-Shearer, R. J., Wen, X., Faria, A., Hahs-Vaughn, D. L., & Korfmacher, J. (2012). National profiles of classroom quality and family involvement: A multi-level examination of proximal influences on head start children's school readiness. *Early Childhood Research Quarterly, 27*, 627–639.

Clifford, A.P. & Göncü, A. (2010). *Reexamining family involvement from the family perspective*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

Coleman, M., & Wallinga, C. (1999). Teacher training in family involvement. *Childhood Education, 76*, 76–87.

Cooper, C. W. (2009). Parent involvement, African American mothers, and the politics of educational care. *Equity & Excellence in Education, 42*, 379–394.

Davies, D. (1993). Benefits and barriers to parent involvement: From portugal to boston to liverpool. In N. F. Chavkin (Ed.), *Families and schools in a pluralistic society* (pp. 205–216). New York: University of New York Press.

Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: The New Press.

Diamond, J. B. (2000). Beyond social class: Cultural resources and educational participation among low-income Black parents. *Berkeley Journal of Sociology, 44*, 15–54.

Diamond, J. B., & Gomez, K. (2004). African American parents' educational orientations: The importance of social class and parents' perceptions of schools. *Education and Urban society, 36*, 388–427.

Doucet, F. (2008). How African American parents understand their and teachers' roles in children's schooling and what this means for preparing preservice teachers. *Journal of Early Childhood Teacher Education, 29*, 108–139.

Doucet, F., & Tudge, J. (2007). Co-constructing the transition to school: Reframing the novice versus expert roles of children, parents, and teachers from a cultural perspective. In R. C. Pianta, M. J. Cox, & K. Snow (Eds.), *School readiness and the transition to kindergarten in the era of accountability* (pp. 307–328). Baltimore: Brookes.

Edwards, P. A., McMillon, G. T., & Bennett, C. T. (2003). Mining the fields of teacher education: Preparing teachers to teach African-American children in urban schools. In C. C. Yeakey & R. D. Henderson (Eds.), *Surmounting all odds: Education, opportunity, and society in the new millenium* (pp. 389–409). Connecticut: Information Age Publishing.

Epstein, J. L. (1994). Theory to practice: School and family partnerships lead to school improvement and students' success. In C. L. Fagnano & B. Z. Werber (Eds.), *School, family and community interaction: A view from the firing lines* (pp. 39–54). Colorado: Westview Press.

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational psychology review, 13*, 1–22.

Fantuzzo, J., Tigue, E., & Childs, S. (2000). Family involvement questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology, 92*, 367–376.

Fantuzzo, J., McWayne, C., Perry, M. A., & Childs, S. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *School Psychology Review, 33*, 467–480.

Fantuzzo, J., Gadsden, V., Feifei, L., Sproul, F., McDermott, P., Hightower, D., & Minney, A. (2013). Multiple dimensions of family engagement in early childhood education: Evidence for

a short form of the family involvement questionnaire. *Early Childhood Research Quarterly, 28*, 734–742.

Fine, M. (1993). [Ap]parent involvement: Reflections on parents, power, and urban public schools. *Teachers College Record, 94*, 682–730.

Fitzgerald, L. M., & Göncü, A. (1993). Parent involvement in urban early childhood education: A vygotskian approach. *Advances in Early Childhood Education and Day Care, 5*, 197–212.

García Coll, C., Akiba, D., Palacios, N., Bailey, B., Silver, R., DiMartino, L., & Chin, C. (2002). Parental involvement in children's education: Lessons from three immigrant groups. *Parenting: Science and Practice, 2*, 303–324.

Gillanders, C., McKinney, M., & Ritchie, S. (2012). What kind of school would you like for your children? Exploring minority mothers' beliefs to promote home-school partnerships. *Early Childhood Education Journal, 40*, 285–294.

Graue, E., & Hawkins, M. (2010). "I always feel they don't know anything about us": Diverse families talk about their relations with school. In M. M. Marsh & T. Turner- Vorbeck (Eds.), *(Mis)Understanding families: Learning from real families in our schools* (pp. 109–125). New York: Teachers College Press.

Graue, M. E., Kroeger, J., & Prager, D. (2001). A Bakhtinian analysis of particular home school relations. *American Educational research Journal, 38*, 467–498.

Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin: Southwest Educational Development Laboratory.

Hill, N. E., & Taylor, L. C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. *Current Directions in Psychological Science, 13*, 161–164.

Hoover-Dempsey, K. V., Walker, J. M. T., & Sandler, H. M. (2005a). Parents' motivations for involvement in their children's education. In E. N. Patrikakou, R. P. Weissberg, S. Redding, & H. J. Walberg (Eds.), *School-family partnerships for children's success* (pp. 40–56). New York: Teachers College Press.

Hoover-Dempsey, K. V., Walker, J. M. T., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S., & Closson, K. (2005b). Why do parents become involved? Research findings and implications. *The Elementary School Journal, 106*, 105–130.

Jaime, A., & Russell, C. (2010). Reaching Native American families to increase school involvement. In M. M. Marsh & T. Turner-Vorbeck (Eds.), *(Mis)understanding families: Learning from real families in our schools* (pp. 145–161). New York: Teachers College Press.

Jeynes, W. H. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education, 40*(3), 237–269.

Ladson-Billings, G. (1994). *The dreamkeepers*. San Francisco: Jossey-Bass Publishers.

Lamb-Parker, F. L., Piotrkowski, C. S., Baker, A. J. L., Kessler-Sklar, S., Clark, B., & Peay, L. (2001). Understanding barriers to parent involvement in head start: A research community partnership. *Early Childhood Research Quarterly, 16*, 35–51.

Lareau, A. (1987). Social class differences in family-school relationships: The importance of cultural capital. *Sociology of Education, 60*, 73–85.

Lareau, A., & Horvat, E. M. (1999). Moments of social inclusion and exclusion: Race, class and cultural capital in family-school relationships. *Sociology of Education, 72*, 37–53.

Lawson, M. A. (2003). School-family relations in context: Parent and teacher perceptions of parent involvement. *Urban Education, 38*, 77–133.

Li, G. (2010). Social class, culture, and "good parenting": Voices of low-ses families. In M. M. Marsh & T. Turner-Vorbeck (Eds.), *(Mis)Understanding families: Learning from real families in our schools* (pp. 162–178). New York: Teachers College Press.

López, G. R. (2001). The value of hard work: Lessons on parent involvement from an (im)migrant household. *Harvard Educational Review, 71*, 416–437.

López, G. R., & Stoelting, K. (2010). Disarticulating parent involvement in latino- impacted schools in the Midwest. In M. M. Marsh & T. Turner-Vorbeck (Eds.), *(Mis)understanding*

families: Learning from real families in our schools (pp. 19–36). New York: Teachers College Press.

López, G.R. & Vàzquez, V.A. (2006). "They don't speak English": Interrogating (racist) ideologies and perceptions of school personnel in a Midwestern state. *International Electronic Journal for Leadership in Learning*, *10*, Retrieved from http://iejll.synergiesprairies.ca/iejll/index.php/ijll/article/download/629/291

Mapp, K. L. (2003). Having their say: Parents describe why and how they are engaged in their children's learning. *The School Community Journal, 13*, 35–64.

Marcon, R. A. (1999). Positive relationships between parent school involvement and public school inner-city preschoolers' development and academic performance. *School Psychology Review, 28*, 395–412.

McKay, M. M., Atkins, M. S., Hawkins, T., Brown, C., & Lynn, C. J. (2003). Inner-city African American parental involvement in children's schooling: Racial socialization and social support from the parent community. *American Journal of Community Psychology, 32*, 107–114.

McWayne, C. M., Melzi, G., Schick, A. R., Kennedy, J. L., & Mundt, K. (2013). Defining family engagement among Latino Head Start parents: A mixed-methods measurement development study. *Early Childhood Research Quarterly, 28*, 593–607.

McWayne, C., Hampton, V., Fantuzzo, J., Cohen, H. L., & Sekino, Y. (2004). A multivariate examination of parent involvement and the social and academic competencies of urban kindergarten children. *Psychology in the Schools, 41*, 363–377.

Miedel, W. T., & Reynolds, A. J. (1999). Parent involvement for early intervention for disadvantaged children: Does it matter? *Journal of School Psychology, 37*, 379–402.

Nzinga-Johnson, S., Baker, J. A., & Aupperlee, J. (2009). Teacher-parent relationships and school involvement among racially and educationally diverse parents of kindergartners. *The Elementary School Journal, 110*, 81–91.

O'Connor, S. (2001). Voices of parents and teachers in a poor White urban school. *Journal of Education For Students Placed At Risk, 6*(3), 175–198.

Osterling, J. P., & Garza, A. (2004). Strengthening Latino parental involvement forming community-based organizations/school partnership. *NABE Journal of Research and Practice, 2*, 270–284.

Parent Teacher Association (2009). *PTA national standards for family-school partnerships: An implementation guide*. Retrieved from http://www.pta.org/files/National_Standards_Implementation_Guide_2009.pdf

Pianta, R. C., & Kraft-Sayre, M. (2003). *Successful kindergarten transition: Your guide to connecting children, families, & schools*. Baltimore: Paul H. Brookes Publishing.

Reynolds, A. J., Mavrogenes, N. A., Bezruczko, N., & Hagemann, M. (1996). Cognitive and family-support mediators of preschool effectiveness: A confirmatory analysis. *Child Development, 67*, 1119–1140.

Russell, A. (1991). Parental role conceptions associated with preschool involvement. *Australian Journal of education, 35*, 273–291.

Scribner, J. D., Young, M. D., & Pedroza, A. (1999). Building collaborative relationships with parents. In P. Reyes, J. D. Scribner, & A. P. Scribner (Eds.), *Lessons from high-performing Hispanic schools: Creating learning communities*. New York: Teachers College Press.

Shivers, E., Howes, C., Wishard, A. G., & Ritchie, S. (2004). Teacher articulated perceptions and practices with families: Examining effective teaching in diverse high quality child care settings. *Early Education and Development, 15*, 167–186.

Smalley, S. Y., & Reyes-Blanes, M. E. (2001). Reaching out to African American parents in an urban community: A community-university partnership. *Urban Education, 36*, 518–533.

Stevenson, D. L., & Baker, D. P. (1987). The family-school relation and the child's school performance. *Child Development, 58*, 1348–1357.

Tinkler, B. (2002). *A review of literature on Latino parent involvement in K-12 education*. Denver: Assets for Colorado Youth.

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (2012). *Family engagement as parent involvement 2.0*. Retrieved from http://eclkc.ohs.acf.hhs.gov/hslc/ttasystem/family/center/familyengparin.htm

Weiss, H. B., Mayer, E., Kreider, H., Vaughan, M., Hencke, R., & Pinto, K. (2003). Making it work: Low-income working mothers' involvement in their children's education. *American Educational Research Journal, 40*, 879–901.

Wen, X., Bulotsky-Shearer, R. J., Hahs-Vaughn, D. L., & Korfmacher, J. (2012). Head start program quality: Examination of classroom quality and parent involvement in predicting children's vocabulary, literacy, and mathematics achievement trajectories. *Early Childhood Research Quarterly, 27*, 640–653.

Wilson, T. L. Y., & Banks, B. (1994). A perspective on the education of African American males. *Journal of Instructional Psychology, 21*, 97–100.

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Latin America*

Rebeca Mejía-Arauz and Gloria Quiñones

Chapter 38
Early Childhood Education and Development in Latin America

Rebeca Mejía-Arauz and Gloria Quiñones

Abstract This section presents the state of the art of early childhood education and development through history and to date in several countries in Latin America. Brazil, Chile, Colombia, Guatemala, Mexico, and Peru give us an idea of the specifics as well as their shared problems and developments regarding how they provide attention, care, and education to their young children. The authors of the different countries and chapters that follow, offer historical accounts on how early childhood has been framed, how social and educational policies have developed, and the challenges they still address and face. They also discuss main research in this area and the research that is still needed.

Keywords Latinamerica • Brazil • Colombia • Guatemala • Mexico • Peru • Early child development

38.1 Historical Accounts of Early Childhood in Latin America and Brazil

In this section we provide a comparative view of the state of early childhood in several countries of Latin America and Brazil, distinguishing the specifics as well as the shared situations of these countries.

It is considered that the recognition of infancy as a social group started in the XVIII century, but the idea of childhood as a social construct with its vulnerability and need for care was more thoroughly developed in the twentieth century (Marre 2014). From the beginning of the 1900s, throughout the whole century, different countries in the world organized conferences and meetings that led to movements

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for the protection and consideration of children's rights. The well-being of children was discussed in terms of health, nutrition, protection, institutionalization, and eventually children's rights. In Latin America perhaps the first conference on this topic started in 1916 in Argentina with the participation of several Latin countries, which continued with some periodicity until 2009 (Marre 2014).

In the case of Latin American countries, although it is important to consider that they each have very particular and in many ways different socioeconomic and political histories, they also share some common problems regarding attention to early childhood. On the other hand, despite all the impressive theoretical contributions of some of the most important scientist in the world with regard to children's and human development, such as Piaget, Vygotsky, and Freud, to name a few, and the sociopolitical movements in the twentieth century in favor of childhood development, it seems that there is still a lot to do for the children in the world, particularly in Latin America.

In the chapters that follow, we find some commonalities that are important to consider, which will give us a better understanding of the current conditions of early childhood education and development, its struggles, and further research and practical needs. There are also very specific contributions in each chapter that emphasize those aspects that are of particular concern in each country.

38.2 Education for Young Children: A Focus on Intellectual Abilities

In the following chapters, the countries that we include in this section being Brazil, Chile, Colombia, Guatemala, México, and Perú report that their main focus of interest in childhood is through providing formal education and institutional childcare. Most of them point out how recent is the provision of childcare centers and the establishment of social policies regarding early childhood care and attention; some of these countries indicate that it was well advanced the second half of the twentieth century when social policies and public actions took place to provide childcare services for children younger than 6 years of age and that before it was formal education only that had been provided for children entering primary or elementary schools. Preschool education in several of these countries was more a privilege for few given that this level of education was provided by private centers.

It is a common factor among the countries presented here that the need for childcare centers increased as higher proportions of women than in previous times entered the labor force. With such an increase, childcare centers also increased in numbers; however, most of the countries included here report that there is a low expenditure for the provision of better services, with a need of better training for employees in charge of children and need of better material conditions. However, although social and educational policies regarding early childhood in these countries seem to be strong and appropriate in terms of worldwide advances, ideas on

paper do not seem to translate into consistent actions that in turn show real benefit for the development of children. As several of the chapters discussed, quality of services and better training of personnel are common problems to face and overcome.

In other words, in the region there are still some aspects that need to be improved or addressed according to the 2010 Latin American regional report for UNESCO (2010) and WCECCE, such as inequity in the access to services and programs for children, there is lack of quality in the services and poor qualifications of those who take care of children, few services for children less than 3 years old, and deficiencies in following up the extent to which children's rights are exercised.

In most of the countries reported in this section, the main focus of the attention provided for children has been formal education. Schooling in these countries is not much different than in other Western countries in terms of age segregation and an emphasis on intellectual or cognitive domains as the main focus of education. At the level of preschool and earlier care, there are some attempts to cover other areas such as social and emotional; however the authors of these chapters conclude that there is still a lot to work in the area of socio-emotional development in public programs for early childhood.

At the level of policies and design of programs, the main focus of early childhood education in these countries follows a perspective of integral development of children. However, it seems that in practice, the main emphasis in educational programs still is on those intellectual or cognitive aspects connected with school performance.

Why is Latin America focusing on children's cognitive and intellectual capacity? Campos Velez et al. (2014) explain how interventions made in Latin America focus on cognitive abilities as these will equip and allow children to have success in their future work life. However, in the case of Brazil, Branco et al. (in this section) advocate how early childhood programs need to foster not only intellectual capacities in children but socio-affective and moral development too. In order to improve societies, research also needs to focus on children's moral and social development.

We—as scientists in charge of investigating the issue and of contributing with significant knowledge for the improvement of our societies—must bring to light empirical and theoretical evidence on the role of educational contexts to provide for moral and social development (Branco 2016, cited in Branco 2009).

Branco et al.'s explanation of how important is for researchers to investigate beyond children's intellectual capacities to include as well as how to nurture children' social and affective development as an important component to improving societies applies to all our countries in this region.

In a different line also shared in the countries of this region, there seem to be important gaps in the living conditions that could promote a healthy development in families of low and higher SE; therefore it is important to continue recognizing this problem in order to orient more efficient ways to insure that children in hard living conditions could have the services that help providing better developmental conditions.

38.3 Future Research in Latin America and Brazil

Research challenges are many for all these countries. While the relevance of better conditions for children's development is equally important all over the world, the development of children in itself could no longer be considered universal; there are very important aspects of cultural diversity even within countries and regions that need to be taken into account in guiding social policies and programs for care and education and for promoting better life conditions for children's development. Thus, much research is needed on how diversity in values, social practices, and socioeconomic and geographical conditions influence the development of children. In doing so it is also important to consider contemporary trends in life, such as the current stressful conditions in the organization of everyday practices in the family which makes it no longer a stable entity, or the particular ways in which urban and rural contexts place high demands on the family and on children, the violent conditions of many of our countries in this region, and the value of the economic demands above the emotional and social stability. All of this added to the importance of recognizing that more and more, some contexts become multicultural, and this also needs to be taken into account for better care and education for our children.

An important note to make is that authors in these chapters rarely mention play as something that takes part and should be considered in studying children's learning and development, contrasting with Western countries in which play is considered an important developmental task. The only country that acknowledges play as relevant in a research agenda is Mexico and still there is a lack of it in the curricula and childcare programs of institutions in this country. Play seems to be a natural expression and manifestation of children's lives that should be taken into account as part of pedagogical activities. This is an area that could be researched more extensively recognizing the importance of play in children's well-being and development.

International comparative research also should be encouraged. This could provide rich knowledge in all areas of early childhood development. It is interesting to note that while in Colombia there is clear preoccupation for children's development in the context of war, guerrilla, and forced displacement, other countries in Latin America that have severe security issues due to the narco-conflict do not report the relevance of conducting research of children's development under these circumstances. Lack of a secure context for development must be a preoccupation of all countries in terms of policies and developing real actions to solve this problem.

References

Branco, A. U. (2009). Cultural practices, social values, and childhood education. In M. Fleer, M. Hedegaard, & J. Tudge (Eds.), *World Yearbook of Education 2009 – Childhood studies and the impact of globalization: Policies and practices at global and local levels* (pp. 44–66). London: Routledge.

Campos-Vázquez, R., Domínguez Flores, C., & Vélez Grajales, R. (2014). Movilidad social e intervenciones sociales [Social Movility and social interventions]. In L. Santibañez Martínez & D. E. Calderón, *Los Invisibles –las niñas y los niños de 0 a 6 años- [The Invisibles – the boys and girls of 0 to 6 years]* (pp 47–58). México. Retrieved from http://www.educacionfutura.org/wp-content/uploads/2014/05/Los-Invisibles_estado-de-la-educacion-en-mexico_2014.pdf

Marre, D. (2014). De infancias, niños y niñas [About childhoods, boys and girls]. In V. Llobet (Ed.), *Pensar la infancia desde América Latina [Thinking infancy from Latin America]*. Buenos Aires: CLACSO.

UNESCO. (2010). Atención y Educación de la Primera Infancia. Informe Regional. America Latina y El Caribe. UNESCO/WCECCE.

Chapter 39
Educational Practices and Young Children's Socio-Moral Development: A Cultural Psychological Approach

Angela Uchoa Branco, Angela Rabelo Barreto, and Ália Barrios

Abstract Early childhood education in Brazil, and in the world at large, draws on historical cultural traditions, and since it was institutionalized, it has served different purposes, from economic to social demands. After a brief analysis of its role within the Brazilian context, we discuss the major goals of Brazilian public policies to the field and emphasize the need to implement new educational paradigms for early education. In this chapter we stress the need to promote, within the context of early childhood education, children's socio-affective development. We criticize the lack of formal attention and planning that educational practices dedicate to socialization, as well as to the emotional and moral development of young children. To illustrate our ideas, we present and discuss two empirical studies, both carried out in Brasília, Brazil. The first study aimed at analyzing beliefs held by experts in charge of basic and in-service training of young children teachers concerning early childhood education and socio-affective development; the other analyzed socio-moral values and young children's interaction teachers promoted within the classroom. New methodological approaches were developed for both studies, carried out from a cultural constructivist theoretical perspective in psychology. The studies made use of observations, video recordings, and interviews. Their results provide research evidence and theoretical elaborations suggesting possible venues to organize early childhood education programs planned to promote both intellectual and socio-moral development among young children. We stress the centrality of appropriate teacher training and the need for further investigation in the area.

Keywords Early childhood education • Social development • Moral development • Values • Cultural approach

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Early childhood education in Brazil, and in the world at large, draws on historical cultural traditions, and since it was institutionalized, it has served different purposes, from economic to social to educational demands. In this chapter, after a brief analysis of its role within the Brazilian context, we discuss the unquestionable need to implement new paradigms for early education in the twenty-first century. We stress the need to address the issue of children socio-affective development as a goal as important as promoting skills related to other aspects of learning and human development. We claim that processes of children socialization deserve careful analysis and planning as much as skills' training and intellectual development. We criticize the unjustifiable negligence of educational practices in relation to social, emotional, and moral development among young children.

In order to illustrate our ideas and evaluations concerning early childhood education in Brazil, we present and discuss two empirical studies. The first aimed at analyzing teachers' practices related to socio-moral issues among young children, as well as beliefs held by experts in charge of formal training of young children's teachers (Barreto 2004). We particularly targeted their values and ideas concerning moral and socio-affective development. A new methodological approach was developed for the study, which was carried out from a sociocultural constructivist theoretical perspective by Barreto (2004), under the advice of this chapter's first author. Barreto's doctoral research made use of edited videotapes showing episodes of social interactions between a teacher and her 3-year-old students in a private preschool located in Brasilia. The videos were then edited to show adult-child interactions within contexts where moral or social issues were at stake, for instance, when a child hit the other or did not show respect—verbally or nonverbally—for a peer or someone else. Observational sessions at the young children center were videotaped, and sessions with the experts were audio recorded. Data were fully transcribed and then analyzed from a qualitative-interpretative methodological approach.

The major objective of the second study was to analyze, from a cultural psychological framework, the characteristics and dynamics of teacher-student interactions and pedagogical practices within an educational context and verify if they were most likely promoting—or inhibiting—young children's moral development. Barrios' master dissertation (2010) took place at a public educational context with 16 6-year-old children, under the guidance of a female teacher who was asked to design and develop specific activities oriented to precisely endorse kids' moral development. Observations of the interactions during routine activities and during the planned activity were carried out, as well as interviews with teachers.

In sum, this chapter aims at providing research evidence and theoretical elaborations suggesting possible venues to the organization of early childhood education programs in tune with intentionally fostering socio-affective children development. The purpose is to collaborate with teacher training programs and to encourage further investigation in the area.

39.1 Historical and Present Educational Goals in Brazil

Early childhood education in Brazil was, until the 1980s, mostly a matter of private concern. Along the last 30 years or so, our country's governments steadily invested in the education of 0–6-year-olds, and up to now, we have 50.8 % of such population enrolled in early educational centers (IBGE 2010). The increase observed in amount of children attending to early education institutions was mostly due to social movements and organized civil rights activities, which impact over government granted for actual legislation and the implementation of public policies concerning young children welfare. At first, efforts were put into the promotion of what was then denominated as preschool, but in order to successfully meet the major goal of early childhood education, in the last decade, the label "preschool" was substituted by young child education. This change in denomination in fact represented an actual attempt to transform the "preparation-for-school" paradigm into the child development paradigm, what indeed occurs, with significant effort, on a day-by-day basis.

In Brazil, as in most Western countries, early education emerged as a necessity within the context of a capitalist society where mothers needed to be actively engaged in the work force. Before the relatively recent investment by the government, the situation of young children was inadequate, because the poor majority of Brazilian population had very limited access to public education. Historically, the government considered 0–3-year-old children as part of social assistance policies held by the Ministry of Social Assistance, while the Ministry of Education cared for 4–6-year-old children enrolled in limited public preschool education. Accordingly, the target of social assistance policies was constrained to feeding and caring for the youngsters, and the main objective of preschools consisted of preparing children to succeed in the school context. This scenario has fortunately changed along the three last decades. Next, we briefly discuss what has happened along those years.

The Brazilian Federal Constitution, in 1988, and the Child and Adolescent Decree, in 1990, established as every citizen's right—and as a family and a state duty—to provide young children with care and education from their very birth. Later on, in 1996, the guidelines for national education (Lei de Diretrizes e Bases da Educação Nacional), a Federal Law, determined that young children education constitutes the first level of what is denominated as Brazil's basic education, which establishes a mandatory public education that goes for 14 years, from young children to high school education (Brasil 1996).

Legislation and programs supported by local and federal government represented a significant step forward. This is particularly true because before governmental initiative, there was a predominance of the goal of caring over the goal of educating young children. Children of well-off or middle-class parents did not need their youngsters to be cared for or educated by state institutions. Most of those mothers did not work and could stay at home with her children, who could be cared and educated by their own mothers or other adult family members. Poor mothers, though, needed governmental or philanthropic institutional support, since they could not—and still cannot—count on anyone else. More recently, when middle-class

mothers work, they can eventually afford private education and care for their children, but the problem remains for working-class mothers. As the political and socioeconomic scenarios changed, both women's rights and economic demands propelled by social movements ended up compelling the state to take charge of young children education in formal public educational institutions.

At first, as happened in other countries, most institutions devoted to young children provided poor education for the poor, and their major goal was limited to arranging for young children's care. Only more recently education became a central objective to be achieved, and the necessary move from basic care to meaningful education, meant to foster children development, has progressively been observed (Rossetti-Ferreira et al. 2002).

Data from empirical research about the quality of early childhood education in day care centers and preschools in Brazil were discussed by Campos et al. (2006), who used data mostly obtained between 1996 and 2003. They based their review on articles published in the main education journals in the country and on papers presented at the most important scientific meeting of the area. The criteria to assess the quality level of early childhood education provided by the investigated institutions, used by most research projects, consisted of the quality of teachers' training, the curriculum, the infrastructure, the pedagogical practices, and the nature of relationships between the institutions and children's families.

Their review confirmed once more how socioeconomic inequalities fiercely reflect upon the quality of education. Most results obtained by the reviewed research reveal the enormous distance between the legal definitions, guidelines proposed by governmental sectors, and the actual situations confronted by the majority of children and adults in our country's early childhood education institutions. However difficult, governmental initiatives and civil society (as the Movimento Interfóruns de Educação Infantil do Brasil—MIEIB, Brazilian Interforum Movement for Early Childhood Education) are dedicated to bridge this gap between official propositions and institutions' realities.

39.2 Goals for Young Children Education: The Status of Socio-Moral Development

In this section, we will discuss a very important challenge early childhood education faces in our country, as well as in other cultures (Barreto 2004): most educational efforts—curricula, teacher's training programs, activities—continue to target almost exclusively on literacy and cognitive development, and very little attention is devoted to children's socio-affective and moral development.

Most professionals responsible for young children educational institutions, especially those meant for children between 4 and 6 years old, act as though the only thing that really matters is to academically prepare kids for schools, where they will master literacy and mathematics and will be trained as functional citizens with little

concern over ethical commitments or democratic values. Consequently, to promote intellectual capacities, rules and obedience persists as the ultimate goal of educational institutions. A significant number of early educational institutions are also included as part of this process.

From early childhood centers to universities, educational institutions seem to expect that moral values and principles, social responsibility, and serious commitments to collective goals will spontaneously sprout along individuals' life trajectories as time goes by. If that was the case, there would be no need for any intentional educational intervention or planned goal promotion. However, even lay people know better than that. Our point is that we—as scientists in charge of investigating the issue and of contributing with significant knowledge for the improvement of our societies—must bring to light empirical and theoretical evidence on the role of educational contexts to provide for moral and social development (Branco 2009). Families should not be alone in cultivating values of justice, respect, social responsibility, solidarity, and citizenship. There is an urgent need to overcome historical myths of neutrality and to encourage proactive interventions within educational contexts in order to foster democratic social values and moral development.

Most studies we carry out in our laboratory at the University of Brasilia (Laboratory of Microgenesis in Social Interactions) target issues of social development and are theoretically oriented by a cultural-psychological approach stressing the centrality of culture and the active role of individuals in human development (Bruner 1997; Rogoff 2003; Valsiner 1994, 2007). According to Valsiner (1994, 2007), processes of cultural canalization are the main venues through which learning and internalization of cultural practices and semiotic messages take place. Together with the fundamental and constitutive role of culture, this theoretical approach highlights the active, constructive role of the subject on his/her own developmental processes and trajectories. The cornerstone of the theory consists of a permanent dialogical, mutual constitution of culture and subject along irreversible time, and human development occurs within the context of cultural practices and along meaning construction processes. What are the consequences of adopting such theoretical framework to make sense of educational institutions? Besides the constructive role of the students—who need to be respected as subjects—we particularly emphasize the role of teachers and other adults, who may or may not promote the quality and success of the educational work, and guidance, provided to children. Teachers are mediators of human development, and their actions—such as engaging children in specific activities and socially interacting with them—are absolutely central to grant the desired quality of the education that students need to develop. This is particularly true at an early age, when young children are especially dependent upon adults. The next sections discuss two research projects that illustrate how critical it is that educators take more seriously the issue of social and moral development within educational contexts.

39.3 Experts' Appraisal of Pedagogical Practices and Socialization

This study aimed at analyzing beliefs held by experts in charge of formal training of young children teachers (Barreto 2004; Barreto and Branco 2005). Our goal was particularly oriented to how they conceptualized and elaborated their ideas over the issue of young children's moral and socio-affective development and how their teachers should (or not) intervene in certain situations. From the sociocultural constructivist theoretical approach adopted, beliefs are defined as orientations which guide present and future actions and can be inferred from indicators detected in discursive constructions presented by the participants. Such psychological constructions are historically, culturally, and affectively impregnated and work as personal future-oriented mediational devices designated as beliefs or values (Valsiner et al. 1997). Beliefs and values—the last defined as deep affect-laden beliefs—function as a major force guiding the whole process of acting and reflecting upon reality. The rationale, then, was that listening to expert's positioning concerning the targeted issues, we would identify in their narrative indicators revealing their prevalent beliefs concerning the education and training of new teachers. Their narratives occurred during individual interviews as well as within semi-structured contexts organized as focal group meetings, where videos and dilemmas were selected to trigger expert's evaluations.

Six experts participated in the study. They actively worked at well-known teachers' training institutions in the city of Belo Horizonte, the capital of the state of Minas Gerais, Brazil. All participants also had professional experience with young children education and postgraduate academic degrees; three had a master, and three had specialization degrees in young children education. The study also included the participation of a young children's teacher at a private education center in Brasilia—here named as Carol—together with her 3-year-old students. The research was partially inspired by Tobin et al. (1989) study carried out in Japan, China, and the United States.

The first phase of the study was carried out in Brasilia. After observing many teachers in a well-known private school, we selected a 25-year-old female teacher and her 16 3-year-old students to participate of filmed sessions. Our first research material consisted of 11:15 h of video with teacher-student interactions, which allowed for the selection of a significant number of episodes relevant to our goal.

The next phase of the study used edited videotapes showing the selected episodes of social interactions between the teacher and her students to the six experts from another major Brazilian city (Belo Horizonte), who were individually interviewed and also participated of a focal group to further investigate their belief orientations. All sessions were audio recorded. Data were fully transcribed and then analyzed from a qualitative, interpretative methodological approach. Convergences and divergences, as well as contradictions, were specially analyzed as we targeted to identify the voices of contemporary theories of human development.

Results show that (1) there is a strong influence of Piaget's constructivism as well as of cultural-historical perspectives. Most experts underline the agentic quality of the developing child and recognize the important role played by social interactions, and some refer to the influence of broader cultural contexts, as well as the role played by educators' intentionality in the promotion of child development; (2) constructivist theories of moral development prevailed in their discourse, particularly with references to concepts like egocentrism, heteronomy, autonomy, and cooperation; however, (3) there was a significant divergence of belief orientations when the subjects of analysis were specific, concrete practices and actions. This finding suggests the existence of controversies and different personal and collective cultures leading to diverse ways to interpret the situations shown in the video. The following section discusses major trends and disagreements found in experts' evaluations on the target-teacher's actions during specific episodes.

39.3.1 Evaluations of Teacher's Practices in Specific Episodes

Among the pedagogical practices actually employed by the target teacher, the authors selected for analysis those where she aimed at socializing the kids in contexts within which some sort of conflict concerning socio-moral issues emerged in child-child or teacher-child interactions. We also included episodes where she suggested, in different ways, any kind of rules to control kids' social behavior. Such episodes contained a sequence of interactions which were carefully analyzed by the researchers, who then prepared an edited video with a sample of the best episodes, i.e., those with a good chance of triggering relevant evaluations by the experts. The episodes were characterized by the existence of goal orientation divergences.

The episodes were organized into six video editions: (1) children's conflicts, or three episodes where they used the words "I did not like it"; such words were suggested by the teacher to be said in such circumstances; (2) the killing of the spider, where the teacher tried to induce empathy toward the insect; (3) conflicts over toys brought from home; (4) a newcomer's aggressive attempt to participate of a Lego play situation; (5) teacher's efforts to stop a frantic play with cushions; and (6) a moment of construction—by teacher and kids—of the "negotiated-rule" book. Next, we discuss the major results according to experts' evaluations vis-à-vis child development theories and to our own analysis. They are organized in the following topics: children's conflicts and the use of "I did not like it"; sanctions and limits; the 'negotiated-rules' book construction; planned activities versus children's interests; autonomy and cooperation; sexuality and gender issues; experts' beliefs synthesis; and last but not least, contributions for young children teacher training programs.

39.3.1.1 Children's Use of "I Did Not Like It"

The six experts were unanimous about the constructive nature of peer conflicts for child development, stressing the need for fostering dialogue and autonomous negotiation among children. However, three experts thought this should be achieved by teacher's active intervention, while the other three said that kids had to work things out by themselves without teacher's interference. This last group did not approve of the "I did not like it" rule, because, for them, it sounded as an artificial, adult-like form of intervention. According to E2 (Expert 2), this is a stereotyped verbal action that does not solve the problem and may only interrupt it. A simple standardized protest can neither provide children with a better understanding of each other's point of view (according to her) nor clarify moral arguments relevant to the situation (Killen and Nucci 1995).

E2 also criticizes another verbal rule of thumb used by the teacher: "in this school we do not hit others, we talk to them." E3, E4, E5, and E6 insisted that adequate conflict resolutions—by talking and negotiating with the other—need continuous, patient work, and the automatic use of verbal rules does not help constructing important negotiation practices. In sum, just repeating the mantra does not mean the internalization of a motivation to negotiate, nor means the acquisition of conflict-solving strategies.

Human interactions and communication processes are very complex. As a consequence, no one can provide standard teacher interventions, or strategies, because those need to be adapted to the singularity of each specific context or situation. Not only collective cultures differ from one another, but individual cultures—with the actual play of personal and interpersonal histories, personality, and so on—also play a very significant part in finding or creating the best way to handle a peer conflict episode. However, peer conflicts are the best venue to cultivate autonomy and independence, which from our culturally oriented theoretical perspective consists of a very relevant goal to be attained by school education, together with cooperation and social responsibility. To achieve such goals, scaffolding (Bruner 1997) and progressive empowerment (Winegard et al. 1989) can be an excellent strategy.

39.3.1.2 The Children and the Spider: Inducing Empathy

To take another person's perspective is acknowledged as a fundamental requirement for decentration and, consequently, to think morally, according to E2, E3, E4, E5, and E6 and to the literature (Piaget 1932/1994). We add its relevance to the development of empathy, the internalization of moral values, and the performance of prosocial conduct (Hoffman 2000; Staub 2003). To our experts, the most important effect of perspective taking is overcoming egocentrism, what alludes to their prevalent constructivist background. De Vries and Zan (1998) advice teachers to ask children to verbalize to each other their feelings as well as to listen to their peers. Such interventions would be necessary, according to E3, E5, and E6, because kids are not able to do that without adult guidance. However, evidence shows that very young kids

can perfectly well solve their own issues (Branco 2003). Moreover, from a Vygotskian perspective, by acting within the proximal development zone, peers can progressively improve their ability to interpret each other's feelings and positionings, not just by playing together but by autonomously resolving their own conflicts.

Another issue is the evidence that perspective taking helps the development of empathy (Hoffman 2000). Even though they are different psychological concepts—one closer to a cognitive perspective and the other to an affective tuning with the other—evidence shows that induction can be particularly effective in producing empathy and sympathy. Hence inductive educational practices may result in successful conflict negotiations.

The problem pointed out by the experts in this case, though, is the fact that the target teacher's efforts to induce empathy for a spider were the same she would use for a human being. Beyond the fact that spiders can be dangerous, the way teacher criticized the kids was too harsh and showed little sensitivity to children's arguments, rendering the whole story surreal and nonsensical. As E1 adequately pondered, the teacher should try herself the kids' shoes and wonder if she would like someone else criticizing her actions using a similar rigid way.

Concerning empathy and how most people refer to the golden rule of "do not do to others what you would not to like them to do to you," it is worthy to reflect upon what such moral principle actually means. At first glance, the rule shines as gold indeed, suggesting respect and true empathy to others. However, it is worth reminding the fact that individuals interpret, think, and feel differently from each other, and if we insist on a blind adoption of the abovementioned rule—as Kant and most religions claim—we may unknowingly reify egocentrism instead. After all, the other does exist as alterity, as a different sentient being; she/he is not an extension of me. Therefore, each social interactive situation demands thorough argumentations and analysis, which may derive from the golden rule but which ultimately aims at a perspective taking and sympathy actually intending the other's feelings and positionings.

39.3.1.3 Bringing a Toy to the Group: To Share or Not to Share

The episode shown to the experts occurred in a context where children were asked to bring, every Friday, one toy to "share" with playmates. However, a contradiction often happened due to the fact that children had the option of not sharing the toy. The concept of "sharing" remained implicit, for the teacher used to say that toys brought from home were "novelties" to be shown and explored (they were put into a "novelty box"), but the concept of sharing was only occasionally made explicit. The real goal, according to the target teacher, was to allow children to speak about themselves through their toys, as well as provide an opportunity for them to learn the meaning of respect for individual private property. In the specific episode, a child strongly reacted against peers trying to touch his toy. Then, controversies

turned up: E1 and E6 criticized the incentive to consumerism; E2 and E4 stressed the waste of time spent with such inevitable conflicts.

De Vries and Zan (1998) suggested the practice, insisting that children should not be obliged to share, to which E4, E5, and E6 agreed. Notwithstanding, the inner contradiction of the activity requires further analysis: it is pointless, and even perverse, to ask kids to bring toys to school only to brag about their interesting toys. While E3 stresses the importance of cognitively "exploring" a private, individual property, E1 affirms that, with this activity, kids should learn how to actually share and cooperate with one another. From our perspective, E1 has a very good point, since our society is already a place for extreme individualism and competition, so the activity consists of an excellent opportunity, a privileged context for learning cooperative values and collaborative skills. Hence, it is recommended that teachers carefully analyze what each pedagogical activity might, in fact, promote. According to research evidence (Branco 2003, 2009; Palmieri and Branco 2008; Barrios 2010), the goal of respecting others' property is by far much more cultivated within educational contexts than fostering cooperation, solidarity, and other prosocial values and behaviors.

39.3.1.4 Joining the Group: Best Way to Accept a Newcomer

Even though there exists a consensus relative to put all efforts in helping children to include newcomers, especially those with any sort of challenge, we detected important disagreements among experts concerning the establishment of limits for the new pupil. The dilemmatic situation selected for discussion involved a boy with a heart problem who was overprotected by his mother. New to the group, he destroyed other children's constructions during a play context, with Carol's full support. When the boy started to destroy other kids' constructions, the teacher played along with his aggressive game, encouraging him to move on with his vicious dinosaur. The major problem was that teacher did not prepare the kids for the newcomer, and the boy was put to play with the kids without any explanation.

E2 and E1 argued that Carol was totally right supporting the newcomer behavior, while E3, E5, and E6 evaluated her supportive actions as a serious disrespect to the group, for the kid was allowed to destroy and dismantle the others' play. According to them, when Carol helped the newcomer to break the so hardly co-constructed rules, she made his adaptation to the group even more difficult. They also argued that the moment a boy complained to her that the newcomer had hit him, she should have listened and done something about it, instead of pretending she was not listening, moving on with the dinosaur game. E3 suggested that, as a dinosaur, the teacher could have guided the newcomer toward a different line of action, instead of destructing everything. E4 reasoned that the teacher did her best under the circumstances but admitted that the strategy had completely failed.

The main problem as we see it is that the boy's heart condition was not visible to his peers. If the handicap was explicit, it would have elicited empathy and helped peers to better understand the context. On the contrary, what was obvious for

children was his ruthless agitation and aggressivity; therefore, Carol at least owed the kids a beforehand explanation. There was consensus about this point among experts: they agreed that she could have prevented the awkward situation if she had invited both parts for a mutual introduction the moment the boy arrived.

39.3.1.5 Imposing Limits: Teacher-Student Divergences

Divergences no doubt are minimized when previous negotiations over what is and is not allowed within the classroom are successfully carried out with students. The episode here analyzed was particularly interesting due to the spontaneous nature of its emergence. It was storytelling time, and several cushions were spread all over the classroom for children to sit down and listen. However, they decided to take them to throw around at each other, all over the place. Carol insisted with them to stop, but it took a long time of persuasion and, at last, imposition until they gave up the game.

Experts, with the exception of E4, said that since the kids enjoyed the cushions so much, Carol should plan activities with them. Why not? E4, though, considered cushion battles as a waste of time, and children should be directed to do something else to foster their development. In this case, cushions had to be removed altogether from the classroom.

E3, E4, and E5 mentioned that if Carol had made explicit to children the sequence of activities for the day, introducing a specific ritual to mark the transition between activities, it would be clearer to the kids that they were expected to sit down and wait for the story to be told; they would be able to better self-regulate their impulses in the context.

From the authors' perspective, though, the situation evokes another issue, a relevant issue to be taken into account in this and similar cases. It refers to the notion of "affordances." According to Gibson (1982), objects have a quality he denominated as affordances, which endows each object with particular properties that kind of elicit, or strongly invite, certain types of actions. For instance, a chair's affordance invites people to sit down; a bed, to lie down; and a rattler, to wobble. So, a cushion's affordance can easily invite flinging and tossing them around at others. Hence, a careful analysis of available objects and materials at kid's classrooms should identify what sort of affordances they have before they are introduced in the setting and expected to be neutral. The fact is that they are not neutral at all, and if you bring drums to the class, you certainly should not reprimand children to play them and make noise.

Prevention and calm negotiation, then, are the best venue to deal with divergences. Sometimes, however, despite teacher's efforts, she will have to intervene more assertively against children's interests and wills, and this will particularly happen when risks to safety are involved. Such interventions, nonetheless, should be kept to minimal according to most theorists (Bugental and Goodnow 1998; De Vries and Zan 1998, 2004).

A crucial matter on this topic consists of children's motivation. Piaget insisted on how important it is to cultivate their curiosity and interest in discovering the world

by themselves, i.e., active learning (De Vries and Zan 2004). Vygotsky (1984), on the other hand, claimed that teachers should be able to propose activities within the scope of children's zone of proximal development; otherwise, their motivation would decline and make the task senseless. In other words, teachers need to be aware and sensitive in order to simultaneously listen to the kids and creatively suggest novel activities attuned with their interests and abilities.

39.3.1.6 Rule Negotiation

In the educational center where Carol worked, discipline was dealt with by the construction of what they called a "book of negotiations," mostly occurring at the beginning of the year. This book was supposed to be co-constructed by teacher and students, but as we observed in several classes, the book's contents were mostly decided by the teacher. This initiative rendered good results and is in tune with educational experts' advice (De Vries and Zan 2004). The point our experts' made, after observing a specific negotiation episode, concerned the excessive number of rules Carol was proposing at the same time. In fact, kids did not participate as actively as expected, and teacher's insistence on the use of the term "negotiated" sounded kind of false.

Educators need to be alert regarding the misuse of some socially (politically) correct terminology. True negotiations require true co-construction, which is costly in terms of time and patience. If we do not honor the concept, we engage in deceitful action to make behavior control less obvious and apparently democratic. Another aspect pointed by all experts referred to the way rules were sentenced: "Do not do this, do not do that." The idea of constructing norms exclusively ruling out what people should not do leaves out moral norms derived of moral principles that should guide actions, interactions, and social motivation (beliefs and values). To foster the internalization of moral principles and motivation, with consequent responsible actions, it is necessary to settle the guidelines behind the norms instead of listing an infinite number of "do nots." This may help the development of autonomy instead of heteronomy, granted by repressive and authoritarian commandments that favor inhibition rather than proactive attitudes.

According to E1 and E4, teachers should know that some rules are indeed fundamental, and this quality needs to be emphasized with children, especially when they resist a "negotiation." According to Smetana (1997), reasoning not necessarily entails negotiation, it requires to explain, or make explicit, the logic behind adults' arguments. Hence, reasoning within an affectionate, adequate, and positive communicative framework may result in active reflexivity, acceptance, and internalization of just and fair guidelines regarding socialization.

Next, we present data from another empirical study whose objective was to analyze, from a cultural-psychological framework, if the characteristics and dynamics of teacher-student interactions and pedagogical practices carried out in a young children educational context were most likely promoting, or inhibiting, children's moral development.

39.4 Misleading Pathways to Moral Development

Barrios' master dissertation (2010) was also conducted under the supervision of this chapter's first author. The study was carried out in a public young children education center with nine teachers of 5-year-olds and the pedagogical staff. The investigation particularly targeted a 46-year-old female teacher's classroom and her choice of activities and social interactions with her 16 kids, with the help of a microgenetic methodology.

The topic of moral development has increasingly become an important research field within developmental psychology. This concern has emerged to meet the needs of a scientific perspective toward understanding human being's development from a broader perspective, taking into account the dimension of ethics, conceived as a relevant aspect of human social conduct. Contemporary societies demand a pedagogical discussion over the significance of educational contexts taking over part of the responsibility to promote the development of the child as a whole person, including aspects related to the active internalization of ethical principles, democratic values, and citizenship. However, due to the complex nature of moral issues and development, this objective is mostly left aside, and many educators still believe that only families should deal with this sort of development (Branco 2011). Consequently, moral development remains constrained to the realms of children's family, and, at educational centers, such development takes place without further notice as part of a hidden curriculum (Giroux and Purpel 1983). Due to its invisibility, hidden curricula tend to have serious effects upon social motivation dimensions, what may help explain the unwelcome increase of individualism, competition, and antisocial conduct. Another consequence of such neglect is the fact that most teachers do not know about the subject and are therefore unable to identify central characteristics of moral development, as well as to recognize the magnitude of its meaning to single individuals and whole societies.

The reasons for the theme to be investigated are plenty. Almost every society complains about youth ambivalences and the poor status of ethics and morality observed in their citizens' conduct. Societies' moral crisis mostly assumes the format of indifference, disrespect, lack of solidarity and cooperation, and an escalating number of violent crimes, corruption events, and destructive conflicts threat social stability. In short, something has to be done, and urgently done.

As argued before, cultural psychology is built on a systemic framework that emphasizes the role played by sociocultural practices and meaning constructions created within social relations. It alleges for the interdependence of psychological dimensions—as cognition, emotion, and intentional action— and it sustains that social beliefs and moral values guide people's actions and relationships. Values are conceived as affective semiotic fields that somehow regulate—even though do not determine—individuals' conducts. In order to assess values and beliefs related to morality issues, the study by Barrios (2010) aimed at identifying and analyzing contents, concepts, strategies, and processes involved in teacher-child interactions that could be meaningful to moral development processes.

The investigation adopted a qualitative methodology and was carried out in a public early education institution in Plano Piloto, Brasília. First, after an adaptation period, we directly observed the work of the four 6-year-olds' teachers of a preschool during the morning period. Then, we carried out a microgenetic study with a female teacher from this group—here named as Sonia—and her 16 students. After the observations, nine teachers, including the pedagogical staff, were interviewed in order to investigate their concepts, practices, expectations, and beliefs regarding ethics, morality, and moral development. Our major goal with the interviews was to identify, in their discursive elaboration, their knowledge and understanding of the topic.

The research major goal was the microgenetic analysis of teacher-children social interactions and the interpretative analysis of Sonia's interview, in order to assess consistencies and inconsistencies between her discourse and actual interactions with children. Teacher-student interactions were first directly observed and, then, she was asked to design and develop two structured activities to "promote moral development" among the kids. The interactions, mediated by specific activities proposed by Sonia, would favor or inhibit moral development, and our goal was exactly to identify what processes were put in motion by young kids' everyday experience. The two planned sessions were recorded in video for subsequent microgenetic analysis (Branco and Valsiner 1997). The results of this analysis are presented in the next section.

Ten direct observation sessions were carried out at four classrooms with 6-year-olds attending to the morning period (total time, 35:10 h). With the target teacher, we video recorded 10:11 h of the usual activities she developed with her kids. Direct observations of usual activities, including the sessions in Sonia's classroom, revealed very limited space and time for children to engage in genuine dialogues with teacher and each other. They did not discuss about the nature of the activities, the reasons why rules had to be followed, or presented arguments on any morality-related issues. Conversation among children was mostly restricted and often prohibited by the teachers during the activities.

The analysis of the narratives obtained during the interviews indicated that most educators perceive moral development as learning and obeying disciplinary rules oriented to control children behaviors, limiting the concept of morality to discipline and, eventually, sexual issues. Children were expected to follow norms and rules asymmetrically established by adults, and even though a couple of teachers mentioned that rules could be negotiated with children, we never observed any sort of negotiation or active participation by children. It was amazing how interviewed adults converged on the notion that moral development consisted of self-control and obedience, as well as on the necessary strategies of unidirectional transmission of values and rules, built upon their implicit belief in students' passive learning. There was only one exception among them, namely, one teacher that associated moral development to the formation of ethical individuals, but even this person did not mention the development of autonomy and critical thinking.

Most frequent rules considered as fundamental for moral development during the interviews were "do not shout, speak one at a time, do not talk to your peer, and sit

straight." There was unanimity among teachers that young children were good to work with because they were particularly passive, acquiescent, and malleable. According to one teacher, " …you can take them and make them the way you want! You can put things into their little minds. With older children, it's much more difficult…. " According to Piaget (1994), such an asymmetry, or elegy to heteronomy, is totally in opposition to cognitive and moral development.

Another characteristic of the concept of rules observed in this group of teachers was similar to what we found in the study previously discussed (Barreto 2004). Most rules mentioned during the interviews—and observed—were stated as a negative assertion: you cannot lie and roll over on the sand, you cannot fight, and so on. DeVries and Zan (1998) criticize this negativity and emphasize that rules should not only come associated to prohibition; rules should remind us of principles and desirabilities. These authors also insist that kids should actively participate of the rule construction process because this would favor their sense of responsibility and compromise.

In Barrio's study we also found a significant contradiction between teachers' discourse and actual practices. In the interviews, when asked about how they reacted vis-à-vis children's transgressions, they stressed conversation and dialogue. Direct observations conducted along the research, though, exposed their systematic use of restatement of rules, verbal threats, and, eventually, real sanctions as time-outs or playtime restrictions.

39.4.1 Teacher's Working Concept of Moral Development

The activities Sonia prepared and developed with the intent of promoting moral development unveiled her working concept of morality, i.e., revealed what she considered as moral development, and made explicit how she thought she could succeed. Notwithstanding, during the interview she told that she had not planned the activities by herself, she counted on the participation of a member of the staff and of other 6-year-olds' teachers of the morning period. Results were particularly worrisome.

Sonia structured the two activities based on a little book entitled "What we can, what we cannot" (O que pode, o que não pode, in Portuguese). According to the book's authors, Anna Claudia Ramos and Ana Raquel, the book was meant to help 3-year-olds to understand some basic rules. In the first day, Sonia worked with the "what we can do," and, the next day, with "what we cannot." Among the rules there were "we can draw at school and at home," "we can play with friends," "we can brush our teeth by ourselves," and "we cannot take medicines by ourselves," also with "we cannot eat cookies and sweets instead of food" and so on. The rules presented by the book were explicitly related to very young children's safety and good manners. Moreover, none of them directly related to moral principles. This, by itself, strongly suggests that Sonia had no idea about the meaning of moral development.

Sonia structured the activities as follows: first, she read the book's simple phrases while showing to the kids the corresponding colorful pictures to each rule.

During her planned activities, the only interactions among kids were those mediated by the teacher, concerning aspects of the structure and organization of the activity. She did not allow any discussion whatsoever, let alone introduce any moral topics to be analyzed by the students. In fact, she remarkably wasted a couple of interesting opportunities to do so. For instance, during the second session of the planned activity, a boy interpreted the rule "we can play with our friends" as an opportunity to sharing toys and games with peers. It was an excellent opportunity to discuss the frequent conflicts over playing with toys, but Sonia simply ignored it. Moreover, when conflicts occurred, she made the supposed aggressor say "I am sorry," without further encouragement to discuss the matter, as though "magic" words would be enough.

Puig (1998) and Rogoff (2003) stress how significant it is to use children's everyday experiences as examples to discuss major socio-moral issues: in such cases, high level of motivation and active participation grant better results in terms of elaboration, negotiation, and internalization. Sonia's planned sessions, however, did not prompt any sort of relevant discussion. When questioned during the interview whether she was happy with the results of the planned sessions, she felt at ease to answer yes, the activities she elected to work with the kids did accomplish the expected goals.

During the planned session, we observed the same patterns shown by teachers in the contexts of everyday activities with children: their efforts minded to avoid conflicts as well as interactions among kids. During the interviews, teachers explained that when kids insisted on interacting with each other, they had to move them to a different group. Put differently, they considered as troublesome the exchange of ideas and opinions, and such negotiations among kids were not seen as desirable educational goals.

When we take into account all results obtained in this research, in agreement with those obtained in other projects developed by our group and elsewhere (Branco 2009), we have to face the inescapable questions: What capacities and developmental processes are teachers in fact encouraging among young children? How are kids supposed to develop autonomy, critical thinking, moral reasoning, and conduct? Why do teachers insist on preventing children's active participation in peer interactions, dialogic argumentations, and constructive conflict negotiations? Why jeopardize children's development due to an obsession with discipline that may render their work a little easier but, on the other hand, destroy precious opportunities to actually promote their development?

39.5 Young Children Socialization and Moral Development in Educational Contexts: Conclusions from a Cultural Perspective

Research and pedagogical implications can be drawn from the studies presented in this chapter, suggesting possible venues to teacher training and further investigation about early childhood education. Following the logic of qualitative studies (Smith 2008), we cannot claim that the results obtained in both studies can be generalized to the Brazilian context. However, it confirms most research projects done in Brazil concerning the investigation of social and moral development in early childhood educational contexts (Barrios 2010) and makes explicit the important aspects linked to processes of cultural canalization that are generally implicit in the complex mechanisms of the hidden curricula teachers are mostly unaware of.

The first study unveils two important aspects concerning pedagogical practices dedicated to foster children socialization: there are controversies on how teachers should deal with particular situations, and there are difficulties in translating well-established guidelines regarding the accomplishment of culturally desired socialization goals into actual pedagogical practices. The second study, on the other hand, made explicit how distant scientific, academic knowledge is from teachers' concepts and beliefs relative to the topic of moral development. They lack knowledge concerning the issue, and, consequently, they end up promoting exactly the opposite, namely, heteronomy and individualism among children.

The major conclusions we can draw from the information and arguments contained in the previous paragraphs can be summarized as follows: (1) everyday-life interactions between adult-children, as well as peer interactions, are fundamental to the advancement—or to the inhibition—of moral development; (2) social interactions result from, as well as produce, specific cultural meanings, values, and beliefs pervading each cultural context, according to a mutual process of co-construction; and (3) if we want to promote significant changes concerning the way young children moral and social development is dealt with within educational settings, we need to work with teachers during training courses and actual professional activities. As we learn from cultural psychology, theoretical guidelines, cultural values, and pedagogical practices mutually co-construct each other; therefore, successful mediations to foster changes require wise efforts to address the issue at both practical and affective-cognitive levels. In few words, we need to engage teachers in analyzing and experiencing particular pedagogical activities; they must collectively reflect over issues related to socialization and morality. This would help them understand and experience the need for an alternative paradigm characterized by new values and beliefs concerning the multiple-dimensional nature of children's education and development. As argued elsewhere (Branco 2009), to provide teachers with theoretical information only does not do the job, especially because moral and social dimensions of human lives originate in affectively deep-rooted values and beliefs.

The results of the studies presented in this chapter show how important educators should be aware of social and moral issues at play in their interactions with students. Also, they demand specific discussions about the subject, in order to enable constructive evaluations of the impact of daily educational practices over children's moral development and education.

Cortella and La Taille (2007) refer to an increasing interest within school contexts in matters of values and morality. However, they say, this derives from complaints over disobedience and teachers' difficulties to control their students' behaviors. Their worry has nothing to do with promoting critical thinking, autonomy, or ethical reflections or conduct among students; their worry is constrained to the notion of internalization of rules. According to one teacher interviewed by Barrios (2010), "our school encourages moral behavior because we guide children showing them what they can and cannot do." The point is that the common sense notion of morality and moral development as rule-abiding phenomena demands an urgent deconstruction; otherwise, education will do nothing to revert a scenario of continuous downplaying and inhibition of children's and adolescent's autonomy, social responsibility, and solidarity. We can no longer accept that, at any level, teachers see moral development as a synonym of obedience and conformity, building their practices on the fallacious assumption of unidirectional construction of knowledge and character.

Similar pitfalls occur when conflicts are almost universally seen as destructive, undesirable, and detrimental to children development. As discussed before, conflicts may eventually be unacceptable or dangerous, but most are cases of divergences that may entail intellectual and socio-affective development (Killen and Nucci 1995; DeVries and Zan 2004; La Taille 2006; Valsiner and Cairns 1995). When a teacher, asked to interfere in a conflict, tells her student to go back to solve the matter with his fellow peer (Branco and Mettel 1995), or asks him how they themselves could resolve the issue (Tobin et al. 1989), she is supporting decentration and the construction of conflict-solving strategies, namely, fundamental socio-affective skills. Of course she may eventually use induction to help develop empathy (Hoffman 2000), suggesting the kids to try each other's shoes. But the nurturing of autonomy is often the best venue to bring forth negotiation and moral development.

As a final remark, we invite teachers, educators, and researchers in general to pay a special attention to the social and moral dimension of young children development, to what adults can do to cultivate particular cultural goals and values, and to the central role played by educational institutions in cooperation with families to contribute to the dissemination of ethical commitments and responsible citizenship among future generations.

References

Barreto, A. (2004). *Educação infantil: crenças sobre as relações entre práticas pedagógicas específicas e desenvolvimento da criança*. Doctoral dissertation, University of Brasília.

Barreto, A.M. & Branco, A.U. (2005). *Young children educational practices, socio-affective development, and belief orientations: a sociocultural constructivist investigation with Brazilian teachers*. In: First ISCAR Congress, International Society for Cultural and Activity Research. Spain: Akron Grafica, p. 139–140.

Barrios, A.(2010). *Desenvolvimento moral e práticas pedagógicas na educação infantil: um estudo sociocultural construtivista*. Master dissertation, University of Brasília.

Branco, A. U. (2003). Social development in social contexts: cooperative and competitive interaction patterns in peer interactions. In J. Valsiner & K. Connolly (Eds.), *Handbook of developmental psychology*. London: Sage Publishers.

Branco, A. U. (2009). Cultural practices, social values, and childhood education. In M. Fleer, M. Hedegaard, & J. Tudge (Eds.), *World yearbook of education 2009 – childhood studies and the impact of globalization: Policies and practices at global and local levels* (pp. 44–66). London: Routledge.

Branco, A.U. (2011). *Bullying e cultura de paz na escola*. Non-published manuscript, report presented to CNPQ, Brasil.

Branco, A. U., & Mettel, T. P. L. (1995). Canalização cultural das interações criança-criança na pré-escola. *Psicologia: Teoria e Pesquisa, 11*(1), 13–22.

Branco, A. U., & Valsiner, J. (1997). Changing methodologies: A co-construtivist study of goal orientations in social interactions. *Psychology and Developing Societies, 9*(1), 35–64.

Brasil (1996). Law # 9.394, December 20th, 1996, establishes the principles and outlines of National Education.: Access: October 14th, 2012 at http://portal. mec.gov.br

Bruner, J. (1997). *Atos de significação*. Porto Alegre: Artes Médicas.

Bugental, D. B., & Goodnow, J. J. (1998). Socialization process. In W. Damon (Ed.), *Handbook of child psychology* (Vol. 3, 5th ed., pp. 389–462). New York: Wiley.

Campos, M. M., Füllgraf, J., & Wiggers, V. (2006). A qualidade da educação infantil brasileira: alguns resultados de pesquisa. *Cadernos de Pesquisa, 36*(127), 87–128.

Cortella, M. S., & La Taille, Y. (2007). *Nos labirintos da moral*. Campinas: Papirus.

De Vries, R., & Zan, B. (1998). *A ética na educação infantil: o ambiente sócio-moral na escola*. Porto Alegre: Artes Médicas.

De Vries, R., & Zan, B. (2004). Quando as crianças fazem as regras. *Pátio Educação Infantil, 2*(4), 6–9.

Gibson, J. J. (1982). The affordances of the environment. In E. Reed & R. Jones (Eds.), *Reasons for realism: Selected essays of James J. Gibson*. New York: Lawrence Erlbaum Associates.

Giroux, H., & Purpel, D. (1983). *The hidden curriculum and moral education: Deception or discovery?* California: McCutchan Publishing Corporation.

Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. New York: Cambridge University Press.

IBGE. *Censo Demográfico* 2010. Retrieved from: http://www.ibge.gov.br/home/estatistica/populacao/censo 2010/default.shtm

Killen, M., & Nucci, L. P. (1995). Morality, autonomy, and social conflict. In M. Killen & D. Hart (Eds.), *Morality in everyday life: Development perspectives* (pp. 52–86). Cambridge: Cambridge University Press.

La Taille, Y. (2006). *Moral e ética: dimensões intelectuais e afetivas*. Porto Alegre: Artes Médicas.

Palmieri, M., & Branco, A. U. (2008). Educação infantil, cooperação e competição: análise microgenética sob uma perspectiva sociocultural. *Psicologia Escolar e Educacional, 11*, 365–378.

Piaget, J. (1932/1994). *O juízo moral na criança*. São Paulo: Summus.

Puig, J. M. (1998). *A construção da personalidade moral*. São Paulo: Ática.

Rogoff, B. (2003). *The cultural nature of human development*. Oxford: Oxford University Press.

Rossetti-Ferreira, M.C., Ramon, F. & Barreto, A.M. (2002). Improving early child care and education in developing countries. In C. von Hofsten & L. Backman (Eds.), *Social, developmental and clinical perspectives, v. 2* (pp. 101–132). East Sussex: Psyc. Press.

Smetana, J. G. (1997). Parenting and the development of social knowledge reconceptualized: A social domain analysis. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 162–192). New York: Wiley.

Smith, J. (2008). *Qualitative psychology*. London: Sage.

Staub, E. (2003). *The psychology of good and evil: Why children, adults, and groups help and harm others*. New York: Cambridge University Press.

Tobin, J. J., Wu, D. Y. H., & Davidson, D. H. (1989). *Preschool in three cultures: Japan, China and the United States*. New Haven: Yale University Press.

Valsiner, J. (1994). Bidirecional cultural transmission and constructive sociogenesis. In W. de Graaf & R. Maier (Eds.), *Sociogenesis reexamined* (pp. 47–70). New York: Springer.

Valsiner, J. (2007). *Culture in minds and societies: Foundations of Cultural Psychology*. New Delhi: Sage.

Valsiner, J., & Cairns, R. (1995). Theoretical perspectives on conflict and development. In C. V. Shantz & W. W. Hartup (Eds.), *Conflict in child and adolescent development* (pp. 15–35). New York: Cambridge University Press.

Valsiner, J., Branco, A. U., & Dantas, C. (1997). Socialization as co-constrution: Parental belief orientations and heterogeneity of reflection. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values*. New York: Wiley.

Vygotsky, L. S. (1984). *A formação social da mente*. São Paulo: Martins Fontes.

Winegar, L. T., Renninger, K., & Valsiner, J. (1989). Dependent-independence in adult-child relationships. In D. A. Kramer & M. J. Bopp (Eds.), *Transformation in clinical and developmental psychology*. New York: Springer.

Chapter 40
Early Childhood Education in Colombia

Francisco José Rengifo-Herrera

Abstract Colombia is characterized by its duality in several aspects. There are significant tensions, fluctuations and adversities created by antagonistic contexts which affect early childhood. In some regions, indicators of quality of life in early childhood development are similar to those in developed countries, whereas other regions show enormous social and economic gaps. One of the most distinctive features of Colombia is its diversity: Geographical features and cultural and sociohistorical practices, created a process of cultural hybridization and formed a multilingual and multiethnic country, with a wide range of practices. Moreover, the armed conflict has had a significant impact on the population. Poverty, low levels of education and restrictions on access to welfare conditions make children's development from these groups more difficult and critical. Being a child – indigenous, black and/or poor – increases social vulnerability in all dimensions. Regarding research work, there seems to be a preference for following European or American theoretical models. There is also a tendency toward descriptive epidemiological studies; intervention studies are barely visible and have little media coverage. However, in the last decade in Colombia, there has been a development of valuable legal frameworks and important conceptual perspectives to implement public policies for early childhood. Future research and programs must focus on the qualification of the educational systems in early childhood education and the development of support systems for families of the guerrillas and paramilitaries who have laid down their weapons. There is also need for promoting research that orient actions for the return of children and families displaced by the armed conflict.

Keywords Colombia • Early childhood education • Qualifications • Research • Theories

Any approach towards and analysis of Colombia's early childhood education requires considering its dual perspective in terms of its economic, social, political, educational and cultural conditions. For more than 100 years, Colombian political

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culture has often led to conflict, and this has had effects on the everyday life of the population, including children (Bushnell 1994).

Duality means understanding that the country has significant tensions, fluctuations and adversities created by antagonistic contexts. In Colombia, there are regions and cities whose indicators and features on early childhood development are similar to those in developed countries, whereas other regions show enormous social and economic gaps (López-Castaño and Núñez-Méndez 2007). This might influence the national statistics, showing Colombia as a country with extreme contradictions. In this respect, we urge the reader not to disregard the duality as a characteristic of the country. This will enable the reader to understand the extreme differences in Colombia's statistical indicators and its development rates.

40.1 Theoretical Paradigms: Concepts, Theories and Research on Early Childhood Education

It is difficult to talk about theoretical paradigms in Latin America. In Colombia, most researchers make use of European or American theoretical models to support their research work. However, there is a tendency toward descriptive epidemiological studies; intervention studies are barely visible and have little media coverage. By contrast, diagnostic studies are presented in the media and have a great impact on society. In this sense, we believe that postgraduate research studies on aspects that can interweave theoretical contributions and specific interventions in social contexts should be promoted. Colombia's social and cultural characteristics demand a different academic approach than that favoured in other latitudes.

During the 1980s and 1990s, academic research was centred on basic developmental psychology (Puche-Navarro 1984; Torrado 1997). However, in the late 1990s and early 2000s, alternative approaches emerged that consider development as a highly complex, multicausal, continuous, multidimensional and comprehensive phenomenon (Amar 2001). We can identify that, at present, there is more theoretical diversity and greater understanding of the different dimensions of early childhood and early childhood education.

Advances in the understanding of early childhood in Colombia have been strongly influenced by the work of Sen (2000), who presents a broader and less psychologistic perspective about human development. In this sense, research on early childhood in Colombia, today, has appropriated multidisciplinary perspectives that allow a broader view of the development processes. This allows one to give the children priority in the reconstruction of social and educational policies, especially at the prospect of regulation or control (possibly end) of the armed conflict. This last aspect, due to its importance, will be discussed later in greater depth.

In Colombia, researchers have made important contributions regarding the impact of the armed conflict on children (Ardila-Rey et al. 2009; Posada and Wainryb 2008; Springer 2012). Similarly, the relationship between early childhood

and parenting practices has also been studied (Cuervo 2010; González and Estupiñán 2010; Pulido et al. 2013). We also highlight Carrillo's work on attachment processes, sibling relationships, children's social well-being and family policies in Colombia (Ripoll and Carrillo-Avila 2013; Carrillo 2012). Obviously, we cannot concentrate only on analyzing certain specific approaches of research on early childhood education. It is important to emphasize the diversity and the wide range of theoretical and methodological perspectives in this country. Puche-Navarro et al. (2012) and Puche-Navarro (2009), for example, have conducted one of the most outstanding works of research in the country. This teacher-researcher has led research work in early childhood for the past 25 years, which is a landmark in Latin America.

The relationship between poverty and early childhood is important to explain some social and psychological processes. Family and social networks, as well as the community, are important for the development of autonomy during childhood (Torrado and Anzelin 2006 and Torrado et al. 2006). Similarly, if education is planned in early childhood, it may identify the importance of the emergence of culture canalization processes, values and practices (Ministerio de Educación Nacional [MEN] – Colombia 2009). Family support plays an important role too (Perez et al. 2006), and the formation of 'communitarian mothers' is critical.

In addition, research should not only be aimed at describing but should promote intervention on social, educational and economical realities that need to be addressed (Peña et al. 2009). The contributions of Van der Gaag (2002) proposing links between early childhood and human development through the notions of education, health, social capital and equality also have a strong influence on the policies, actions and transformations of social actions to promote children's welfare.

Legal frameworks, conceptual perspectives and systems related to public policies for early childhood that were created during the last decade are very valuable, but there are still many problems in implementing them. The absence of monitoring processes for public policy, bureaucracy and corruption and especially the wide gap between public policies and the real conditions of public officials running these policies create many difficulties. All this makes the planned objectives in government documents unachievable because public policies and government actions lack effective mechanisms for the implementation of those actions (Durán-Strauch et al. 2011). This brings serious problems to children due to the difficulties in effectively applying laws and social policies, leaving the children revictimized and mistreated. We can say that, in the Colombian case, there is overdiagnosis and sub-performing of real problems, and this is a serious drawback for the achievement of goals by the country.

40.2 Local Conditions That Focus on Research Programs in Early Childhood in Colombia

In 1968, the Colombian Institute of Family Welfare (ICBF – Instituto Colombiano de Bienestar Familiar) was created with the goal of protecting the child and family. Subsequently, a more contemporary look on childhood began in the early 1970s. The perspectives on the development, care and protection of children appear within academic discussion. State policies began to emerge. Nonetheless, paternalistic approaches in early childhood appeared, especially regarding the government actions aimed at the poorest sectors of the population (shipping of free food for families who sought help, with no control systems by the government). Institutional characteristics have been in favour of paternalistic policies, which has become one of the main difficulties with respect to its actions as a government agency. In 1979, an important change occurred with the creation of the National Family Welfare System (Law 7 of 1979). We emphasize the role played by the program 'Communitarian Homes' (Hogares comunitarios) as a strategy that enables minimum childcare, especially in the poorest regions and marginal sectors of most populous Colombian cities.

In the 1970s and 1980s, the first documents of agreement between universities and state were elaborated (these documents regulate the actions of early childhood education and create guidelines for curriculum development for early childhood education, such as Dirección Nacional de Planeación, DNP, Para cerrar la brecha [to close the gap], 1974–1978, and MEN-ICBF-UNICEF, 1985, Plan Supervivir/Pefadi).

From the 1990s on, educational processes in early childhood were formalized. Currently, the Colombian formal education system proposes the existence of three levels that must be offered to children between 0 and 6 years – prekindergarten, kindergarten and transitional kindergarten – as proposed by Law 115, Articles 17 and 18 (Ley 115 from 1994 and Ministerio de Educación Nacional 2009).

A brief history about processes on curricular and pedagogical practices in the last 30 years shows that in the 1980s the concept of dimensions had great relevance. The proposal raised different concepts regarding the curriculum, perceptual-motor skills, socio-emotional characteristics, intellectual development, language and creativity. These concepts were analyzed through the notion of dimensions, which served as a guide to the comprehension of the practices and planning in early education since the early 1980s.

From the 1990s, changes in theoretical understanding of the concept of dimension allowed one to think about alternative concepts on early childhood education from a State perspective. A proposed approach to this was the construction of indicators of curricular achievements as embodied in the notion of dimension. Examples of these dimensions are bodily, communicative, cognitive, aesthetic and ethical, attitudes and values (De cero a siempre [From zero until forever], MEN 2013).

Currently, Colombian educational programs for early childhood education are referred as 'early education' (Educación Inicial). These government programs are

developed in the context of worldwide early childhood policies considered by international agencies (De cero a siempre, MEN 2013). The main program focused on 'zero until forever'. It featured the integrated actions of the different dimensions, levels and processes involved in predicting the future of citizens in emotional, social, economic, educational, cognitive and cultural areas.

Early education is a right for all children under 5 years of age to participate in healthy contexts. Learning is promoted in recognition of sociocultural characteristics, as well as the importance of individual possibilities. Such approaches increase prospects for children in that the early years become a window of opportunities. This type of planning allows the emergence of multiple alternatives along ontogenetic trajectories in childhood.

Since the beginning of the twenty-first century, the idea of early education became a guiding principle of global educational activities. Nevertheless, Colombia took on this challenge only at the end of the 2010s, unlike most countries in Latin America. Most of the countries of the region created teaching and curriculum guidelines from the beginning of the 2010s.

Currently, the notion of dimension is maintained as a reference for thinking out the curriculum. At the same time, this concept allows the organization of new meanings and other points of view about its role in educational practices and process evaluation in early childhood education. Play as a promoter of education, attachment as a catalyst for identity processes, development of autonomy, the role of language as primary way to access culture, the body and the emergence of identity and other dimensions are highlights of the current perspectives on curriculum policies in early childhood (De cero a siempre, MEN 2013).

Curriculum planning must be developed through the implementation of educational projects and recreational activities that take into account the integration of all the dimensions of human development (an integrated perspective about development).

The analysis of early education documents (De cero a siempre, MEN 2013; Consejeria presidencial de la primera infancia, Presidencia de la República) allows to identify that there is a tendency to consider learning processes as irregular, oscillating and having many variations. This has important implications for pedagogical practices of teachers and community mothers.

We recognize that there is no broad systematization of teaching practices in early childhood. Similarly, there seem to be no reported studies regarding the impact of formation processes of community mothers and teachers on early education. Both, communitarian mothers and teachers, participate in educational programs oriented to redefine their daily practices, but there is no clarity on how such interventions are being taught and assessed.

Recognizing the value of playful activities as part of learning situations is very important. Pedagogical practices should focus on facilitating situations in which play and socialization processes allow to achieve pedagogical objectives. This issue is discussed in some of the documents (Fandiño and Reyes 2012; Consejeria presidencial de la primera infancia, Presidencia de la República, De cero a Siempre

2013), indicating that there is no explicit interest in bringing formal education practices into early childhood education.

Similarly, ICBF provides services at a national level for lower-income people (working in homes or community kindergartens part time or full time), and with regard to the private preschool education, it must provide the three levels required by legislation. Cajas de Compensación Familiar[1] covers both kindergartens and educational institutions of schooling.

Before 2003, in Colombia, there were different isolated actions carried out by the state to deal with the issues in early childhood development. The National Plan of Survival and Development (supervivir) as well as creating the 'Communitarian Homes' were some of those actions. Nevertheless, the lack of coordination between different government agencies was a major problem in the consolidation of children's attention. Likewise, there were no public policies to coordinate the actions or to establish specific goals and results.

Colombia's agreement to be included in the Convention on the Rights of the Child (CRC) in 1991 is a very important aspect to be considered. After that agreement, the public policy of the country was reorganized, and 10 years later, the document 'Colombia for Early Childhood' was created. This public policy was approved in 2003 by the Conpes Document (Consejo Nacional de Política Económica y Social) [Conpes] 109. This document allowed the creation, coordination and organization of articulated actions and policies for children from 0 to 6 years (Torrado and Anzelin 2006). It was based on the Millennium Development Goals and the Convention on the Rights of the Child in order to ensure relevance of the performed actions (Simarra 2010).

Also, in 2006, the new code for children and adolescents was issued (Law 1098, 2006) based on the following legal principles: (I) best interests of the child, (II) strengthening comprehensive child protection efforts, (III) prevalence of child rights and (IV) responsibility for child welfare (Duran-Strauch et al. 2011).

One of the main features of the country is its cultural diversity. The natural geographical features as well as the sociohistorical practices created a process of cultural hybridization. Colombia is a multilingual and multiethnic country. Living conditions are complex. The cultural diversity in the community creates a wide range of practices and/or cultural norms in parenting. This means that there are many different worldviews that correspond to perspectives of others, family and parenting practices, allowing the emergence of different cultural niches, even, in some cases, completely opposite. Racial minority groups become victims of drug violence and the armed conflict. Poverty, low education and restrictions on access to welfare conditions make early childhood development in these groups even more difficult and critical. Also, being a child (indigenous, black, or poor) further increases social vulnerability in all dimensions (Springer 2012; United Nations Development Program [UNDP] 2011b, c).

[1] Private entities, nonprofit, with a supportive nature, created by the management and aid in grants, as well as services of social security employers' contributions to improve the quality of life for families of Colombian workers.

With respect to this issue, as already mentioned, the analysis of Colombia's major problems must take into account the existence of socio-economic and educational GAP. Poverty, as a condition, is part of the historical construction of the country. Colombia, according to the GINI index, is one of the most unequal countries in the region (Economic Commission for Latin America and the Caribbean/United Nations [ECLAC/UN] 2012), which is most important considering the economic growth of the country in the last decade. Similarly, the armed conflict and violence create experiences of fragmentation and have a significant impact on the population (Jimeno 2001), which, in turn, creates highly conflicting practices, meanings and forms of relationship and social cohesion.

Although data from the country can seem very encouraging, we must emphasize that the beneficiaries of the economic dynamics of the country during the last decade belong mostly to large urban centres (68.4% of the population). The comparisons among urban and rural population should be highlighted in terms of the impact that social and economic differences have on childhood education and development. According to the data, about 11 million people in Columbia live in the countryside (United Nations Development Program [UNDP] 2011a).

Rural statistical data shows that basic needs are neglected in relation to issues such as education, public services and employment conditions. The indicators of poverty, inequality and unemployment are quite different from those found in the larger cities.

Poverty in Colombia, according to the Organization for Economic Cooperation and Development/Economic Commission for Latin America and the Caribbean (Organization for Economic Cooperation and Development/United Nations Children's Fund [ECLAC/UNICEF] 2012), was 34.2% in 2011 (in 2002 it was 49.7%), while the population in extreme poverty in 2011 was 10.7% (in 2002 it was 17.8%). Some data on indigence and children give us an idea of the impact on childhood, given that 33% of children between 0 and 5 years in households are living in extreme poverty. Combining poverty and indigence indicators, the total percentage of children between 0 and 5 years who belong to families in that condition rises to 57.8% (Organization for Economic Cooperation and Development/United Nations Children's Fund [ECLAC/UNICEF] 2010).

Social phenomena such as forced displacement (produced by army, guerrilla, paramilitaries and traffickers) mainly affect peasant families and those in lower-income classes. These circumstances contribute to shaping new dynamics and family structures and greater syncretism in the customs and ways of conceiving relations with oneself, with others, and with the environment (Torrado-Pacheco and Bejarano 2009). The presence of armed groups has consequences in the inclusion of children as war fighters in the armed conflict. Sometimes, children are forced to join these groups or they become victims directly (death, sexual abuse, or physical and psychological torture) or indirectly (family death or forced recruitment) (Springer 2012).

The emotional fragility and psychological consequences associated with the difficult circumstances in which children grow must be highlighted (Save the Children/Organización de Estados Iberoamericanos 2009). Any study of Early Childhood

Education in Colombia must take into account how children have increasingly become victims of armed conflict, and this represents a very important aspect of any analysis of the situation in Columbia (Jimeno 2001; Rengifo-Herrera 2012).

40.3 Current Research and Future Research Needs

In the event that the Colombian government establishes peace agreements with guerrilla groups (FARC and ELN), there will be a need to implement post-conflict-specific actions with respect to early childhood. The severe social exclusion experienced by peasants in the countryside has been one of the most neglected aspects in terms of execution of actions and policies. Historically, the Colombian state seems to care about executing actions in large urban centres but does not develop concrete proposals to expand its presence in sectors traditionally disregarded.

Reconstructing relationships, trust and reassertion of values in contexts that have been highly violent are goals not easy to implement. Research conducted by Osorio-Mejia et al. (2012), Posada (2012), Posada and Wainryb (2008) and Rengifo-Herrera (2012) are examples of the analyses that need to be done to understand the impact of violence and the lessons learned from it in the development of children.

Equally important are the social changes that have resulted from the lack of concrete actions and dynamics caused by armed conflict. Consideration must be given to the new economic resources needed for educational and social development for the people who have suffered the consequences of the social conditions.

Research on early childhood in Colombia must take into account several aspects regarding key issues for the future. Some of these key issues are as follows:

Improvement of the quality of education in childhood and adolescence through increasing the qualifications of staff in early childhood education

Developing support systems for those guerrillas and paramilitaries groups, and their families, who have laid down their weapons

Promoting research to orient actions for the return of children and families displaced by the armed conflict

Creating systems of social inclusion for children whose families moved out of extreme poverty

Developing programs for teaching new technologies in early childhood

There are many actions we could mention in this list. However, we believe that the political, economic and social situations in Colombia are changing favourably. This would make it possible for the country to rethink some of its plans to attend early childhood, including those for overcoming various difficulties that were a burden of the past.

References

Amar, J. (2001). Perspectivas de la Psicología en el siglo XXI. Psicología desde el Caribe, 2001, (2), 38–52. Retrieved. October, 1, 2013 http://www.redalyc.org/articulo.oa?id=21300804

Ardila-Rey, A., Killen, M., and Brenick, A. (2009). Moral reasoning in violent contexts: Displaced and non-displaced Colombian children's. Evaluations of Moral Transgressions, Retaliation, and Reconciliation. Social Development, 18, (1).

Bushnell, D. (1994). *Colombia una nación a pesar de sí misma. De los tiempos precolombinos a nuestros días*. Bogotá: Editorial Planeta.

Carrillo-Avila, S. (2012). Family policy initiatives in Latin America: The case of Colombia and Ecuador. *Journal of Child and Family Studies, 21*, 75–87.

Código de Infanica y Adolescencia. Ley 1098 de 2006. Diario Oficial de la República de Colombia No 46.446 November 8th of 2006.

Cuervo, A. (2010). Pautas de crianza y desarrollo socioafectivo en la infancia. *Diversitas: Perspectivas en Psicología, 1*(6), 111–121.

Durán-Strauch, E., Guáqueta-Rodríguez, C. A., & Torres-Quintero, A. (2011). Restablecimiento de derechos de niños, niñas y adolescentes en el sistema nacional de bienestar familiar. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud, 2*(9), 549–559.

Economic Commission for Latin America and the Caribbean/United Nations. (2012). *Social Panorama of Latin America*. Retrieved August 6, 2013 http://www.cepal.org/publicaciones/xml/4/48454/Social Panorama 2012DocI.pdf

González, A. R., & Estupiñán, M. R. (2010). Prácticas de crianza de madres adolescentes de la ciudad de Duitama, Colombia. Investigaciones Educativas en. *Enfermeria, 28*(3), 396–404.

Jimeno, M. (2001). Violence and social life in Colombia. *Critique of Anthropology, 21*(3), 221–246.

López-Castaño, H., & Núñez-Méndez, J. (2007). *Pobreza y desigualdad en Colombia Diagnóstico y estrategias*. Bogotá: Departamento Nacional de Planeación (DNP).

Ministerio de Educación Nacional. (2009). *Desarrollo Infantil y Competencias en la Primera Infancia*. Bogotá: Taller Creativo.

Ministerio de Educación Nacional. (2013). Una propuesta pedagógica para la educación de la primera infancia. Documento base para la construcción del lineamiento pedagógico de educación inicial nacional. Retrieved september 29, 2013 http://www.colombiaaprende.edu.co/html/familia/1597/articles-310603_docu2.pdf

Organization for Economic Cooperation and Development/Economic Commission for Latin America and the Caribbean (ECLAC). (2012). Latin American Economic. Outlook 2013: SME Policies for Structural Change. Retrieved July 22, 2013 http://www.eclac.org/publicaciones/xml/5/48385/LEO2013_ing.pdf

Osorio-Mejia, A. M., Bolance-Losilla, C., & Alcaniz, M. (2012). Measuring intermediary determinants of early childhood health: A composite index comparing Colombian departments. *Child Indicators Research, 6*(2), 297–319.

Peña, S., Vera, A. V., Rodriguez, I. M., Rodriguez, H. Y., Rengifo-Herrera, F. J., Perdomo, M. T., & Abello, O. A. (2009). *Hogares con vivencias. Programa de formación de Madres Comunitarias*. Ibagué: Universidad de Ibagué/Gobernación del Departamento del Tolima, Colombia.

Pérez, M, Zuleta, C; Negret, J.C.; Flórez, R.; Castrillón, S. y Reyes, Y. (2006). Acceso al lenguaje, la lectura y la escritura: Una prioridad de la Política de Infancia. Bogotá: Comisión Lectura en la Primera Infancia.

Posada, R. (2012). Experiences of violence and moral reasoning in a context of vengeance. *Revista Colombiana De Psicologia., 21*(2), 197–212.

Posada, R., & Wainryb, C. (2008). Moral development in a violent society: Colombian children's judgments in the context of survival and revenge. *Child Development, 79*(4), 882–898.

Presidencia de la República-Consejeria presidencial de la primera infancia. (2013). *De cero a Siempre: Estrategia de atención integral a la primera infancia. Fundamentos politicos, técnicos y de gestión*. Bogotá: Imprenta Nacional.
Puche-Navarro, R. (2009). From implicit to explicit representation in children's response to pictural humor. *International Journal of Behavioral Development, 33*, 543–555.
Puche–Navarro, R. (1984). *Después de Piaget, Compilación, entrevistas y comentarios sobre Inhelder, Greco, Mounoud y Bresson*. Cali: CLEPS Ediciones.
Puche-Navarro, R., Combariza, E., & Ossa, J. (2012). La naturaleza no lineal de los funcionamientos inferenciales: Un estudio empírico con base en el humor gráfico. *Avances en Psicología Latinoamericana, 30*(1), 27–38.
Pulido, S., Castro-Osorio, J., Peña, M., & Ariza-Ramírez, D. P. (2013). Pautas, creencias y prácticas de crianza relacionadas con el castigo y su transmisión generacional. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud, 11*(1), 245–259.
Rengifo–Herrera, F. J. (2012). The semiotic construction of values of violence in the colombian context. In A. Branco & J. Valsiner (Eds.), *Cultural psychology of human values*. Charlotte: Information Age Publishers.
Ripoll, K. & Carrillo-Avila, S (2013). Sibling relationships and children's social well-being. In *Handbook of child well-being: Theories, methods and policies in global perspective* (pp. 1817–1842). New York : Springer.
Save the Children/The Organization of Ibero-American States. (2009). Colombia: Huellas del conflicto armado. Retrieved November 18, 2011 http://www.asdown.org/descargas/politica/colombia_huellas_del_conflicto_en_primera_infancia.pdf
Sen, A. (2000). *Desarrollo y Libertad*. Bogotá: Planeta.
Simarra, J. (2010). Panorama de las políticas públicas de primera infancia en Colombia. *Miscelánea Comillas., 68*(132), 397–417.
Springer, N. (2012). Como corderos entre lobos. Del uso y reclutamiento de niñas, niños y adolescentes en el marco del conflicto armado y la criminalidad en Colombia. Retrieved July 13, 2013 http://www.centrodememoriahistorica.gov.co/descargas/informe_comoCorderosEntreLobos.pdf
Torrado, M. C. (1997). El desarrollo cognitivo hoy. *Revista Colombiana de Psicologia, 5*, 65–71.
Torrado, M.C. & Anzelin, I. (2006). La Primera Infancia en la agenda local Comisión Gestión y desarrollo local. Bogotá: Observatorio sobre Infancia. Universidad Nacional de Colombia.
Torrado, M. C., Reyes, M. E., & Durán, E. (2006). Bases para la formulación de un plan nacional para el desarrollo de la primera infancia. *Revista Infancia, Adolescencia y Familia, 1*(1), 15–38.
Torrado-Pacheco, M. C., & Bejarano, D. (2009). Estado del arte sobre primera infancia en el conflicto. In *En Huellas Del Conflicto En La Primera Infancia* (pp. 53–142). Bogotá: Panamericana formas e impresos S.A.
United Nations Development. Program. (2011a). *Colombia rural. Razones para la esperanza. Informe Nacional de Desarrollo Humano 2011*. Bogotá: INDH PNUD.
United Nations Development. Program. (2011b). *Afrocolombianos Sus territorios y condiciones de vida.. Colección Cuaderno del Informe de Desarrollo Humano. Informe Nacional de Desarrollo Humano 2011*. Bogotá: INDH PNUD.
United Nations Development. Program. (2011c). *Pueblos indígenas. Diálogo entre culturas. Informe Nacional de Desarrollo Humano 2011. Colección Cuaderno del Informe de Desarrollo Humano*. Bogotá: INDH PNUD.
Van der Gaag, J. (2002). From child development to human development. In M. E. Young (Ed.), *From early child development to human development*. Washington, DC: The World Bank.

Chapter 41
Early Childhood Education in Chile

Rodrigo A. Cárcamo

Abstract This chapter summarizes around 200 years of history of early childhood education in Chile. For the time of the colony, the first records about childhood education are described with an account of the purpose of these schools with their Catholic tradition and the differential attention to children from different social classes and ethnicities. With the advent of the Republic, the Lancaster educational model was applied but changed over the years following ideas from several countries. In the second half of the nineteenth century, the first kindergartens with the Froebel pedagogic system were implemented. In 1906, the first public kindergarten was officially created including professional training programs. The chapter also discusses coverage and investment in early childhood education from the government, which has never stopped. Since 1990, a series of reforms in education have taken place. The last decade highlighted the major effort ever undertaken: for the first time, the Chilean government prioritized to set up a public policy toward children's protection and well-being involving early stimulation programs, educational programs for parents, and coverage to attend full-time daycare centers. Additionally, the public policy for childcare centers offers intercultural programs for ethnic minority children from 2 to 5 years old. The last decade has been marked by an exponential scientific interest in aspects like cognitive and socio-emotional development, which is also discussed, as well as the future of scientific research to improve our understanding of child development in the Chilean context and the impact of the latest policies in early childhood education.

Keywords Early childhood education • Chile • Childcare • Intercultural programs

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41.1 Brief History of Chilean's Early Childhood Education

Early childhood care and education in Chile has undergone a great change in the last decade. For the first time, the Chilean government has established as a priority to set up a public policy toward children's protection and well-being called "Chile Grows With You," which among other things involves programs such as early stimulation, educational programs for parents, and coverage to attend full-time daycare centers (Saracostti 2010). In a period when female participation in the labor force is encouraged as a means to reduce poverty and its reproduction, about 43% of Chilean women have entered the labor market, and the number of daycare centers for children from 3 months old has quintupled between 2006 and 2009. As a result, in 2009, approximately 37.4% of the preschoolers received non-maternal care and most of them from 35 to 45 h per week (Medrano 2009). However, behind this change, there is a history of several transitions through the republican trajectory of the country that will be summarized as follows.

For the time of the colony, the first records about childhood education are described by Rojas (2010), who explained in an invaluable source how the elementary schools were arranged at the end of the eighteenth century. The schools had as their basic purpose to teach to pray, read, write, and basic math operations and prevailed in Catholic tradition and a strong use of rewards and punishments. Children from different social classes could attend them but not from different races: Negros and Zambos[1] were not allowed to receive theses teachings. Fees that the richest families paid supported those schools, and poor (but white) children who attended the same school did it without payment. The educational system was also highly restricted for girls, who received education in a few monasteries, but as an exception that only rich families could afford. Prior to this, from 1700 to 1811, a specific school for Mapuche indigenous children existed, with the goal to evangelize them and modify their traditions; however, it was never successful and disappeared slowly over time. With the advent of the Republic, the Lancaster educational model was introduced: the more advanced students had to pass on their knowledge to the less advanced ones, which enabled the same number of teachers to educate larger numbers of students, but over the years, it changed under the influence of France, Germany, and the United States of America (Egaña 2000).

In the second half of the nineteenth century, the first kindergartens were implemented; however, there were just few private attempts, since the priority was given to primary school at that time (Peralta 2008). Those centers were strongly influenced by the Froebelism pedagogic system. In 1902, two positions were in contraposition: some authorities declared that early education must be provided at home by parents, but others were more enthusiastic with the idea that moral principles can

[1] These terms are no longer in use; nowadays, they have a pejorative meaning. At that time, *Negros* was the word to identify individuals of African ancestry, and *Zambos* was used to identify individuals who were of mixed African and Amerindian ancestry.

be better transmitted at the age of 4 in kindergarten and that bad habits can thus be avoided.

Thereby in 1906, the first public kindergarten was officially created, and professional training programs began. However, the support by the government decreased, and in 1914, all the public kindergartens were closed (Rojas 2010). During the next decades, several attempts by professionals of education were made to increase the number of public kindergartens without real success, especially because in economic crisis the government was supporting preferably primary education. The Montessori method was present in those few centers that were still open but serving a very low number of children. In the 1950s, the coverage for children under 5 years of age was around 0.9 %, which increased to 2 % in the 1960s and 4 % in the 1970s. In this period of the Allende government, early childhood education was a priority and the coverage increased 15 % each year on average (Echeverría 1982). The main reasoning behind this policy was to provide mothers access to the labor market, keep children away from the street, and improve their development through early stimulation.

All the efforts to create a policy to promote preschool education echoed in 1970, with the enactment of the law that among others created the National Kindergartens Board (Junta Nacional de Jardines Infantiles, JUNJI), which grouped several institutions and coordinate all the public centers to this day (Rojas 2010). In the 1980s, during the dictatorship, the preprimary school continued growing in terms of coverage, but the most important issue at this time was the instauration of a very strong private system; the neoliberalism permitted the expansion of both private institutions or universities which were allowed to offer undergraduate programs in preschool education and private or semiprivate childcare centers which were subsidized by the state (Umayahara 2006).

Since the democracy was restored in 1990, a series of reforms in education has taken place. The goal was to increase the coverage and improve the quality and equality in public education in general. These changes were accompanied of a series of reforms on the curriculum, and for the first time, the curricula include diverse ethnic contents representing all the indigenous people. From the beginning of the twenty-first century, a reform of early childhood education was begun, based on a new curricular basis; an important feature is the trust given to the teachers as professionals who together with the community can promote children's learning (Umayahara 2006). The theoretical background is based on the socio-cognitive paradigm, which emphasizes the active role that children must play in their own learning process, taking into account the sociocultural context where it occurs (Friz et al. 2009).

The last decade was characterized by the creation of the unprecedented public policy called Chile Crece Contigo (Chile Grows With You), which would become one of the pillars of the policy of social protection, that among others increased the number of public daycare centers from 708 in 2005 to 4.243 in 2009 (Rojas 2010). Again as in the 1970s, the purpose was to provide conditions of equality from the early years to the most vulnerable population in Chile (Saracostti 2010).

The current situation of early childhood education in Chile can be summarized by a mixed system between private and public childcare centers, where the coverage has been increasing enormously and the government guarantee free and full-time access to the 60 % of the most vulnerable population in Chile (Rojas 2010). The age range of the children is from 86 days to 6 years old, arranged in three different levels of 2 years each. According to the Organisation for Economic Co-operation and Development [OECD] (2013), around 42 % of the children in Chile under the age of 3 and 77 % of the children at the age of 4 attend preprimary education. Despite this, the annual expenditure per child in preprimary education is one of the lowest in the OECD countries, slightly more than half of the average annual expenditure in OECD countries (OECD 2013). However, the government is still trying to enroll more children in these levels of education, based on the idea that this policy can break down the circle of poverty, because mothers may participate in the labor market and their children receive adequate stimulation, particularly those children from vulnerable contexts and therefore develop in conditions of greater equity (MINEDUC 2013). The quantitative increase is well documented, but we know little about possible qualitative changes in Chilean childcare.

41.2 Indigenous Children in the Modern Chilean Society

Although the current indigenous population in Chile is quite small and there are disagreements about the data to estimate its presence, the past governments have attempted to perform certain policies to preserve its existence. While the total would represent no more than 11% of the population, the Mapuche ethnic group is notable for its major presence compared to other ethnic groups. Several measures have been implemented. The current program "Chile Grows With You" justifiably tries to take the differences between the various ethnic groups in Chile into account, addressing them in terms of their accepted belief system. An example is the five different guidelines that the program provides to mothers during the pregnancy period (Standard, Aymara, Mapuche, Rapa Nui, Chilota), where the beliefs and advices for that period come from their own culture (Chile Crece Contigo 2013).

Additionally, the public policy for childcare centers offers special intercultural programs in preprimary education for children from 2 to 5 years old belonging to one of the following original or immigrant ethnic minorities: Aymara, Atacameño, Colla, Rapa Nui, Mapuche, Pehuenche, Huilliche, Kawashkar, and Yámana. The main goal of this program is strengthening cultural identity and sense of belonging of indigenous communities, enhancing the educational role of families and communities involved, promoting mother tongue in children attending intercultural centers of indigenous communities, and supporting nutrition given to children appropriate to their culture and age (JUNJI n.d.). These efforts began in the early 1990s, for example, introducing Mapudungun (the Mapuche language) as a regular course in some primary schools, but they never reached a high impact. Nowadays, the experience in intercultural preschools shows that some indigenous families do

not like the idea at all, because they see opportunities of social mobilization in the standard educational system. They claim that the intercultural teaching of the Mapuche language, for instance, hinders the adequate development of their children and reveals their ethnic origin, which can make them the object of discrimination in the Chilean society (Sadler and Obach 2006).

41.3 Current Status of the Research in Early Childhood Education in Chile

Scientific research with international impact in Chile is quite recent, especially in aspects of early childhood development (Cárcamo et al. 2014a). Until the 1990s, practically all the research was done in the field of health; however, when the country achieved an infant mortality rate and nutritional status of its population comparable to that of developed countries, the focus shifted toward the enhancement of psycho-emotional aspects of children's development and environment, both at home and at school (Cárcamo et al. 2014a).

In the field of early childhood education, the last decade has been marked by an exponential scientific interest in aspects like cognitive and socio-emotional development (i.e., Cárcamo et al. 2016; Noboa-Hidalgo and Urzúa 2012; Santelices et al. 2009; Seguel et al. 2012) and quality of the childcare environment (Cárcamo et al. 2014b; Herrera et al. 2005; Strasser et al. 2009; Villalón et al. 2002); however, the presence of the Chilean studies in the international academic community is still limited. Moreover, there is some research in the field, focused in child development and risk factors in preschoolers, which was just spread locally.

From the current research, there are some findings related to early childhood education that can be summarized as follow. Cárcamo et al. (2016) studied 96 mother-infant dyads divided into two groups, one group of children who received exclusive maternal care during the first year and another group who attended childcare centers during the same period, to see whether early attendance in childcare centers can affect the attachment relationship between children and their mothers. The dyads came from low SES samples and they were all measured twice, just before the start of the childcare arrangements and after approximately 8 months. Additionally, a subgroup of Mapuche families were involved in both samples. Results showed that children who belong to the Mapuche benefit from early childcare attendance and improve the security of their attachment relationship, controlling by income and maternal features. For the total group, there were no pretest-posttest differences in attachment after 8 months of full-time childcare attendance.

Noboa-Hidalgo and Urzúa (2012) analyzed data from a longitudinal study in low-income populations in Chile. The study was meant to uncover the effects of participation in public childcare centers on a range of cognitive and socio-emotional development outcomes in young children. The authors found positive effects of

childcare attendance on cognitive and emotional regulation outcomes, but, interestingly, they also found potential negative effects on child-adult interactions and reasoning and memory skills. These authors stressed the importance of quality of care for child outcomes, especially in infant classrooms.

Seguel et al. (2012) analyzed the differential effects of childcare attendance on children's development and learning. The study was longitudinally designed, including four time-points where the first time-point was around the age of 15 months and the last time point around 4 years. The comparison was between a group who attended childcare in public centers in Chile during the 4 years and a group that received maternal care during the same period, matched by sociodemographics variables. The authors concluded that children who had attended childcare did not differ on cognitive outcomes compared with children who had received maternal care exclusively. However, there was a positive effect on the cognitive development when children were enrolled in childcare after 3 years of age. According to the authors, the quality of the caregiver-child interactions is the most likely explanation for this positive effect (Seguel et al. 2012).

Another Chilean study conducted by Santelices et al. (2010) involved 185 children, their primary caregivers, and the staff from their childcare centers. Children on average were 19 months old (range from 8 to 24 months) and from low SES. The investigation was meant to compare the interactions that children develop with their parents and caregivers at the centers. The authors found that early childhood experience in daycare centers can be positive for children thanks to the fact that it improves the qualitative exchange between caregivers and children to develop cognitive functions, more than at home, where mothers or primary caregivers principally develop affective aspects.

Assuming that quality in the context of early childhood education matters, Chilean findings about the quality of childcare center can be summarized as follows. Results showed that the majority of the daycare centers for 0–2-year-olds (Cárcamo et al. 2014b; Herrera et al. 2005) and the preschools (Villalón et al. 2002) do not reach a quality level above the low or mediocre level, with a tendency for better results in private centers. For the 4–5-year-olds, the state daycare centers on average reached better results than the private ones. However, the centers of highest quality were all privately owned. In both infant/toddler and preschool classrooms, it was concluded that the process quality of care in Chile was at a moderate level. Cárcamo et al. (2014b) also did a meta-analysis to compare the Chilean quality of childcare centers with that found in other international studies. In total, 23 studies from ten countries were included, and the results showed that the quality of the Chilean classrooms was comparable with the quality levels found in most European studies, although the score was somewhat lower than the scores found in studies conducted in USA and Australia. Importantly, the interaction subscale of the quality of the Chilean childcare centers scored consistently high across in the three studies.

Strasser et al. (2009) were interested in the time distribution and activities in preschool centers in Chile. The authors showed that the main activities in preschool classrooms from different socioeconomic status were unstructured ones, and most

of the time children were engaged in free-play and enjoying mealtime, or the caregiver was disciplining the children. These findings were not very positive and suggest that the quality of the instruction in preprimary education in Chile still needs some improvement. Thus, even when there is some evidence about the good interaction that caregivers can display in infant classrooms, other factors need to be considered to reach a higher overall quality.

41.4 Future Research Needs

For the first time in its history, there is a very important general agreement in Chile about the need to invest as never before in early childhood education. Nowadays, such problems as infant mortality, malnutrition, and stunted growth belong to history and no longer form a priority in public policy. As other authors have emphasized, early childhood education needs new steps to improve its level, coverage has been increased but quality and equity has been relegated to a second place (Peralta 2008; Umayahara 2006). Future research is indeed desirable to improve our understanding of child development in the Chilean context and for evaluating the impact of the latest policies in early childhood education. It might be also important to evaluate the quality of early childhood education, especially in the vulnerable context where the current public policy is trying to provide better and equal starting conditions.

References

Cárcamo, R. A., Van der Veer, R., Vermeer, H. J., & Van IJzendoorn, M. H. (2014a). From founding homes to day care: A historical review of childcare in Chile. *Cadernos de Saúde Pública, 30*(3), 461–471. doi:10.1590/0102-311X00060613.

Cárcamo, R.A., Vermeer, H.J., De la Harpe, C., Van der Veer, R., & Van IJzendoorn, M.H. (2014b). The quality of childcare in Chile: Its stability and international ranking. *Child & Youth Care Forum, 43*(6), 747–761. doi:10.1007/s10566-14-9264-z.

Cárcamo, R. A., Vermeer, H. J., Van der Veer, R., & Van IJzendoorn, M. H. (2016). Early full-time day care, mother–child attachment, and quality of the home environment in Chile: Preliminary findings. *Early Education and Development, 27*(4), 457–477. doi: 10.1080/10409289.2016.1091971.

Chile Crece Contigo. (2013). Sobre Chile Crece Contigo. ¿Qué ofrece?. Retrieved from: http://www.crececontigo.gob.cl/sobre-chile-crece-contigo/que-ofrece/

Echeverría, R. (1982). *Evolución de la matrícula en Chile: 1935–1981*. Santiago: Academia de Humanismo Cristiano.

Egaña, M. L. (2000). *La educación primaria popular en el siglo XIX en Chile: una práctica de política estatal*, *Colección Sociedad y Cultura, Dirección de Bibliotecas, Archivos y Museos, PIIE* (Vol. XXII). Santiago: Lom Ediciones.

Friz, M., Carrera, C., & Sanhueza, S. (2009). Enfoques y concepciones curriculares en la educación parvularia. [Curricular approaches and concepts in pre-school education]. *Revista de Pedagogía, 30*, 47–60.

Herrera, M. O., Mathiesen, M. E., Merino, J. M., & Recart, I. (2005). Learning contexts for young children in Chile: Process quality assessment in preschool centres. *International Journal of Early Years Education, 13*, 13–27.
Junta Nacional de Jardines Infantiles JUNJI (n.d.) Programa nacional de educación intercultural. Retrieved from: http://www.junji.gob.cl/portal/index.php?option=com_k2&view=item&id=1467&Itemid=160
Ministerio de Educación MINEDUC (2013). Campaña para incentivar la matrícula de pre-kinder y kínder. [Campaign to promote enrollment in pre-kinder and kinder]. Retrieved from: http://www.mineduc.cl/contenido_int.php?id_contenido=25000&id_portal=1&id_seccion=4657
Noboa-Hidalgo, G. E., & Urzúa, S. S. (2012). The effects of participation in public child care centers: Evidence from Chile. *Journal of Human Capital, 6*, 1–34.
Organisation for Economic Co-operation and Development. (2013). Education at a Glance: OECD indicators 2013. Data retrieved September 23, 2013 from
Medrano, P. A. [internet] Public Day Care and Female Labor Force Participation: Evidence from Chile (SDT 306) 2009 [cited 2013 Mar 12]. Available from: http://www.econ.uchile.cl/uploads/publicacion/25d848f1-0435-4691-9623-b20cff7a36aa.pdf
Peralta, M. V. (2008). Quality: Children's right to appropriate and relevant education. *Early Childhood Education, 110*, 3–12.
Rojas, J. (2010). *Historia de la infancia en el Chile republicano 1810–2010 [History of the childhood in the republican Chile 1810–2010]*. Santiago de Chile: Ocholibros.
Sadler, M., & Obach, A. (2006). Pautas de crianza mapuche. Estudio Significaciones, actitudes y prácticas de familias mapuches en relación a la crianza y cuidado infantil de los niños y niñas desde la gestación hasta los cinco años. Chile: CIEG, Universidad de Chile y CIGES, Universidad de La Frontera.
Santelices, M. P., Olhaberry, M., Perez-Salas, C. P., & Carvacho, C. (2010). Comparative study of early interactions in mother-child dyads and care centre staff-child within the context of Chilean crèches. *Child: Care, Health and Development, 36*, 255–264.
Saracostti, M. (2010). Constructing Chile's social protection system: From early childhood to old age. *International Social Work, 53*, 568–574.
Seguel, X., Edwards, M., Hurtado, M., Bañados, J., Covarrubias, M., Wormald, A., et al. (2012). ¿Qué efecto tiene asistir a sala cuna y jardín infantil desde los tres meses hasta los cuatro años de edad? Estudio longitudinal en la Junta Nacional de Jardines Infantiles [What is the effect of attending nursery school between three months and four years of age? A longitudinal study in the National Preschool Association]. *Psykhe, 21*, 87–104.
Strasser, K., Lissi, M. R., & Silva, M. (2009). Gestión del Tiempo en 12 Salas Chilenas de Kindergarten: Recreo, Colación y Algo de Instrucción. [Time Management in 12 Chilean Kindergarten Classrooms: Recess, Snack and a Little Teaching]. *Psykhe, 18*, 85–96.
Umayahara, M. (2006). Early childhood education policies in Chile: From pre-Jomtien to post-Dakar. In*Background paper prepared for the education for all global monitoring report, 2007*. Paris: UNESCO.
Villalón, M., Suzuki, E., Herrera, M., & Mathiesen, M. (2002). Quality of Chilean early childhood education from an international perspective. *International Journal of Early Years Education, 10*, 49–59.

Chapter 42
Early Childhood Education in Guatemala

María Eugenia Rabbe

Abstract This chapter discusses how the institutional attention to early childhood development and education in Guatemala had to go through a process of acknowledgment of the importance of meaningful and lasting learning during the first 7 years of life, in order to include this age period in the Education Reform of 1998. At present, the National Curriculum (2005) addresses this on two levels: the infant and toddler years (0–3 years of age) and preschool years (4–6 years of age), stating the relevant skills and areas of education and development. It is also discussed in this chapter the fact that the law does not determine exactly which institutional entity is responsible for the attention and education at those levels: the Ministry of Education of Guatemala or the Secretary of Social Works of the First Lady, which poses a problem affecting the service provided to children. Several studies in the country have shown that at this point in time the coverage has not been enough and that greater efforts are needed by the public and private sectors to guide parents, teachers, and the community, for children to be active part of teaching and learning process.

Keywords Guatemala • Early childhood education • Preschool education • Research

Institutional attention to early childhood development and education in Guatemala had to go through a process of acknowledgment of the importance of the meaningful and lasting learning of the first seven years of life, in order to include this age level in the Education Reform (1998). Now the National Base Curriculum (2005) addresses this on two levels: the infant and toddler years (0–3 years of age) and preschool years (4–6 years of age), where clearly the relevant skills, areas, and profiles are explained. In this chapter, we direct attention to the fact that the law does not determine exactly which entity is responsible for the attention and education at those levels: the Ministry of Education of Guatemala or the Secretary of Social Works of the First Lady, which poses a problem affecting the service provided to

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children. Several studies in the country have shown that at this point in time, the coverage has not been enough and that greater efforts are needed by the public and private sectors to guide parents, teachers, and the community, for children to be active part of teaching and learning process.

Guatemala is located in Central America bordering with Mexico, Belize, El Salvador, and Honduras. According to the projection of the last census, its population in 2011 was 14,713,763 (51% women, 49% men) (Instituto Nacional de Estadística de Guatemala [INE] 2002).

The Peace Agreements signed in 1996 between governments and "guerrilla" (Agreement on Identity and Rights of Indigenous Peoples and Socioeconomic and Agrarian Agreement) marked the importance of education since this is one of the pillars to improve economic, cultural, and social levels for Guatemalans (Diseño de la Reforma Educativa 1998). According to the Education Law (Educación Nacional de la República de Guatemala 1991), Guatemala divides the education system in five levels:

Initial level: 0–3 years old
Preschool level: 4–6 years old
Primary school: 7–12 years old
Secondary school: 13–18 years old
Higher education: 19 to up years old

Initial level is offered to children from 0 to 3 years old, seeking the overall development from a comprehensive family support for their full training. Its goals are to ensure as basic responsibility of the State the full development of children, their existence, and right to live in family and proper environmental conditions as well as to ensure biopsychosocial child development through care programs for the mother during pregnancy and after giving birth.

Preschool level is the educative experience of younger children before entering the first grade, in terms of age, up to 6 years. Preschool level is oriented to developing self-esteem, certain basic skills, and behaviors, allowing them to be better emotionally and intellectually adjusted for their integration to primary school.

The current situation of children between 0 and 6 years of age in Guatemala is not encouraging at all; according to the National Work and Income Survey (ENEI 2004), the population between these ages was 2.8 million, and of those, there were only 50,381 children attending a specialized center (initial level, 266,754 children; preschool level, 23,627 children) according to UNICEF (Initial Education and Public Programs in Guatemala Society 2010).

The United Nations Children's Fund (2008) conducted a study called "Status of Early Childhood in Guatemala" (Situación de la Primera Infancia en Guatemala), in which data was collected by interviewing personnel in the Department of Education and the Secretary of Social Works of the First Lady (Secretaría de las Obras Sociales de la Esposa del Presidente[SOSEP]). This study reported:

1. The private sector has increased the attention to early childhood, with the creation of numerous educational centers that aim for a population for children

below 6 years of age, but these centers do not have proper quality standards. For example, a large number of these establishments do not have qualified personal to attend to this group of children.

2. The early development programs and projects supported by the Department of Education which include the "Comprehensive Care Program for Children (*Programa de Atención Integral de Niños y Niñas [PAIN]*), are actually working with a center in each of the 22 states of the Republic of Guatemala, taking care of around fifteen thousand children in the 328 centers. Further, there is also the informal school program "*De la mano Edúcame*", that helps 666 families in 4 states.
3. The programs and projects that are supported by the Welfare Secretary and Secretary of Social Works of the First Lady (*Secretaría de las Obras Sociales de la Esposa del Presidente [SOSEP])* attend approximately 100 thousand children in programs like *Hogares Comunitarios* (14 thousand) and *Creciendo Bien* (82 thousand) from 2200 communities.

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Early childhood education in Guatemala covers infant and toddler years, (ages 0–3), the preschool years (ages 3–5), and the kindergarten years (ages 5–6) (Ministerio de Educación de Guatemala 2008). The fundamental purpose is to provide children with educational experiences in an active way, in an attempt to impact gradually their learning processes and development. The goals of these levels are:

To develop a positive sense of themselves, by expressing and moderating their feelings and emotions, to start having initiative and self-determination, and show positive attitude toward learning.

To be capable of taking different roles and ability to solve conflicts in games and other activities in and/or out of school.

To acquire confidence and extend their vocabulary by expressing and having a conversation.

The ability to comprehend the principal functions of written language.

The ability to recognize people that have different cultural backgrounds and characteristics.

To develop cognitive capacities that allow them to use different strategies to solve problems in a creative way.

To be interested in observing natural phenomena and participating in experimental situations, in which they can ask, predict, compare, examine, explain, share opinions, and acquire positive attitudes toward the preservations of the environment.

Learn values and principles that are needed for respecting oneself and others.

To achieve the goals above, it is necessary to develop adequate activities, with active and differential methodologies, considering individual and developmental characteristics, that allow for the interaction of the students and teachers in a physical environment.

The active teaching approach followed in Guatemalan education has been constructed as the process that helps children learn in a meaningful way. By this, it is meant that the child is the leading character of its own learning, and the teacher provides the tools for the child's development. Teachers propose activities, personal or group tasks, which will develop the critical thinking as well as an effective communication in each of the phases of learning.

In early childhood education the best teaching methodology followed in learning centers is the use of different, independent spaces that teachers set up in the classroom. In these spaces, children can move around and engage in some learning activity. Children choose the space they wish to work in and decide the amount of time to spend there. The learning center approach provides a time in which children explore and practice skills to their own satisfaction. These centers provide children with opportunities for hands-on learning, cooperative learning, social interaction, real-life problem solving, autonomous learning, and open-ended activities. Children learn various subjects as they move from one space to another in the classroom. For example, a subject such as life science can be presented in a life-science space in the classroom; such a space may have living animals and plants for children to handle. The classroom may also have an environmental space next to the life-science space. As young children move from the life-science space to the environmental space, they can explore the habitats of some of the animals (Harris 1999).

The differentiated teaching provides students multiple options for taking information, making sense of ideas, and expressing what they learn. In other words, a differentiated classroom, with the use of different spaces, provides different avenues to acquiring content, to processing or making sense of ideas, and to developing products so that each student can learn effectively (How to Differentiate Instruction in Mixed-ability Classroom 2001).

As part of a new National Curriculum, Guatemala designed in 2005 the Base Curriculum for the infant and toddler years (0–3 years of age) and preschool years (4–6 years of age). In this program, attention to these age levels has a double purpose: socializing and the stimulation of evolving processes (Ministerio de Educación de Guatemala 2005). Socializing is described as a process in which rules that govern the social harmony are incorporated and transformed, leading to a positive interac-

tion with others, allowing the student to recognize his/her personal identity and as a social human being. Stimulation of evolving processes focuses in the psychological process that relate to the good use of knowledge outlines.

Simultaneously, socializing and stimulation of the process allow the student to prepare for life and for the acquisition of future permanent knowledge, because it is considered that in these stages is where the bases of human behavior are established, and the personality is formed based on the infant neuroplasticity, which is the biological mechanism that motivates growth and development and is the one that promotes student learning (Junque and Barroso 2009).

An optimum development is guaranteed when it established the importance of tending the needs of certain aspects such as providing preventive health services and, specially, proper training and qualifications of the teachers who interact with the children in order to promote the educational process since birth. In view of this, the Framework for Curriculum Transformation (Ministerio de Educación de Guatemala 2005) has generated ten criteria for initial (0–3 years of age) and preschool (4–6 years of age) being the main purpose to achieve educational quality with the involvement of both teachers and parents:

The child as the center of the process
The child participation and involvement
Reinforce the child development
Respect and attention to the individual differences
Leadership and involvement from the family and the community
The environment and the child interacting as one
Cultural relevance
Holistic learning
Harmony between the activity and communication
Specific childhood game

The curriculum is based on the development of abilities defined in the proposed curriculum (2005) as a disposition that a child has to develop in order to deal with and find solutions to everyday problems and create new knowledge that will help the child to achieve a permanent and meaningful learning. The curriculum has been organized in five areas:

Learning skills
Communication and language
Social and natural environment
Artistic expression
Physical education

The curriculum establishes a minimum of 2 h of daily activities, during 5 days a week. Class periods last between 25 and 30 min. Regarding children's evaluations, personal records are used to appraise the maturity of each child to be able to promote him/her to the next grade, as long as they fulfill the requirements related to their age (Ministerio de Educación de Guatemala 2010).

It is important to note that there are no fundamental agreements between the Welfare Secretary, Secretary of Social Works of the First Lady (Secretaría de las Obras Sociales de la Esposa del Presidente [SOSEP]), and the Ministry of Education of Guatemala. The first supports early education and grants permits for the operation of initial care centers (Government Decision No. 662–90 1990); however, it was the Ministry of Education of Guatemala, within the National Base Curriculum (2005), who included the educational model that should orient the development of this level. In daily practice, however, in beginning levels of school, the Welfare Secretary and Secretary of Social Works of the First Lady (Secretaría de las Obras Sociales de la Esposa del Presidente [SOSEP]) do not check whether they comply with the model presented by the Ministry of Education of Guatemala. Likewise, it may be noted that these centers provide "care" to children but this does not include providing proper stimulation for cognitive, social, and emotional growth.

Another very important factor, in the development of initial and preschool levels, is that although under the Curricular Transformation (2005) detailed the principles for an educational process according to the particular needs of students, they are not met within the methodology developed in the classroom, as teachers in the public sector have shown resistance to change and have not wanted to implement strategies that will take the kids to the powers that arise. With this in mind, the Ministry of Education of Guatemala is making efforts to conduct various trainings, aimed at teachers of this sector, so they can use innovative strategies in the educational process, which are described in the National Base Curriculum (2005). At the beginning of 2014, he made alliances with three private universities (Universidad del Valle de Guatemala, Universidad Panamericana, Universidad InterNaciones) onto them to direct the training throughout the Republic of Guatemala, with a new mode of teaching learning face classes once a month on weekends and distance tutoring, through an educational platform through internet.

In conclusion, we can infer that the lack of knowledge of the National Base Curriculum, among teachers, has made the early childhood education in Guatemala, continues to have little impact on the children, and, perhaps in the future, may be a factor in determining the failure coverage of elementary level.

The following section discusses current contemporary research in Guatemala in relation to early childhood education.

42.1 Research on Early Childhood Education

In order to improve preschool education, the research that has been done in Guatemala, in general, aims to develop projects that can improve coverage and provide guidelines to support the immersion of children in the schooled and informal programs modalities, both defined in the National Base Curriculum, preschool level (Ministerio de Educación de Guatemala 2005). The schooled modality, that is, preschool education, is developed within a formal and academic environment involving well-trained personnel, with specific schedule, in a part-time working day, whereas

in day care centers, children centers or private foster homes are open for 8 h or more. Personnel responsible for the schooling attention are the preschool monolingual and bilingual teachers[1] as well as the teachers for the different programs and projects of governmental organizations or nongovernmental organizations. The informal program is defined as the one that is developed with the direct, active, and organized participation from the family and the community, adopting their program and taking into account the local characteristics and necessities, in the teaching aspects, flexible schedules, and other needs.

Figueroa Castro (2007) in his study "Acculturation and Identity Formation Process in the Child Preschool Education through Traditional Popular Culture" was able to verify that even though the preschool education is the most important stage of childhood because of its influences in the formation and development of the child, it is not properly oriented in terms of the formation of the child's identity. According to Figueroa Castro, this is due to the fact that the content of the schooling and teaching approach follows programs that have been developed in other countries and are not adapted to the Guatemalan culture. The author concluded that 74% of preschool teachers do not know the Guatemalan culture (anecdotes, riddles, tongue twister, music, oral and written traditions, tourist places, literature, theater, sayings, proverbs, social events, festivals, pilgrimages, habits, memories, heroes, etc.) so that they reinforce in their students foreign acculturation and the loss of national identity. Preschoolers, influenced by family, school, and social media, embrace other foreign cultures and do not appreciate the values, customs, and traditions of Guatemala culture. In the sample, 94% chose foreign values, customs, and/or traditions, while 6% chose Guatemalan values, customs, and/or traditions.

During 2011, a pilot project was held in three "Caritas Centers" (Christian Foundation) (Rabbe 2011) to measure the cognitive capacity of children 3–6 years old. Some of the conclusions of this research were that 3-year-old children showed a deficiency in the area of gross motor abilities, as a result of their low levels of physical activity, which also had a direct relationship with the bone and muscular development and the deficit of iron and protein in their bodies (Nelson and Luciana 2001). The results showed that children who have had the opportunity to attend to a special center like preschool, where they received some stimulation, were closer to reaching the corresponding developmental standards. However, due to the possible precarious condition of food, living, and basic services, their cognitive development still showed significant deficiencies, as well as in the visual and motor areas (Rabbe 2011).

In 2012, Hormel Foods Corporation, approved by the US Department of Agriculture (USDA) and the Department of Public Health and Social Assistance of Guatemala, conducted research on the effectiveness of fortified Spammy™ (canned turkey pate) in the physical and cognitive development of children from 3 to 6 years old. To evaluate cognitive development, they used the Bracken Basic Concept Scale-

[1] In Guatemala, 21 Mayan idioms are spoken in different regions of the country, and bilingual teacher means that he/she has to dominate Spanish and at least one Mayan language (Diseño de Reforma Educativa 1998).

Third Edition: Receptive (BBCS-3:R) Revises (2008). This test measures children's comprehension of basic and functionally relevant educational concepts such as colors, letters, numbers/counting, sizes/comparisons, shapes (School Readiness Component [SRC]), direction/position, self/social awareness, and texture/material (Total Test [TT]). Children in the sample improved in conceptual knowledge over the 20 week intervention. This result showed significant improvements in the School Readiness Component (SRC) and Total Test (TT) raw scores (Rabbe 2012).

The researchers also noted that age-adjusted standardized SRC scores improved to a greater degree than anticipated. The SRC focuses on knowledge associated with success in early formal education such as counting, shapes, letters, and numbers; regarding this, greater than expected improvement were found in both treatment and control groups. This improvement may be due to the focus on these concepts at the day care center, the provision of high-quality protein at the beginning of the school day, increased vitamins and mineral intake intrinsic to poultry, or most likely, a combination of several of these factors. This information, combined with teacher reports that children improved their attention after consuming a meal containing Spammy™, provides compelling evidence for the importance of combining educational programs with improved nutrition for this age group. Within the treatment group, positive relationships were found between end line vitamin D and cognitive gain as well as end line ferritin and cognitive gain. Within the control group, no significant correlations were found between end line blood micronutrient levels and gain scores (Center for Studies of Sensory impairment aging and metabolism [CeSSIAM] 2012).

An important point to mention is that for a long time, several government institutions have proposed legislation for the provision of preschool education, but parents still have not seen the importance to take their young children to schools, and they prefer to keep them at home, until they have the age to begin reading and writing. However when children reach the age, parents then decide that it is most important to teach them how to work so they will be able to help in the family economy.

To encourage the involvement of parents and to convince them of the importance why their young children must attend school, the new National Curriculum (2001) provides guides that include the use of regional language, give information to parents and community, build more schools, and design professional development programs for preschool teachers.

In summary, the research discussed here shows that Guatemalan public and private institutions are worried about early childhood education in the country and are developing programs to improve it. There are efforts for designing a new curriculum. Every school has to develop a curriculum according to the Basic National Curriculum. However, to be implemented, it requires the commitment of teachers and communities, besides of assigning economic resources. Economic resources, however, remain a major challenge that the country faces.

References

Acuerdo Gubernativo Número 662-90 (1990) Emitir el Reglamento Orgánico de la Secretaría de Bienestar Social, capítulo I, artículo 3

Bracken, B. (2008). *Basic concept scale: receptive (BBCS-3:R)*. Williamsburg: Pearson.

Center for Studies of Sensory impairment, aging, and metabolism [CeSSIAM]. (2012). *Final Report of Hormel's Spammy TMProgram*. Austin: Hormel Food Sales, LLC.

Comisión Paritaria de Reforma Educativa. (1998). *Diseño de Reforma Educativa. Segundo Proyecto de Educación Básica*. Guatemala: Gobierno de Guatemala.

Figueroa Castro AL (2007). Transculturización y Proceso de Formación de Identidad en el Niño de Educación Preprimaria a través de la Cultura Popular tradicional. Un published dissertation, Universidad de San Carlos de Guatemala, Guatemala

Fondo de las Naciones Unidas para la Infancia UNICEF. (2008). *Situación de la Primera Infancia en Guatemala*. Guatemala: UNICEF.

Fondo de las Naciones Unidas para la Infancia UNICEF. (2010). *La Educación Inicial en Programas Públicos y de la Sociedad Civil en Guatemala*. Guatemala: Informe de Estudio. Propuestas de Acción. Instituto para el Desarrollo y la Innovación Educativa en Educación Inicial y Derechos de la Infancia IDIE.

Harris, J. (1999). Critical issue: Organizing for effective early childhood programs and practice. http://www.ncrel.org/sdrs/areas/issues/students/.../ea100.ht. Accessed 22 Oct 2013.

Instituto Nacional de Estadística INE. (2002) Población en Guatemala (demografía). http://www.ine.gob.gt/np/población. Accessed 16 Sep 2013.

Instituto Nacional de Estadística INE. (2004). *Encuesta Nacional de Empleos e Ingresos ENEI*. Guatemala: INE.

Junque, C., & Barroso, J. (2009). Manual de Neuropsicología. Síntesis S. A, Madrid, p 255 Ley de Educación Nacional de la República de Guatemala, capítulo VIII, artículo 29 (1991)

Ministerio de Educación de Guatemala. (2005). *Curriculum Nacional Base, Nivel Preprimaria*. Guatemala: Dirección General de Gestión Educativa DIGECADE.

Ministerio de Educación de Guatemala. (2008). *Curriculum Nacional Base, Nivel Inicial*. Guatemala: Dirección General de Gestión Educativa DIGECADE.

Ministerio de Educación de Guatemala. (2010). *Reglamento de Evaluación de los Aprendizajes, artículos 18 y 22*. Guatemala: Ministerio de Educación de Guatemala.

Nelson Ch, Luciana M (2001) *Developmental Cognitive Neuroscience*. Madison: Book and Journal Services, p 498.

Rabbé, M. (2011). *Cognitive development assessment children from 3 to 6 of Age. Pilot Project Final Report*. Austin: Hormel Food Sales, LLC.

Rabbé, M. (2012). *Cognitive development assessment spammy MT intervention research. Children from 3 to 6 of Age. Peronia center*. Austin: Hormel Food Sales, LLC.

Chapter 43
Early Childhood Education and Development in Mexico

Rebeca Mejía-Arauz and Gloria Quiñones

Abstract This chapter discusses the current research agenda in early childhood education in Mexico and reviews research pointing to the pedagogical challenges the country faces at the present time. A historical account of early childhood in Mexico is also discussed to unpack the educational institutions in which families, children, and educators participate in. The curriculum models currently used in early childhood are further analyzed within a historical frame to better grasp what the society in Mexico has valued. These values are translated into children's development of cognitive skills, as is the case, for example, of oral traditions. Throughout the chapter it is discussed how language and communication has been a strong emphasis in early childhood education, in specific in the preschool years. However, there are still relevant situations that have not been thoroughly studied, such as cultural variations in language or how to make connections between home and schools to increase children's oral language development. Another finding discussed in this chapter is the role of play in Mexican early childhood education. Some of the challenges found are how educators can develop pedagogical strategies that can be used to improve literacy development and how play can be seen as an important strategy for children's learning. All these dimensions also need to be considered when studying a very complex society in Mexico's diverse rural, urban, and indigenous communities.

Keywords Mexico • Early childhood education • Child development • Indigenous children • Uban and rural child development

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Attention to early childhood development in Mexico through official institutional services started with childcare centers around mid-twentieth century, which increased with the socioeconomic movement of women entering the work force. Although there was a history of governmental actions since 1837, it is until this century when educational programs for 3–6-year-olds became compulsory. In this chapter, we discuss social and educational policies for early childhood attention and the current research agenda for Mexican early childhood education. In general, there is the need for conducting more research in all developmental domains in early childhood in Mexico and also in terms of applied research. Among several areas of research and practice, current pedagogical challenges in Mexico include understanding play as an important developmental and pedagogical leading activity in early childhood, which has been an under-researched and applied area. Also, research on families in different sociocultural contexts and more specifically in relation to socio-affective dimensions is pointed out as another area for further research.

43.1 Background and Local Conditions

Mexico is a federal republic situated in North America, bordering the United States of America in the north and Guatemala and Belize in the south. After the census of 2010, the total population reported was 112,336,538 inhabitants, of which 77.8% lived in urban areas (INEGI 2010), but the country's cultural and ethnic diversity is reflected in the number of indigenous towns (52), native languages (80), and 6,913,362 speakers of indigenous languages (Bertely Busquets 2003; INEGI 2010).

In the last 20 years, the proportion of children has decreased compared to the increase in adult population. Results of the 2010 census reported 10,528,322 children 0–4 years old and 11,047,537 children of ages 5–9 years (INEGI 2010).

With regard to education, according to the Federal Constitution, it is compulsory to attend basic school, which includes 3 years of preschool starting at 3 years old, 6 years of primary school, and 3 years of secondary school. The state is obliged to provide these levels of education to all Mexican children at no cost. There are also public and private institutions providing care and education for children from newborns of 45 days up to 3 years in a system called initial education.

43.2 Current Early Childhood Educational Policies

Social and educational policies in Mexico reflect an interest in providing better quality education and a more extended coverage for children of all ages including their health and safety. This has been part of a national action plan, called "Un México apropiado para la infancia y adolescencia 2002–2010" (A suitable Mexico for childhood and adolescence) (SEDESOL 2002).

By 1996, Knaul and Parker pointed out that the provision of early childcare in Mexico was a problem not solved. To date this problem continues, particularly for those in more extreme poverty conditions. Extreme poverty is increasing (Pujol and Torres 2000), and in particular in rural zones, which include larger marginalization and exclusion in terms of social services for health and education (Roman and Valencia 2012). To date, more and more mothers with jobs with no social support benefits leave their infants at home under the care of siblings or their grandmothers (Maldonado 2013), putting in risk two extremes of the population in terms of age.

Due to the increase in women joining the labor force in the last four decades, it became an urgent need to extend the provision of childcare institutions and programs for infants (Knaul and Parker 1996). To attend this need, Mexico developed institutions and programs called initial education (educación inicial) for children 0–3 years old (CONIA 2010).

Regarding early childhood formal education, it starts at 3 years of age and it covers a period of 3 years. Although Mexico has a history of offering childcare from 1837, it is important to note that at the level of preschool education, it became compulsory only until recently, with a reform in education in 2002, which had to be gradually accomplished by 2009 (INEE 2006). In 2010, reports showed that 52% of children between 3 and 5 years of age attended preschool, whereas 95% of the population of children between 6 and 14 years old were reported to attend primary school (INEGI 2010). In the section that follows, we will expand this topic and present the different contexts of early childhood education and development in Mexico.

43.3 Different Educational Systems in Early Childhood

The divisions in social classes and inequalities of the education system are a challenge (Latapi Sarre 2002; Martínez Rizo 2002; Reimers 2002) that Mexico faces to date. On the one hand, there is a strong social class divide between private and public childcare centers and schools, and on the other hand, there are strong differences between education in urban, rural, and indigenous communities, all of which involve different opportunities for children. In the twentieth century, children in indigenous and rural communities were more vulnerable in all accounts, and in particular, these populations experienced educational inequalities. In an effort to provide equality in education, the Mexican Ministry of Education (Secretaría de Educación Pública) developed several modalities of schooling: general, rural, indigenous, and community education. The last two are modalities that serve particular needs of children in indigenous towns and in very isolated communities, whereas general schools are found in urban and rural cities (INEE 2006).

Early childhood education in Mexico is growing, and social and economic changes and international pressures have led to the creation and impulse of programs in different social institutions for children's education and care (SEP 2003,

2004). The next section comprises a discussion of these social institutions and the goals for learning and development of Mexican children.

43.4 Early Childhood Preschool Institutions

Private and public long day care in Mexico is provided by the Centers for Childhood Development (Centros de Desarrollo Infantil CENDI) for children from 0 to 4 years of age. These centers follow the program developed for initial education, which is an integrated model that focuses on children's physical, emotional, social, and cognitive development. The program also takes into account children's environmental and sociocultural conditions and includes a program for parenthood education and particular institutional staff training in urban and rural contexts (CONAFE 2010). These centers have two different modalities: one follows a more formal schooled program, while the other tries to address particular needs and traditions of rural and indigenous communities.

The historical antecedents of these centers for early childhood go back to 1837, but probably this would apply in particular to Mexico City. More extended actions took place around 1921 after the Mexican Revolution as an attempt to deal with different social problems regarding children such as the many orphans unattended that resulted from this revolution. Later on, in the 1970s, childcare centers were more often available for families that had formal jobs, leaving those in the informal job market with no options, that is, those in poverty or extreme poverty would not have access to these public services for their children, whether they needed education, health treatments, or child-rearing support.

Preschool institutions (for 3–6 years of age) follow a system based on competencies designed by the Secretary of Public Education (SEP). In this Mexican Preschool Educational Program (SEP 2004), curriculum learning goals are directed to develop in children: (a) personal and social development, (b) language and communication, (c) mathematical thinking, (d) exploration and knowledge of the world, (e) expression and appreciation of art, and (f) physical and health development. The character of the program is open; this means the educator will select and design what is convenient for children. Educators have freedom to plan according to learning projects and depending on the cultural and linguistic contexts of children.

43.5 Current Research on Early Childhood Education

In Mexico, research on childhood development has focused more often on those processes and skills related to school performance. Research on early childhood development is scarce and often focuses on those areas connected to school, such as the learning prerequisites for a better school performance. For such reason, the research presented here includes in some cases preschool and school-age children.

43.6 Early Childhood Research on Pedagogy and Competencies Models

In a large-scale study, researchers evaluated competencies of preschool children and how they develop the competencies related to the official curriculum enlisted above in 40 centers in Mexico City and the States of Mexico, Puebla, and Yucatan (Juarez Hernandez 2008). The purpose of the study was to identify and evaluate children's competencies, to better understand learning environments and pedagogies of educators.

In relation to pedagogical practices, it was found that educators focused on activities such as coloring, cutting, and pasting (Martinez et al. 2004). The researchers pointed out that children were bored, and the pedagogical emphasis was on an instructive pedagogy. The activities planned such as coloring aimed to have similar results on – for example, drawing ducks and learning that ducks are yellow. These activities did not provide children's active exploration and diverse outcomes such as having another color for ducks. One of the challenges discussed by the researchers was how to offer support for educators to have a sociocultural theoretical foundation that informed their pedagogical practice. This remains a challenge for educators on how to move from instructive pedagogy where the educator is at the center of the educational practice, into focusing on the child's own agenda involving play.

In a similar line, Paniagua (2008) identified which competencies teachers expected by the end of preschool education as well as the tools they offered in order for their students to develop cognitive competencies, such as perception, attention, spatial cognition, imagination, language, memory, problem solving, and creativity. Results showed that the structure and organization of the classroom were important factors for children's stimulation, but other factors related to better performance in the students were teachers who kept a warm and enthusiastic tone in their classroom, making sure the tasks instructions were clear for students, stimulating and guiding student intervention as well as providing them with positive feedback when they provided accurate answers or opinions in order to build confidence in themselves, encouraging them to participate in classroom activities, and inviting them to exercise respect for diversity of opinions.

In summary, these results were related to competencies in the areas of communication, reasoning, information processing, metacognitive, and self-regulatory competencies (Toledo-Rojas and Mejía-Arauz 2013).

Regarding sociocultural factors, research conducted by Matute et al. (2009) explored the influence of parents' educational level, type of school, and gender in the development of attention and memory, among others, in children of 5–8 years of age in public and private schools. Parent's educational level was correlated with some of the children's tests results (digit regression, verbal-auditory retrieval, visual memory); also, girls in private schools performed better than boys. The authors discussed that parents with higher educational level may influence language development through their daily interaction with their children, which in turn results in higher performance in cognitive tests, such as memory and attention.

This current research has focused on children's cognitive abilities, which are valued in the Mexican society as a result of the influence of the institution of school. In a similar line, language development has been considered a main area of children's development in the school and family contexts even though there is not as much research as in other areas, for example, compared to literacy. The next section focuses on the state of the art on oral language research.

43.7 Early Childhood Research on Oral Language Development

As a result of an educational reform in 2002, oral language was prioritized as one of the most relevant skills to develop in the preschool years. Ideally, the responsibility for the development of this cultural tool would be shared between school and families, because as students interact in different social contexts, this would facilitate the development of more extensive vocabulary and narrative skills. However, with the educational reform and from a perspective of formal education, the classroom is still considered one of the most important settings for learning new forms of communication, and in view of this, the reform oriented preschool teachers to create a stimulating environment for the children to participate and develop cognitive skills through oral expression.

Despite its great importance in early childhood development and socialization, the study of oral language in Mexico is relatively scarce. Interestingly, consistent and strong research on language development comes from work on indigenous populations, which increased in particular after the Zapatista movement in 1994. In contrast, the study of the changing conditions of children in urban contexts with the pressure of bilingualism (Spanish-English) for middle class and higher SES children or cultural variation in language development within the country has not been thoroughly studied.

Most of the research we found addresses language learning in the school context, for example, in relation to the results of educational programs in preschool or how language helps the development of knowledge in peer interaction in preschool classes.

Among the research on the influence of preschool programs, there is a comparative study on learning differences in preschool programs covering language and communication and mathematical thinking conducted by Backhoff et al. (2008). They looked at the developmental level and skills accomplished in preschool children of different gender, age, school grade, in public and private schools, and in urban and rural populations. The results of the study in language and communication showed a significant gap regarding educational achievement between preschoolers. In rural communities, the developmental level and skills were even lower in such a way to subsequently impact their academic achievement; while 74–81% achieved the basic skills in language and communication expected for their grade

and age, in urban public and private schools the percentage of children was between 93% and 99%. Sociocultural conditions were associated to these results, such as parental educational level, number of books at home, frequency in attending cultural events, and school type (public or private, rural or community courses). Older pupils achieved lower scores in comparison to those students with normative age in the same grade. Also, the results of this study are consistent with international research showing higher performance in preschool girls in oral and written language and communication, compared to boys in the same group. Although different authors and researchers around the world (Mussen et al. 1976; Dale et al. 1998 in Papalia and Feldman 2012) have documented this phenomenon, there is scarce documentation or research about the Mexican children (Toledo-Rojas and Mejía-Arauz 2013).

Although the family context and parent-child interaction is crucial for oral language development in early childhood, this is not a frequent topic of study involving urban populations or in populations that speak Spanish. However, a study noted that families in Mexico tended to tell family stories and anecdotes during family gatherings while children were present and often participated (Reese et al. 2011); while this helps children in getting used to a narrative style that organize their thinking and provide them with the cultural vocabulary and narrative style of their cultural communities (Bruner 1991), this is not often a resource that schools use to make a connection between home and school contexts of learning.

González de la Torre (2004) analyzed samples of written narrations constructed by preschool children and found a strong relation between the structure of children's narratives and the structure of popular tales, TV stories, and children's own experiences with particular coherence in the stories of 5-year-old children or older. This shows how children make use of home, family, and out-of-school experiences in an important way that could be used as pedagogical strategies in schools as a bridge for children's learning.

Research on language development with indigenous children, most of them specifically referring to the indigenous population living in the center and south of Mexico, has been conducted by sociolinguistics specialists such as De León (2001; 2005; 2007; 2011) who explores oral language development in Mayan children of Chiapas.

De León (2005) studied the relation between language learning and cognition with Mayan children from Chiapas who speak the Tzotzil language. In her studies, she describes the way in which children construct meanings in their social interactions in everyday life, in such a way that involves emotional development. Important part of this development is through repetitions that at the same time transform new structures within the frame of the language (De León 2007). De Leon points out that this also occurs in verbal play where children learn to manipulate and play with metalinguistic forms and structure. The extent of research on play and development in Mexican children will be discussed later on in the chapter, but because literacy development is a topic more often related to language and cognitive development, we first address this topic.

43.8 Early Childhood Research on Literacy Development

Literacy development in childhood is one of the most studied subjects by researchers in fields and disciplines related to children development and education in Mexico. There is wide agreement on its relevance not only for formal learning but also as an integral part of children's development in social context.

To date, Mexico still faces severe problems regarding literacy, with 6.9% of the Mexican population being illiterate, despite the fact that basic education is free and mandatory in the country (INEGI 2011). In 2000, Mexico obtained the last place in the PISA test (OCDE 2005), and 3 years later, the statistics were still the same. More recent results in the test known as ENLACE (Evaluación Nacional del Logro Académico en Centros Escolares, National Evaluation of Academic Achievement in School Centers (SEP 2012)) showed that 43% of students performed at a very basic level in Spanish class, and 15% did not achieve this basic level.

In response to such state of affairs regarding children's reading and writing performance at all school levels, Mexican educational and research institutions have made continued efforts to study literacy development with the idea of orienting better educational programs for children and for developing social programs that promote literacy practices in the population as a whole, considering, in particular, issues of social inequality.

Important contributions in research focusing on early childhood prerequisites for learning of reading and writing, and in particular, children's understanding of writing, come from the work by Ferreiro and Teberosky (1979). This work was followed by a good number of studies on how children learn to read and write in Mexico and in Latin America (e.g., Vega 2005). Ferreiro y Teberosky (1979) were pioneers in Latin America in pointing out that before experiencing formal education, children develop certain notions of the alphabetical system, developing to an extent processes and skills that are precursors to the acquisition of reading and writing.

Following these conceptions, other studies conducted in Mexico showed that preschool children recognize written codes related to content, which is meaningful in their communities. Vega (2005) has called this process emergent alphabetization, which includes knowledge, behaviors, and abilities children show in an effort to interpret symbols that they use for communicative purposes regardless of whether they use scribbles, drawings, or letters.

More recently, research following the perspective of the New Literacy Studies (Gee 2004) found that children who lack the social mediations and opportunities to be acquainted with school like vocabulary and types of texts take longer to develop skills that are needed for learning to read and write according to what is being taught in schools. Recent research in Mexico shows this is not only explained in terms of the distance between family literacy practices and school demands but also is related to a lack of a literacy environment in their communities (Mejía-Arauz et al. 2011; Reese et al. 2011). This research shows how informal oral language and everyday life narratives are important practices in Mexican communities and is scarcely acknowledged in schools. One of the challenges is how to use this type of oral

language as a pedagogical scaffolding strategy in schools as a beginning point for improving literacy development in children. A more thorough review of literacy development research in Mexico can be found in Mejía-Arauz et al. (2013).

43.9 Early Childhood Research on Play

Research on how children play and how these practices are incorporated in Mexican early childhood programs is scarce. This section discusses and provides examples of the importance of considering play in early childhood curriculum in Mexico.

Despite the well-recognized importance of play in childhood development (Cole and Cole 1989; Göncu 1999; Van Oers 2012), few studies in our country focus on how children's play and involvement in entertainment activities influence their development. These research topics seem of high importance in particular because of the changing conditions in lifestyle for families and children in urban contexts as well as in rural and indigenous communities. Particularly in urban contexts, as more mothers spend longer hours in their jobs, children are left longer at school for extra school classes or in childcare institutions (Mejía-Arauz 2015). For that reason, it is important to conduct more research on the impact of these activities and changes in children's play.

Among the few studies, Briceño (2001) pointed out that in contemporary families in México, play has lost its main relevance and comes only after all the programmed activities that adults conduct or choose for children. This may be a result of parents' lack of possibilities to spend leisure time with their children due to their job demands. But also, in some cultural groups, such as in some indigenous groups, adults do not often get involved as playmates with their children because older brothers, cousins, and neighbors take that role (Gaskins and Miller 2009; Toledo-Rojas and Mejía-Arauz 2015). In a similar line, Martinez et al. (2004) discuss that in Mexican cultural practices, there is some lack of adult play with children.

Another related line of research understudied is the television and use of electronic devices as part of children's leisure time. In view of family organization and conditions, electronic games or activities as well as viewing television have gained a different role in the life of a child. As parents lack the time or habit to spend playtime with their children, they let their children watch TV for long hours, and in this way, television becomes a "virtual nanny," being this a resource openly used by parents (Briceño 2001). This study shows how parents might not realize the importance and functions other kinds of play have in the development of their children. However, through television, children are also learning how to play. In a study conducted in the north of Mexico, Mayra a 5-year-old child living in a rural community played and perform a telenovela (soap opera) role (Quiñones 2013a, b). Television was an important everyday event in the life of families; however, the role of adults still is important in how they can recognize and extend children's learning through play.

Furthermore, play is also absent in schools. For example, pedagogical strategies and the different forms of participation in play are rarely mentioned in the Preschool

Educational Program document (Manteca 2004), and therefore research on the influence of play in the context of preschool classrooms is almost nonexistent, even though the Mexican Preschool Educational Program mentions its relevance:

> El juego es un impulso natural de las niñas y los niños y tiene manifestaciones y funciones múltiples. Es una forma de actividad que les permite la expresión de su energía, de su necesidad de movimiento y puede adquirir formas complejas que propician el desarrollo de competencias. (pp. 35)

> Play is a natural impulse in girls and boys and has multiple manifestations and functions. It is a form of activity that allows the expression of the child's energy and of his/her need of movement and can take complex forms that encourage the development of competencies.

In this curriculum document, play is acknowledged as a form of individual, peer, and collective participation. In this view, play is seen as individual activity were children are able to concentrate and a collective activity were children accept rules and are able to self-regulate their actions. A greater emphasis is made on how play allows children to develop competencies. In relation to the pedagogical role of the educator, this will depend on the educator's orientation and initiative to extend play experiences and value children's everyday knowledge.

The view of play as natural, as is conceptualized in the Mexican preschool system, has been questioned by researchers (Fleer 2013), and several researchers have acknowledged the importance of play as a cultural and historical construct (Brooker and Edwards 2010; Fleer 2010b, 2013; Schousboe and Winther–Lindqvist 2013). In European heritage communities, play has been considered a central activity in children.

Contemporary approaches in the study of play acknowledge the importance of the role the adult might have in children's learning and how teachers contribute and collaborate in how children learn in play theoretically and conceptually (Jordan 2010; Fleer 2010a, b).

In order to understand how educators and what theoretical ideas inform their views on play, in their research, Martinez Preciado et al. (2003) found how educators focus on having similar and conventional results. For example, educators mentioned how they expected children to draw all cows the same, with black spots; educators rarely account on children's interests or in having rich conversations with children about them. In the same study, it was found that play was described as a tool for developing motor skills, as a strategy to control groups, play involved rhymes, imitation, and repetition. This view of play as natural is prevalent in the views of educators and as discussed by the authors rarely is mentioned how play develops children's imagination.

In a recent study, Quiñones (2013a) shows how in a rural and an urban community in the north of Mexico children's play involves rhymes and music, and this is usually performed in recess or break time. The early childhood curriculum in these preschool makes emphasis on academic skills such as motor fine skill and preliteracy skills. Play is not prevalent in these two preschools, and the role of the adult is yet to be understood in how they can participate, sustain, and extend children's conceptual development in play. This shows how in the Mexican society cognitive skills and academic activities are favored rather than play. This remains an area where there is the need for further research on how play is culturally understood in rural, urban, and indigenous communities.

43.10 Early Childhood Research on Family Practices

In this section, we focus on the role family plays in different aspects of childcare and childhood education from parenting practices at home to the relation of family with the school. Some of the research found in this area in Mexico follows a quantitative approach with statistical analyses of relationships between family sociodemographic factors and children's achievement in schools. This is the case of the work conducted by Bazán et al. (2007) and Matute Villaseñor et al. (2009). Other studies like those conducted by Romero (2001), Valdés et al. (2009), Vera et al. (2010), or Solís and Díaz (2007) provide more detailed accounts of parenting practices at home regarding childcare in early years and its impact on child development. It is also worth noting the scarce attention researchers in Mexico pay to the study of socio-affective factors related to cognitive activities especially in early childhood, except among few others, for the work of Covarrubias (2006). As Quiñones and Fleer (2011) point out, it is important to look at how young children in contemporary societies make sense of everyday life subjective experiences as part of what shape socioemotional dimensions in them. Currently, there are major transformations in the characteristics and forms of life in Mexican families, transforming also the impact this has on children development, which points to the need of much more research in this area.

43.11 Concluding Remarks

Despite the long history of attempts to provide good care and education for early childhood in Mexico, formal education at the preschool level in Mexico became compulsory only until 2002, which creates new challenges in the Mexican education and research agenda. Different institutions have been created for care and education and a national Preschool Educational Program based on a competency model has been created where educators have the freedom to plan according to their own institutional and personal interests. Early childhood education continues to be instructive where the teacher is at the center of planning for children's education.

An important pedagogical activity in early childhood education is play. However, there is very little research on how play is understood in the Mexican context. The studies found and discussed showed how Mexican adults in some cultural communities do not tend to participate or get involved in play with children, which may be related to cultural practices in the organization of adult-child interactions. Further, in curriculum documents, play is seen as an individual endeavor rather than a collective enterprise between adults and other children. This shows the importance of conducting more research in play across cultural groups in urban, rural, and indigenous communities to better understand what play is and its cultural and developmental relevance.

Another important cultural practice which has been under-researched is how everyday storytelling and styles of conversation in Mexican families may relate to children's oral language development and how this can be valued in preschool programs as an important component of language and preliteracy development.

Finally, the importance of family in Mexican society should be acknowledged in the research and the importance on how family contributes in children's achievement in preschool and in children's learning and development. The research discussed in this chapter aims to give a wider picture of early childhood education in Mexico and to point out areas in which more basic and applied research is needed.

References

Backhoff Escudero, E., Andrade Muñoz, E., Sánchez Moguel, A., & Peón Zapata, M. (2008). *El aprendizaje en tercero de preescolar en México: Lenguaje y comunicación, pensamiento matemático*. México: INEE.

Bazán Ramírez, A., Sánchez Hernández, B., & Castañeda Figueiras, S. (2007). Relación estructural entre apoyo familiar, nivel educativo de los padres, características del maestro y desempeño en lengua escrita. *Revista Mexicana de Investigación Educativa, 12*(33), 701–729.

Bertely Busquets, M. (Coord.). (2003). Educación, derechos sociales y equidad, en La investigación educativa en México, I(1) (pp. 3–238). Mexico: COMIE.

Briceño Alcaraz, G. E. (2001). El juego de los niños en transición. *Estudios sobre las Culturas Contemporáneas, 7*(14), 71–87.

Brooker, L., & Edwards, S. (2010). *Engaging play*. Maidenhead: McGraw Hill.

Bruner, J. (1991). *Actos de significado*. Madrid: Alianza.

Cole, M., & Cole, R. S. (1989). *The development of children*. New York: W.H. Freeman and Company.

CONAFE. (2010). *Modelo de educación inicial del CONAFE*. México: Consejo Nacional de Fomento Educativo.

CONIA. (2010). *Informe 2007–2009 Un México apropiado para la infancia y la adolescencia*. México: Secretaría de Desarrollo Social.

Covarrubias Terán, M. A. (2006). Autorregulación afectiva en la relación madre-hijo. Una perspectiva histórico cultural. *Psicología y Ciencia Social, 8*(001), 43–59.

De León Pasquel, L. (2001). Finding the richest path: The role of language and cognition in the acquisition of vertical path by Tzotzil (Mayan) children. In M. Bowerman & S. Levinson (Eds.), *Conceptual development and language acquisition* (pp. 544–565). Cambridge: Cambridge University Press.

De León Pasquel, L. (2005). *La llegada del alma: Infancia, lenguaje y socialización entre los mayas de Zinacantán*. México: CIESAS /INAH / Conaculta.

De León Pasquel, L. (2007). Parallelism, metalinguistic play, and the interactive emergence of Tzotzil (Mayan) siblings' culture. *Research on Language and Social Interaction, 40*(4), 405–436.

De León Pasquel, L. (2011). Language socialization and multiparty participation frameworks. In A. Duranti, E. Ochs, & B. Schieffelin (Eds.), *The handbook of language socialization* (Vol. I). Malden: Blackwell Publishing.

Fleer, M. (2010a). Conceptual and contextual intersubjectivity for affording concept formation in children's play. In L. Brooker & S. Edwards (Eds.), *Engaging Play* (pp. 67–79). England: Open University Press.

Fleer, M. (2010b). *Early learning and development*. Cambridge: Cambridge University Press.

Fleer, M. (2013). *Play in the early years*. Cambridge: Cambridge University Press.

Gaskins, S., & Miller, P. J. (2009). The cultural role of emotions in pretend play. In C. Clark (Ed.), *Transactions at play, play and culture studies* (Vol. 9, pp. 5–21). Lanham: University Press of America.

Göncu, A. (1999). *Children's engagement in the world*. London: Cambridge University Press.

González de la Torre, Y. (2004). La competencia narrativa en niños de edad preescolar. En María Peredo (Ed.) Diez estudios sobre la lectura (pp. 34–79). Guadalajara: Universidad de Guadalajara.

Ferreiro, E., & Teberosky, A. (1979). *Los sistemas de escritura en el desarrollo del niño*. Ciudad de México: Siglo XXI Editores.

Gee, P. (2004). *Situated language and learning: A critique of traditional schooling*. London: Routledge.

INEE. (2006). Panorama educativo de México 2006. Indicadores del Sistema Educativo Nacional. México: Instituto Nacional para la Evaluación Educativa.

INEGI. (2010). Censo General de Población y Vivienda, 2010. Downloaded from http://www.inegi.org.mx/lib/olap/consulta/general_ver4/MDXQueryDatos.asp?proy=cpv10_pt on September, 10, 2013.

INEGI. (2011). *Principales resultados del censo de Población y Vivienda 2010*. México: INEGI.

Jordan, B. (2010). Co-constructing knowledge: Children, teachers and families in a science -rich curriculum. In L. Brooker & S. Edwards (Eds.), *Engaging play* (pp. 96–107). England: Open University Press.

Juarez Hernandez, M. C. (2008). *Evaluación de las competencias de niños y niñas preescolares*. México: Universidad Pedagógica Nacional.

Knaul, F., & Parker, S. (1996). Cuidado infantil y empleo femenino en México: evidencia descriptiva y consideraciones sobre las políticas. *Estudios Demográficos y Urbanos, 11*(3), 577–607.

Latapi Sarre, P. (2002). Distintas escuelas, diferentes oportunidades. Los retos para la igualdad de oportunidades en Latinoamérica. *Revista Mexicana de Educación, 7*(2), 122–132.

Maldonado, M. (2013). El rol de la abuela en el desarrollo de los nietos. In R. Mejía-Arauz (Ed.). *Desarrollo Psicocultural de Niños Mexicanos*, pp. 271–298. Guadalajara, México: ITESO. ISBN 978-607-9361-80-8.

Manteca, E. (2004). *Programa de educación preescolar 2004*. Secretaría de Educación Pública: México.

Martinez, P., Myers, R. G., & Linares Ponton, M. E. (2004). ¿Todos los pollos son amarillos ?En Busqueda de la Calidad Educativa en Centros Preescolares. Hacia una Cultura Democrática, A.C. (ACUDE).

Martinez Preciado, F., Linares, M. E., Myers, R. (2003). *¿Todos los pollos son amarillos? En búsqueda de la calidad educativa en centros preescolares*. Informe presentado a la Dirección General de Investigación. México: Hacia Una Cultura Democrática, A.C. Mimeo

Martínez Rizo, F. (2002). Nueva visita al país de la desigualdad. La distribución de la escolaridad en México, 1970–2002. *Revista Mexicana de Investigación Educativa, 7*(6), 415–443.

Matute Villaseñor, E., Sanz Martín, A., Gumá Díaz, E., Roselli, M., & Ardila, A. (2009). Influencia del nivel educativo de los padres, el tipo de escuela y el sexo en el desarrollo de la atención y la memoria. *Revista Latinoamericana de Psicología, 41*(2), 257–276. Bogotá: Facultad de Psicología–Fundación Universitaria Konrad Lorenz.

Mejía-Arauz, R. (2015). Contrastes en el desarrollo socio-cognitivo de niños de contextos urbanos y rurales o indígenas de México. In R. Mejía-Arauz (Ed.). *Desarrollo Psicocultural de niños mexicanos*, pp. 13–43. Guadalajara, México: ITESO. ISBN 978-607-9361-80-8.

Mejía-Arauz, R., Reese, L., Ray-Bazán, A., Goldenberg, C., & Torres-Armenta, V. (2011). El ambiente alfabetizador en familias y comunidades y su relación con el aprendizaje de la lecto-escritura. En S. Frisancho, M. T. Moreno, P. Ruiz, and V. Zavala (Eds.) Aprendizaje, Cultura y Desarrollo: Una aproximación interdisciplinaria, pp. 135–152. Lima, Perú: Fondo editorial de la Pontificia Universidad Católica del Perú.

Mejía-Arauz, R., Toledo-Rojas, V., & Aceves-Azuara, I. (2013). Early childhood education and development in mexico. In L. Meyer (Ed.), *Oxford bibliographies in education*. New York: Oxford University Press.

Mussen, P. H., Conger, J. J., & Kagan, J. (1976). *Desarrollo de la personalidad en el niño*. México: Trillas.

OCDE. (2005). *Informe PISA 2003*. Madrid: Santillana Educación.

Paniagua Villarruel, M. (Coord.). (2008). *Desarrollo de competencias cognitivas en preescolar: Experiencias y respuestas.* Guadalajara: ITESO.

Papalia, D. E., & Feldman, R. D. (2012). *Desarrollo humano*. México: McGraw Hill.

Pujol, R. R., & Torres, E. J. (2000). Vigencia y eficacia de los derechos de los niños y niñas en México y los impactos de la globalización. In Y. Corona Caraveo (Ed.), *Infancia, legislación y política* (pp. 37–58). México: UAM.

Quiñones, G. (2013a). Play performance and affect in a Mexican telenovela. In D. Winther–Linqvist & I. Schousboe (Eds.), *Children's play and development – cultural historical perspectives* (pp. 89–106). Netherlands: Springer.
Quiñones, G. (2013b). Perezhivanie Vivencia in the Everyday Life of Children. Unpublished doctoral dissertation. Monash University, Australia.
Quiñones, G., & Fleer, M. (2011). "Visual Vivencias": A cultural-historical tool for understanding the lived experiences of young children's everyday lives. In E. Johansson & J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 107–129). Netherlands: Springer.
Reese, L., Mejía-Arauz, R., & Ray-Bazán, A. (2011). Mexican parents' and teachers' literacy perspectives and practices: construction of cultural capital. International Journal of Qualitative Education, 1–21.
Reimers, F. (2002). *Distintas escuelas, diferentes oportunidades. Los retos para la igualdad de oportunidades en Latinoamérica [Different schools, different opportunities. The challenges for educational equality in Latinamercia]*. Madrid: La Murralla.
Romero Contreras, S. (2001). Algunas reflexiones sobre el juego y sus usos en el preescolar. *Educando para Educar, 2*(3), 16–22. Benemérita y Centenaria Escuela Normal del Estado. División de Estudios de Posgrado. San Luis Potosí, SLP.
Roman, I., & Valencia E. (2012). Pobreza, desigualdad de oportunidades y políticas públicas en México: el combate contra la pobreza y desigualdad. In *Pobreza, desigualdad de oportunidades y políticas públicas en América Latina*, pp. 109–123. Sopla, Catedra Konrad Adenauer.
SEP (2003). Contenidos e instrumentación de los programas destinados a la población de 3 a 6 años. Revisión de las Políticas de Educación y Cuidado de la Infancia Temprana [Contents and tools for programs for 3 to 6 years old children. Revisions of Politics and Education and Care of Early Childhood]. Retrieved from http://www.oecd.org/edu/school/34429901.pdf
SEP. (2012). *Informes de resultados 2012*. Retrieved from http://www.enlace.sep.gob.mx/ba/ on August 19th, 2013.
Secretaria de Educación Pública (SEP). (2004). *Programa de Educación Preescolar*. México: SEP Secretaria de Educación Pública.
SEDESOL. (2002). Un México apropiado para la infancia y la adolescencia Programa de Acción 2002–2010. Secretaría de Desarrollo Social, Secretaría de Educación Pública, Secretaría de Salud. ISBN: 970-721-114-8.
Schousboe, I., & Winther–Lindqvist, D. (2013). *Children's play and development. Cultural – historical perspectives*. London: Springer.
Solís Cámara, P., & Díaz Romero, M. (2007). Relaciones entre creencias y prácticas de crianza de padres con niños pequeños. *Anales de Psicología, 23*(2), 177–184.
Toledo-Rojas, V., & Mejía-Arauz, R. (2015). Desarrollo cognitivo, del lenguaje oral y el juego en la infancia. In Mejía-Arauz, R. (Ed.), *Desarrollo Psicocultural de Niños Mexicanos*, pp. 45–74. Guadalajara, México: ITESO. ISBN 978-607-9361-80-8.
Valdés Cuervo, A. A., Martín Pavón, M. J., y Sánchez Escobedo, P. A. (2009). *Participación de los padres de alumnos de educación primaria en las actividades académicas de sus hijos*.
Van Oers, B. (2012). *Developmental education for young children. Concept, practice and implementation. International perspective on early childhood education and development, 7*. London: Springer.
Vega Pérez, L. (2005). Los años preescolares: su importancia para desarrollar la competencia lectora y el gusto por la lectura. En L. Vega, S. Macotela, & I. Seda (Eds.), *Alfabetización: retos y perspectivas* (pp. 13–38). México: UNAM.
Vera Noriega, J. A., Peña Ramos, M., Calderón González, N. G., & Martínez Ortega, L. E. (2010). Prácticas de crianza y educación inicial en la étnia Mayo. *Estudios sociales, 17*, 304–324.

Chapter 44
Early Childhood Education in Peru

Susana Frisancho and María Isabel La Rosa

Abstract In this chapter, the authors present a general landscape of early childhood education in Peru taking into account both its achievements and its current challenges. After presenting the local conditions and the country's main characteristics that shape early childhood intervention programs, the chapter begins with a historical review of programs and public policies for early childhood education in the country and continues presenting the current status of the research in this topic and its main concerns and future directions. Although research in this area is scarce in the country, this chapter summarizes most of the studies that have attempted to understand infants' developmental processes and early childhood education programs in Peru. Two problems are raised as final conclusions of this chapter: poverty is pointed out as one of the main factors that prevent children from attaining their developmental potential and one of the main challenges to fight against in modern Peru. On the other hand, the rich cultural diversity of the country is poorly valued and frequently misunderstood by teachers, parents, and students, which threaten the flourishing and development of children in diverse sociocultural contexts.

Keywords Infant development • Cultural diversity • Early childhood education

44.1 Local Conditions that Focus Research and Intervention Programs

Peru, a country located in the south region of the American continent, has one of the highest indigenous populations and accounts for a great part of the enormous socio-linguistic and cultural richness of the Latin-American region. Ethnologue (Lewis et al. 2013) lists 105 individual languages for Peru, 93 living and 12 extinct. Peru possesses the biggest Quechua population (3,262,137), and, after Bolivia, it has the biggest Aimara population in the Andean region (UNICEF and FUNPROEIB 2009).

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Around 29 million people live in Peru, and children make up 38 percent of the population. According to Young Lives (2013), children in Peru are the most vulnerable and unprotected citizens. Although infant chronic malnutrition has decreased in the country between 2011 and 2012 (ENDES 2012), malnutrition and anemia among children younger than 5 increased from 30.7% to 32.9%. Children's mortality during the first year of life has also increased; it rose from 16 to 17 deaths for each 1000 children born alive, although it is higher in rural areas (29 deaths for each 1000 children born alive). Of course, the risk of mortality is higher in the Andes and Amazonia regions than in the city of Lima, where the mortality index is only 13 deaths for each 1000 children born alive, showing the great inequalities of the country. In Latin America, mortality among indigenous children is more or less twice than that of nonindigenous children (Del Popolo and Oyarce 2005).

IndexMundi (2013) indicates that for 2010 the population below poverty line in Peru was 31.3%, and from this, 3.8 million people are living in extreme poverty. Out of them, 2.1 million are children (Young Lives 2013). Although the country ranks 96th in the world for under-5 mortality (Young Lives 2013), children in city slums, the Amazon rainforest, and the Andean highlands are 10–12 times more likely to die before their fifth birthday than their peers that belong to the richest 20% of families.

Paradoxically, the country is experiencing a continuous economic rise and climbs six positions in the rankings to reach 61st place, although the low quality of its educational system is still one of its more complex social problems (Schwab 2013). In comparison to other Latin-American countries, Peruvian teachers are among the most dissatisfied with their jobs (Murillo and Román 2012). International studies show that teachers' salaries are between 25% and 40% less than the salaries of other professionals with the same or less level of education (Mizala and Ñopo 2011, 2012). It is important to point out that in Latin America, teachers earn between 30% and 70% less than their peers (other professionals and technicians), which is especially true among preschool and primary teachers (OCDE/CEPAL 2011). This factor undoubtedly affects the quality of education since it heavily depends on the quality of the daily work of teachers, their talents and competencies, and their motivation to work. With low salaries, it is difficult to retain the most talented individuals in the profession and to keep them enthusiastic and committed to their jobs.

In spite of all this, the National Education Council (CNE in Spanish) recognizes the importance of early childhood education and considers it a national priority. In its 2012 balance of Proyecto Educativo Nacional (Consejo Nacional de Educación 2013), the council acknowledges the efforts Peru is doing both to improve the quality of early childhood education programs and to reach more children with programs and services. However, it also points out that the number of children between 0 and 3 that receive services has decreased; only 4.5% of this group of children is included in any social program. Moreover, although the budget rose in 2012 due to management problems, only 50% of this budget was spent.

44.2 Early Childhood Education in Peru: History and Current Trends

The particular political, economical, social, and cultural conditions of Peru make up the background for early childhood education policies. So, Peruvian early childhood education programs and policies are twofold: some of them focus at achieving the educational goals set up by the Ministry of Education. Others, related to the goals of the ministry of health, are aimed at reducing children's mortality rates and malnourishment and have a prevention and health promotion focus.

In Peru, the pioneer work in early childhood education for children younger than 6 years began in the city of Lima by private initiative. Juana Alarco de Dammert established the Sociedad Auxiliadora de la Infancia in 1896 and founded Cuna Maternal de los Naranjos in 1902 with the goal to provide care for children of working mothers; it is one of the few institutions from those years that still functions nowadays. Also in 1902, Elvira García y García organized the first private kindergarten for children 2–7, an institution ascribed to Liceo Fanning (Córmack and Fujimoto-Gómez 1993), a women school founded in 1881 by Teresa González de Fanning to educate women as a way to emancipate them from mandatory marriage and housework. Teresa González de Fanning and Elvira García y García, along with other women, are considered the first generation of erudite women in Peru (Denegri 2004).

Only in 1930 the government began to show interest in early childhood education when President Augusto B. Leguía (1919–1930) got to know the work of sisters Victoria and Emilia Barcia Boniffatti, who studied education in Europe and had developed a modern kindergarten program – based on progressive education – in the city of Iquitos, in the Amazonia region. Based on that experience, Leguía asked the sisters to organize what would be the first public kindergarten in Peru, which began functioning with very few resources on May 25, 1931, serving children 4–5. Its motto was Saint Francis of Sales' saying "We must do all things from love, and nothing from constraint" ("Todo por amor, nada por fuerza") that until now guides early childhood education programs in Peru (Barcia Boniffatti 2015; ISPPEI 2009). In 1940, the Inspectoría Nacional de Jardines de la Infancia was created to supervise the work of the programs. As recently as 1967, preschool education was included into the Ministry of Education, and in 1968, it was allocated as part of the direction of primary and preschool education.

In 1970, in a diagnostic research study carried out by the Commission for the Educational Reform of Peru, which was run by Augusto Salazar Bondy (Salazar Bondy 1975), it was for the first time acknowledged the importance of good care and education during the first 5 years of life. Early childhood education was thought of as the first step in the educational process; its goals were identified as the creation of necessary conditions for the adequate development of children from birth to 6 years of age, with the participation of family and community.

The name early childhood education (in Spanish, educación inicial) was chosen to change the traditional focus of preschool education, mainly aimed at preparing

children for elementary education. This new educational level was officially created in 1972 by law N 19326. In 1973, with the goal of fighting against hunger and broadening the reach of early childhood education programs, so they can serve children in rural areas and shantytowns, nonschooling programs were created (Peralta and Fujimoto-Gómez 1998). Named PRONOEI, which stands for Proyecto Experimental de Educación Inicial No Escolarizada, these nonschooling programs were later on adopted by many other Latin-American countries.

Currently, Peruvian General Education Law N° 28044 defines early childhood education as the first stage of basic education. It has two levels: the first one from birth to 3 years of age (daycare services) and the second from 3 to 5 years (school-based programs). Early childhood education has to be articulated to elementary school and needs to include the family and the community to ensure the quality of children's care and the respect of their rights. The current National Curriculum Guidelines (Ministerio de Educación 2009) highlights that children need play to construct their subjectivity and identity and to learn about the world. Although not explicitly declared as such, the national curriculum assumes a constructivist approach that is evident in its general background, as it assumes that children and adolescents actively construct their knowledge. Peru is committed to guarantee all children access to high-quality early childhood education programs that fit their unique individual, social, and cultural needs (Ministerio de Educación del Perú 2007).

COBERTURA 100 is a good example of a social program that intends, through the coordinated efforts of the Ministry of Education, local governments, schools, civil society institutions, and the community, to universalize early childhood education for children 3–5 (Ministerio de Educación del Perú 2013).

Unfortunately, Peru is a country where poverty is endemic. As it is known, children are vulnerable to poverty and disease because they can affect the achievement of their developmental milestones and have severe impacts later in life (Alderman 2011; Almond 2006; Almond and Chay 2003). Since the quantity and quality of nutritional intake have an impact on growing and development and are related to the survival of children, Peruvian early education programs have a focus on survival, especially in rural areas. A challenge that we still have is to implement social and educational programs that go beyond these basic survival needs to enhance other educational and psychological process necessary for the full development of children.

44.3 Current Status of the Research in Early Childhood Education in Peru: Concerns and Future Directions

As we have seen in this brief report, early childhood education in Peru still presents many challenges. Unfortunately, research in this area is scarce in the country, although some research studies do exist. Some research studies focused on language

and cognitive development of children. Gonzales Moreyra (1995), studying language development of children under three, found that poverty and marginalization reduces the quality, frequency, and duration of mother-child verbal interactions, which affects children's language and cognitive development. Majluf (1980, 1990) showed a high and significant correlation between spatial representation in spontaneous drawing and cognitive development measured by Piagetian tasks among children between 4–6 and 7–6 years old, with some differences due to age and income level. Reátegui (1990) found that in the Andean communities, the only responsible for the children's upbringing is the mother. Her study shows that Andean children have normative cognitive development, with particular characteristics according to their cultural context and practices. In the same vein as that of Gonzales Moreyra's research, this study also showed a low language development but a good development of gross motor skills. Other studies (Majluf 1970, 1971a, b) found that children between 3 and 5 years old from poor neighborhoods either in Lima or in Andean towns (Chumo, Sicuani) showed several shortcomings in their readiness for school, especially regarding reading skills. Other studies have also shown that poverty and malnutrition are associated with low cognitive and motor development (Pollit and Caycho 2010; Pollit 2002; Pollitt et al. 1980).

One research area that has strongly developed in Peru has to do with attachment and bond between children and their caregivers. Studies show that similarly to children from different countries, Peruvian children also use their mother as a secure base. Descriptions of the optimally attached child seem to be very similar across cultures (Posada et al. 2013). In the same vein, there are studies aimed at evaluating the efficacy of interventions programs to promote a healthy relationship between poor teenage mothers and their babies (Traverso et al. 2010; Traverso and Nóblega 2010). However, more research is needed to know the particular characteristics that these psychological processes take in different cultural contexts. Although, generally speaking, Peruvian mothers of middle and low socioeconomic status acknowledge the importance of affectivity for the healthy development of children (Nóblega et al. 2009), it is important to explore how this process occurs in multicultural settings, knowing that cultural practices, as patterns of meaning historically constructed and transmitted (Geertz 1973), have to do with the way parents relate to and raise their children (García 2011; Paradise 2011).

Another research avenue has to do with early childhood education in cultural contexts, the transition from kindergarten to elementary education, and the relationship between culture and development (Frisancho, Moreno, Ruiz Bravo & Zavala 2011). Research shows that in Peru, there is a gap between early childhood education and elementary education; whereas kindergarten is thought of as a time to learn through play, first grade in elementary education is thought of as the beginning of "serious" learning, where homework, paper-and-pencil activities, and long hours sitting in a chair are the norm. Moreover, studies show that teachers in Peru have not enough training to give adequate support to children during this transition (Ames 2011). Regarding the development of gender identities, Ames (2006) points out several research studies that show that within the school, boys and girls get different messages according to their gender and that gender stereotypes and prejudices are prev-

alent in schools. The Young Lives study (Save the children 2013), a long-term international study focused on childhood poverty, also reports that there are differences in how parents view girls' and boys' futures. This is a problem that has to be addressed within the Peruvian educational system.

Unfortunately, cultural diversity is frequently misunderstood and scarcely valued by teachers, parents, and students (Zavala 2007, Callirgos 2004; Robles 2004; Cueto and Secada 2003). In this context, more research is needed to learn about the mode in which children learn in culturally diverse contexts (Anderson 2016; García 2011; Paradise 2011).

44.4 Conclusions

In Peru, poverty prevents children from attaining their developmental potential. Peru being such a culturally diverse country, it is a deep social problem that diversity is misunderstood and not valued as a richness of the country, which leads to inequality in education opportunities and access to health services and development. In such a difficult context, more research is needed to identify developmental patterns and processes that can be used to implement better social policies and programs aimed at enhancing children's development and quality of life.

References

Alderman, H. (Ed.). (2011). *No small matter: The impact of poverty, shocks, and human capital investments in early childhood development*. Washington, DC: World Bank.

Almond, D. (2006). Is the 1918 influenza pandemic over? Long-term effects of in utero influenza exposure in the post-1940 U.S. *Journal of Political Economy, 114*(4), 672–712.

Almond, D., & Chay, K. (2003). *The long-run and intergenerational impact of poor infant health: evidence from cohorts born during the civil rights era*. Mimeo: University of California Berkeley.

Ames, P. (Ed.). (2006). *Las brechas invisibles. Desafíos para una equidad de género en la Educación*. Lima: Instituto de Estudios Peruanos (IEP) http://198.57.164.64/~ieporg/textos/DDT/brechasinvisibles.pdf. Accessed 20 Mar 2014.

Ames, P. (2011). Empezando la escuela. Las transiciones de los niños pequeños en diversos contextos socioculturales. In S. Frisancho, M. Moreno, P. RuizBravo, & V. Zavala (Eds.), *Aprendizaje, cultura y desarrollo. Una aproximación interdisciplinaria*. Lima: Fondo editorial de la PUCP.

Anderson, J. (2016). *Las infancias diversas. Estudio fenomenológico de la niñez de cero a tres años en cuatro pueblos indígenas de la Amazonía peruana*. Lima: UNICEF/Cooperación Canadiense. http://buenaondaperu.org/unicef/Las-Infancias-Diversas-Estudio-fenomenologico-de-la-ninez-de-cero-a-tresanos-en-cuatro-pueblos-indigenas-de-la-Amazonia-peruana.pdf. Accesed 27 Dec 2016.

Barcia Boniffatti, E. (2015). *Educar es vivir*. Lima: Centauro Editores S.A.C.

Callirgos, J. C. (2004). *Percepciones y Discursos sobre Etnicidad y Racismo: Aportes para la Educación Intercultural Bilingüe*. Lima: CARE PERÚ http://www.care.org.pe/pdfs/cinfo/libro/Folleto%20de%20Etnicidad%20y%20Racismo.pdf. Accessed 21 Feb 2014.

Consejo Nacional de Educación (2013). Proyecto educativo nacional. Balance y recomendaciones 2012. http://www.cne.gob.pe/images/stories/cne-publicaciones/Balance2012alta.pdf Accessed 21 Feb 2014.

Cormack, M., & Fujimoto-Gómez, G. (1993). *Estado del Arte de la atención del niño menor de seis años en América Latina y el Caribe. Documento de trabajo del proyecto multinacional de educación básica*. Washington, DC: PRENDE/OEA.

Cueto, S., & Secada, W. (2003) Eficacia escolar en escuelas bilingües en Puno, Perú. Revista Electrónica Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 1, 1. http://www.ice.deusto.es/RINACE/reice/vol1n1/CuetoySecada.htm. Accessed 13 Feb 2014.

Del Popolo, F., & Oyarce, A. M. (2005). *América latina, población indígena: perfil sociodemográfico en el marco de la conferencia internacional sobre la población y el desarrollo y de las metas del milenio. Revista Notas de Población 79 (LC/G.2284-P/E)*. Santiago de Chile: CEPAL-CELADE www.eclac.org/publicaciones/xml/5/23525/notas79-cap1.pdf. Accessed 16 Feb 2014.

Denegri, F. (2004). *El abanico y la cigarrera: la primera generación de mujeres ilustradas en el Perú 1860–1895*. Lima: Instituto de Estudios Peruanos.

ENDES. (2012). Encuesta demográfica y de salud familiar 2012. http://desa.inei.gob.pe/endes/. Accessed 21 Apr 2014

Frisancho, S., Moreno, M., Ruiz Bravo, P., & Zavala, V. (Eds.). (2011). *Aprendizaje, cultura y desarrollo. Una aproximación interdisciplinaria*. Lima: Fondo editorial de la PUCP.

García, F. (2011). Relaciones de afecto orientadas al bienestar colectivo en la socialización temprana de una comunidad quechua del Perú. In S. Frisancho, M. Moreno, P. Ruiz Bravo, & V. Zavala (Eds.), *Aprendizaje, cultura y desarrollo. Una aproximación interdisciplinaria*. Lima: Fondo editorial de la PUCP.

Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books.

Gonzáles Moreyra, R. (1995). *Exploración del desarrollo del lenguaje en el niño peruano menor de tres años: un modelo interactivo*. Lima: Ministerio de Educación-Fundación Bernard Van Leer.

Indexmundi. (n.d.). Peru population below poverty line. http://www.indexmundi.com/peru/population_below_poverty_line.html. Accessed 15 Oct 2013.

ISPPEI. (2009). *El jardín de la infancia. Su obra, sus objetivos y proyecciones*. Lima: ISPPEI "Emilia Barcia Boniffatti", serie documentos históricos.

Lewis, M. P., Simons, G. F., & Fennig, C. D. (Eds.). (2013). *Ethnologue: Languages of the world* (Seventeenth ed.). Dallas: SIL International http://www.ethnologue.com. Accessed 2 Oct 2014.

Majluf, A. (1970). Importancia de los primeros años de la vida en el desarrollo psicofisiológico del niño. In: Majluf. A. (1993). *Marginalidad, Inteligencia y Rendimiento Escolar*. Lima: Brandon Enterprise.

Majluf, A. (1971a). Madurez para el aprendizaje de los niños de 5 años en zona marginal de Lima. In: Majluf, A. (1993). *Marginalidad, Inteligencia y Rendimiento Escolar*. Lima: Brandon Enterprise.

Majluf, A. (1971b). Exploración de la habilidad mental y maduración para el aprendizaje de dos grupos de niños de tres a cinco años de Sicuani y Chumo. In: Majluf, A. (1993). *Marginalidad, Inteligencia y Rendimiento Escolar*. Lima: Brandon Enterprise

Majluf, A. (1980). Representación de relaciones espaciales en el dibujo espontáneo y en pruebas espaciales piagetanas en niños de 4 a 7 años, 11 meses de clase socioeconómica media y baja. In: Majluf, A. (1993). *Marginalidad, Inteligencia y Rendimiento Escolar*. Lima: Brandon Enterprise

Majluf, A. (1990). Relación entre la representación del espacio en el dibujo espontáneo y la inteligencia. In: Majluf, A. (1993). *Marginalidad, Inteligencia y Rendimiento Escolar*. Lima: Brandon Enterprise.

Ministerio de Educación del Perú. (2007). Proyecto educativo Nacional al 2021. http://www.minedu.gob.pe/DeInteres/xtras/PEN-2021.pdf. Accessed 2 Nov 2013.

Ministerio de Educación del Perú. (2009). Diseño Curricular Nacional para la educación básica regular. http://www.minedu.gob.pe/inicio.php. Accessed 2 Nov 2013.

Ministerio de Educación del Perú. (2013). Cobertura 100. http://ebr.minedu.gob.pe/dei/cobertura100.html. Accessed 21 Feb 2014

Mizala, A., & Ñopo, H. (2011). Teachers' salaries in Latin America: How much are they under or over paid? IZA discussion Paper Series 5947, Institute for the Study of Labor (IZA).

Mizala, A., & Nopo, H. (2012). Evolution of teachers' salaries in Latin America at the turn of the 20th century: How much are they (Under or Over) paid?. IZA Discussion Papers 6806, Institute for the Study of Labor (IZA).

Murillo, F. J., & Román, M. (2012). Formación, Motivación y Condiciones Laborales de los Docentes de Primaria en Perú. *Revista Peruana de Investigación Educativa, 4*, 7–42 http://siep.org.pe/archivos/up/262.pdf. Accessed 2 Nov 2013.

Nóblega, M., Thorne, C., Peña, B., & Moreyra, P. (2009). Imágenes de la niñez desde la perspectiva de las madres peruanas. *Revista de Psicoanálisis, 27*(2), 213–242 http://www.minedu.gob.pe/DeInteres/xtras/PEN-2021.pdf.

OCDE/CEPAL. (2011). Perspectivas Económicas de América Latina 2012: Transformación del Estado para el Desarrollo. http://dx.doi.org/10.1787/leo-2012-es http://www.eclac.org/publicaciones/xml/4/44904/2011-548_Leo2011_WEB.pdf. Accessed 2 Nov 2013

Paradise, R. (2011). *¿Cómo educan los indígenas a sus hijos? El cómo y el por qué del aprendizaje en la familia y la comunidad. In: Frisancho, S., Moreno, M., Ruiz Bravo, P., & Zavala, V. (2011) (editoras). Aprendizaje, cultura y desarrollo. Una aproximación interdisciplinaria*. Lima: Fondo editorial de la PUCP.

Peralta, M. V., & Fujimoto-Gómez, G. (1998). *La atención integral de la primera infancia en América Latina: ejes centrales y los desafíos para el siglo XXI*. Santiago de Chile: OEA.

Pollitt, E. (2002). *Consecuencias de la desnutrición en el escolar peruano*. Lima: Fondo Editorial de la Pontificia Universidad Católica del Perú.

Pollitt, E., & Caycho, T. (2010). Desarrollo motor como indicador del desarrollo infantil durante los primeros dos años de vida. *Revista de Psicoanálisis, 28*(2), 385–413.

Pollitt, E., Halpern, R., & Eskenasy, P. (1980). *Poverty and malnutrition in Latin America: Early childhood intervention programs: A report to the ford foundation*. New York: Praeger Publishers.

Posada, G., Lu, T., Trumbell, J., Kaloustian, G., Trudel, M., Plata, S. J., Peña, P. P., Perez, J., Tereno, S., Dugravier, R., Coppola, G., Constantini, A., Cassibba, R., Kondo-Ikemura, K., Nóblega, M., Haya, I. M., Pedraglio, C., Verissimo, M., Santos, A. J., Monteiro, L., & Lay, K.-L. (2013). Is the secure base phenomenon evident here, there, and anywhere? A cross-cultural study of child behavior and experts' definitions. *Child Development*. doi:10.1111/cdev.12084.

Reategui, N. (1990). *Estructuras cognitivas y afectivas de madres y niños andinos*. La Paz: Proandes.

Robles, A. M. (coordinadora). (2004). *Aproximaciones al Racismo, Etnicidad y a la Educación Intercultural Bilingüe.* Lima: CARE. http://www.care.org.pe/pdfs/cinfo/libro/Aproximaciones%20al%20racismo.pdf. Accessed 2 Nov 2013.

Salazar Bondy, A. (1975). *La educación del hombre nuevo: la reforma educativa peruana*. Buenos Aires: Paidós.

Save the Children. (2013). *Growing up with the promise of the MDGs children's hopes for the future of development*. London: Save the children http://www.savethechildren.org.uk/sites/default/files/docs/Growing_Up_MDG_Promise_Asia_version.pdf. Accessed 2 Mar 2014.

Schwab, K. (Ed.). (2013). The global competitiveness report 2012–2013. World economic forum. http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf Accessed 2 Mar 2014

Traverso, K., & Nóblega, M. (2010). Promoviendo vínculos saludables entre madres adolescentes y sus bebés: Una experiencia de intervención. *Revista de Psicoanálisis, 38*(2), 259–283.

Traverso, K., Nóblega, M., Escribens, P., Vigil, V., Gabilondo, R., & Fernandez, A. (2010). Una experiencia para promover un vínculo saludable entre madres adolescentes y sus bebés. *Revista de Psicopatología y Salud Mental del Niño y Adolescente, 16*, 41–47.

UNICEF & FUNPROEIB (2009). *Atlas Sociolingüístico de Pueblos Indígenas en América Latina*. Cochabamba, Bolivia: FUNPROEIB Andes. http://www.proeibandes.org/atlas/tomo_2.pdf. Accessed 2 Mar 2014.

Zavala, V. (2007). *Avances y desafíos de la educación intercultural bilingüe en Bolivia, Ecuador y Perú*. Lima: Care.

Part III
Contemporary Research and Evidence – Early Childhood Education Globally: *Nordic Region*

Stig Broström, Johanna Einarsdottir and Ingrid Pramling Samuelsson

Chapter 45
The Nordic Perspective on Early Childhood Education and Care

Stig Broström, Johanna Einarsdottir, and Ingrid Pramling Samuelsson

Abstract This chapter discusses a number of central dimensions and dilemmas of early childhood education and care (ECEC) in the Nordic countries: Denmark, Finland, Iceland, Norway and Sweden. In the two first sections, 'Early Childhood Education and Care: An Integrated Part of the Welfare System, Democracy and Women's Liberation' and 'ECEC for All in an Internordic Perspective', we describe the fact that almost all children in the Nordic countries attend preschool, which on the one hand can be described in the light of the participation of both mothers and fathers in the labour market and on the other hand reflects the positive view of society with regard to ECEC. Then in Sect. 45.5, basic educational ideas are introduced, and for each country, there is an account of how early childhood services and education have progressed during recent decades. In continuation of this, Sect. 45.6 presents details from the development of curricula in each Nordic country during the last two decades. Subsequently, in Sect. 45.7, we focus on some current as also as upcoming tasks and problems related to children's learning and development, which are also related to the question of ECEC *Didaktik*.

Keywords Nordic early childhood education • Welfare state • Democracy • Bildung • Womens liberation • Didaktik and curriculum • Research on early childhood education

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> The core values in the Nordic welfare states are equal opportunities, social solidarity and security for all. The model promotes social rights and the principle that everyone is entitled to equal access to social and health services, education and culture. (Yearbook of Nordic Statistics 2012, p. 58)

The term early childhood education and care (ECEC) is used in the chapter as an umbrella term for all variants of settings for children 0–5 years of age: In Denmark and Norway, it is called kindergarten, in Iceland playschool, in Finland daycare and in Sweden preschool. The chapter will not focus on the six-year-olds, since this is a transition stage between ECEC and primary school or children are already at school at this age. They are in settings closely resembling school, although the legislation in some countries dictates that children are not to begin compulsory primary school until age seven. In Norway and Iceland, this age group is already in primary school.

45.1 Early Childhood Education: An Integrated Part of the Welfare System, Democracy and Women's Liberation

During the last century, the Nordic countries have established a welfare model, which is often called the Nordic model or the social democratic model. This includes developing a more equal society regarding social security systems and equal opportunities for men and women and not least introducing reforms such as child allowance, parental leave and access to preschool for all children. This means that children are the responsibility of not only the family but also society, just like school education is. Behind all of this are democratic values like solidarity, civil rights, equity and equality.

At the end of the 1960s, some of the Nordic countries were in great need of people who could work in the expanding labour market, which is why we looked favourably on immigrants coming to work in the region. There was also a very positive view, although there were exceptions, on woman and mothers entering the labour market (Sommer et al. 2010). Questions of equality and equity between gender and social classes were high on the political agenda. Someone had to take care of children in the families involved, which is why a demand for universal daycare arose (Klint and Johansson 2010). Daycare slowly became a reality for many children and their families.

In all the Nordic countries, the explosion of ECEC took off in the 1970s, when women were needed in the labour market (Norway and Finland were a bit later in their construction of this). As shown in Table 45.1, the percentage of children of all age groups enrolled in ECEC has increased significantly during the past two decades. Today the general picture is that almost all children between 2 and 5 years of age spend their daily lives in preschool.

Table 45.1 Nordic statistics 1990–2011 revealing the percentage of 2-year-old and 5-year-old children attending ECEC

Country	1990–2 years old	1990–5 years old	2011–2 years old	2011–5 years old
Denmark	63	74	91	97
Finland	53	53	52	78
Iceland	50	72	94	94
Norway	20	62	89	99
Sweden	55	90	67	98

Table 45.2 Information about laws, payment and staff competence in the various countries

Country	Law on ECEC for all children	Fee for one child in €/month	Preschool teachers in %	Parental leave in months
Denmark	2007 (from 0 year of age)	250–500	61	8
Finland	1995 (from 3 years of age)	24–264	33	9
Iceland	1991 (for children under the age of 6)	90–200	38	9
Norway	2009 (from 1 year of age)	300	33	9
Sweden	2003 (from 1 year of age)	Maximum 175	54	16

There are some variations between children aged 2 and 5. More, in all the Nordic countries, the percentage of 1-year-old children attending ECEC is significantly lower. The age at which children attend ECEC depends largely on the length of parental leave, which varies from 8 months in Denmark to 16 months in Sweden.

The Nordic countries all offer generous support for paid parental leave. The political arguments for substantial paid parental leave and daycare services have been based on ensuring that both parents have the possibility to work as well as care for and promote their children's well-being and development (Eydal and Kröger 2009). Table 45.2 illustrates how the Nordic social security systems offer various forms of economic support for the care of children. In Denmark, parents are paid for 8 months, and in Finland, 9 months are allowed for parental leave. In Sweden, parents receive economic support (about 80% of their salary) for 16 months, and fathers get a specific bonus for staying home more than the 2 months they are required to take of the parental leave. In Iceland, parents get 9 months of parental leave with full salary, but can instead take 18 months with 50% of their salary; of this, fathers are required to take 3 months (Tjänstemännens Centralorganisation 2012).

Most mothers with young children work outside the home, and children spend many years in some kind of early childhood education programme. It has become mothers' as well as fathers' right to be active on the labour market and ECEC, and fathers have taken on a central role in the family as well. Another aspect is what is regarded as children's right to a positive setting where they can play, learn and feel secure. There are great similarities between the Nordic countries. Finnish women have a lower degree of employment, with 68% in the labour market, while this figure is 70% in Denmark, 72% in Sweden, 75% in Norway and 78% in Iceland (Yearbook of Nordic Statistics 2012).

The development of ECEC in the Nordic countries is largely based on strong and successful women, but also on political support for democracy and equality. It is interesting to see how these women have struggled for their own rights as women, as well as for their children's rights; we know from other parts of the world that women's and children's status and opportunities are very closely related (Vittachi 1989). Although there may be many people behind a development, we want to highlight a few examples.

Alva Myrdal was a Swedish social democratic politician and diplomat who meant a great deal for the welfare of children in Sweden as well as the other Nordic countries. Alva Myrdal had social ambitions for children and the families back in the 1930s (Myrdal and Myrdal 1934). Myrdal's quest for an equitable and egalitarian society contributed to her interest in working for an ECEC in which children from an early age could be brought up in the social democratic spirit from an early age. The education that Myrdal advocated was based on psychological theories that were very new at the time. She said that the new society required a new upbringing by which old, authoritarian ways of raising children would be replaced by education for the community and solidarity. Obedience would be replaced by adaptation to general rules, based on a social order developed through democratic decisions. Myrdal formulated a family policy in which the family, the woman and the child were in focus. Women could work and become financially equal to men, and ECEC would help to make this possible. The state would take a great deal of responsibility for children's education by creating settings, in the form of an all-day institution, to help shape the new child with the help of the new pedagogy with democracy as its foundation.

There were also women in the other Nordic countries who took the initiative for establishing crèches and preschools, as well as training for preschool educators. For example, in Iceland, the Women's Association established the first crèches in the 1920s. Similarly, in Denmark, strong women established the first Froebel Kindergarten in 1871 and 20 years later realized education for preschool staff.

With most children now in ECEC, they had the opportunity to be socialized into two different settings: those of the family and of ECEC. Today ECEC has become part of everyday life for most families, especially for the next generation of children, of whom virtually everyone will have experience of ECEC. The ECEC released the child from the family and focused more on the child as an individual who is given opportunities to participate in a new community, new traditions and cultures value along with other children rather than simply within the family (Tallberg-Broman and Pramling Samuelsson 2013).

45.2 The Research-Based Political Agenda

Research both on the brain and within the social sciences offers evidence of the importance of the early years. Experiences in the family obviously lay the foundation for children's way of relating to the world around them later, in both ECEC and

school. But studies from different countries show that ECEC can make up for deficiencies in the child's home environment. ECEC can thus play a compensatory role, but a prerequisite for this is a high-quality setting. The fact that quality is crucial for children's future learning manifests itself in a British longitudinal study, which followed more than 3,000 children from age three to adolescence (Sylva et al. 2004). High quality is characterized by the presence of well-trained and effective teachers who can build on the children's experiences. They are simply able to assume a shared focus of interaction and communication with the children – this has been called 'shared sustainable thinking' (Siraj-Blatchford 2007).

There are indications that the Nordic governments want to raise the bar for quality in ECEC through several measures. In Sweden, a new Education Act incorporating ECEC has come into force (The Swedish National Agency for Education 2011). As part of launching these intentions, educators from ECEC participated in training courses under the name 'The Preschool Lift', and licentiate graduate schools were established. In 2011 a new preschool-teacher education was launched, with more focus on the ECEC content dimensions and the specific preschool age. Finally, it should be noted that the School Inspectorate now also examines ECEC in terms of how well it is working towards preschool goals and intentions (Skolinspektionen 2012).

In Denmark, a similar movement has been noted during the past 10 years. A new school reform opened up for an extended cooperation between preschool teachers and school teachers, and through educational developmental programmes, we also see a strengthening of the content within ECEC such as language, communication, science and technology.

In Norway, two curriculum versions have been developed (Kindergarten Act, 2005), and a committee is now discussing the curriculum in order to draft a revised version in 2014. The committee will reflect on the concepts of play, learning and *Bildung* and will likely still argue for an ECEC characterized by play, *Bildung* and care (Ødegaard 2013).

In Iceland, a new national curriculum for all school levels was published in 2011, with a common section for all school levels in which six basic areas are introduced as a common thread: literacy, sustainable development, health and well-being, democracy and human rights, equality and creativity. According to laws from 2008 that took effect on July 1, 2011, to be a teacher in Iceland one now must have a 5-year university education. Hence, only those who have a master's degree from an accredited university and have been granted a licence by the Ministry of Education, Science and Culture can use the occupation title 'preschool teacher' (Lög um menntun og ráðningu kennara og skólastjórnenda við leikskóla, grunnskóla og framhaldsskóla nr. 87/2008).

Finland has a national document as well as local documents for guidance within ECEC (STAKES 2004). Key notions are partnership, children's points of view and competent staff. Values are highlighted as well. The educational goals are promotion of personal well-being, reinforcement of considerate behaviour and action towards others and gradual build-up of autonomy. Play and the physical environment are strongly emphasized. The content areas are mathematical, natural science, historical, aesthetic, ethical and religious-philosophical orientation. What is

interesting about the Finnish guidelines is that language is not mentioned as a goal, but on the other hand, it is formulated as a 'supporting element' in all activities.

Looking at the various guidelines for ECEC in the Nordic countries, the value base seems to be very strongly related to democracy (see Chap. 22 Emilson and Johanson in this volume), a child-oriented approach with an integration of care and education, in which play also has a place. Preschool teachers' educational contribution to children's life in ECEC has been conceptualized as a unity of care, upbringing and teaching with focus on children's well-being, learning, development and *Bildung* (Broström 2006). The *Bildung* concept is explicitly mentioned in the Norwegian Preschool Act (Kunnskapsdepartementet 2006/2013). *Bildung* goes beyond education, stressing the child's general and all-round development as an active member of society, and thus aims to help them realize democratic participation. It is oriented towards the future and has a global perspective. The democratic person is a political subject, with knowledge and skills, and a desire to make use of these through transformative practice. This is a person who has the knowledge, skills and will to realize transformation through action, summarized in the concept 'action competence' (Schnack 2003). Regarding early childhood education, such approaches have been described as a critical democratic ECEC education (Broström 2012). This is in line with the eight key competences for lifelong learning formulated by Eurochild (2011) 'to equip individuals to engage in active and democratic participation' and also highly expressed in Nordic legislation for preschool education (Einarsdottir et al. 2015).

45.3 ECEC for All in an Internordic Perspective

The concept of 'lifelong learning', which became part of the OECD's goals in 2009, has strengthened ECEC as an educational institution, and it is now regarded as the first stage of lifelong learning and seen as important in laying the foundations for children's future learning. However, lifelong learning is not a self-evident notion for bringing the youngest children into education. In many countries, it instead means extending education to the life after compulsory school. When we talk about the notion of lifelong learning, we want to emphasize the fact that experiences from the early years form the foundation for later experiences and learning. Consequently for this period in life, we talk about other kinds of education than for later in life while still calling it education. Perhaps the most important learning during these years is learning to learn, which the British EPPE (Effective Provision of Preschool Education) project has shown is the benefit of high-quality ECEC for later school learning (Sylva et al. 2010). But it has also received interest and appreciation for different content areas.

The first decade of the new millennium has been characterized by social changes which have had major impact on the education system in the Nordic countries. These include globalization, democratization, marketization, medicalization,

digitization and increasing demands for accountability and measurability – a great number of factors that affect families' lives.

In various international comparisons of the quality of ECEC, the Nordic countries are ranked at the top. As can be seen in the 2008 UNICEF report (UNICEF 2008), Sweden was the only country with a full benchmark for early childhood at the time of this comparison, although all Nordic countries fared quite well. Today, all the Nordic countries offer access for all children. The aspects compared in the UNICEF report are parental leave, plan for disadvantaged children, less than 10% poor children, subsidized and regulated services for children, a national curriculum, 80% of staff trained, teacher-child ratio (1:15), at least 25% cover for children under 3 years of age and 80% for children from 4 years and 1% of GDP spent on ECEC. In another international comparison and evaluation, Finland, Sweden, Norway and Denmark are ranked among the best (Iceland is not included in the report). The ECEC rankings are among the top, not least due to the fact that all children and families have access and that the educational theory and practice unites care and education (Lien Foundation 2012).

When similarities and differences among the Nordic countries are examined, one realizes that the development has moved from looking at ECEC as social services, governed by the Ministries of Social and Family Affairs or the like, towards being governed by the Ministry of Education or the equivalent, in all countries except Denmark. Table 45.2 illustrates ECEC services. Children have the right to attend ECEC programmes during the years before starting school, regardless of family income or parental employment. If a child's parents want him or her to attend an ECEC programme, the local municipality is obligated to provide the child with a slot in either municipal kindergarten or a private child care programme. ECEC services in Norway, Sweden and Denmark are usually open from 6:30 a.m. to 5 or 6 p.m., while this can vary a great deal in Finland and Iceland. The parents only pay a small part of the cost in all Nordic countries.

Today preschools in Sweden, Iceland, Norway and Finland are under the auspices of the Ministry of Education (Einarsdottir 2013). In Denmark, preschool belonged to the Ministry of Social Affairs until 2010 and was then moved to the Ministry of Children and Education. Due to political conflict in 2013, however, it was returned to the Ministry of Social Affairs. But again in 2016 reestablished as Ministry of Children and Social Affairs.

Table 45.2 illustrates how the fee for each child varies among the countries, with the maximum fee varying from 175 to 500 €/month. Denmark is the most expensive country in which to have a child in ECEC.

In general in the Nordic countries, preschool starts when a child is between 1 and 2 years of age. Preschool start is earlier in Denmark (Yearbook of Nordic Statistics 2012), while in Finland, due to the child home care allowance, it does not take place until a child turns three. In Sweden, it is also possible to apply for home care allowance, but only 2.5% of parents make use of this and often for only a few months, while they wait for a place at the ECEC they want their child to attend.

In Denmark until 1976, families with specific educational and social needs were prioritized, while the limited numbers of places were distributed. For this reason, in 1978, a new act (Bistandsloven) was established for ECEC places for all children.

Finally, in 1997, the Act on Social Service completed the claim for places and also took a clear educational (learning) perspective. Parents pay 25% of the total cost, which amounts to about 250–500 € (a rather large portion of average family's budget). Yet, parents with more than one child receive a sibling discount, and families with low income can get a place for free.

In Sweden, an Act of Parliament in 2003 gave each child the right to participate in ECEC activities from the age of four, even if their parents were out of work or on maternity leave. The Maximum Fee Reform gives parents the right to have a child in whole-day ECEC for no more than 3% of the family's total income with a maximum fee of 175 €/month, with the remaining cost financed by the state and municipality, and a 'ceiling' was set for the cost of the first, second, third, etc. child per month. The aim of this reform is equality between children and between communities. The age for free ECEC for 15 h per week has now been lowered to 3 years, and there are discussions about lowering this to 2 years.

In Norway in 2009, Parliament gave the individual child the right to have a place in preschool. The parental fee covers 15% of the operating costs in municipal preschool and 18% of the costs in private preschool. An equal public funding for public and private preschools should be achieved within the next few years. At present, the maximum parental fee is 300 € per month. At the municipal level, there will be lower set rates for siblings and free places for children from low-income families. In 2008, the municipality of Oslo experimented with free costs for children with other ethnic backgrounds than Norwegian, and this is still a political demand, as reported by the Norwegian Ministry of Education reported in 2010 (Broström et al. 2010).

In Iceland, ECEC institutions were moved under the Ministry of Education already in 1973, so instead of being part of the nation's social policy, it became part of educational policy. In 1994 the ECEC became by law the first level of schooling in Iceland, although not compulsory or free of charge. Children with special needs are given priority. Parents pay approximately 25% of the actual cost of preschool, and parents with more than one child in preschool pay less.

45.4 Qualifications of Staff in ECEC

Preschool-teacher education in the Nordic countries has been reformed in the past decade. Although there are variations among the countries, all have placed an emphasis on strengthening the education and moving it to a higher level. In Finland today, professional preschool-teacher education is a Bachelor's degree programme at universities or universities of applied sciences. An increasing number of early-education students complete a master's degree, although this is not required, and many preschool directors have a master's degree. In Iceland, the education for preschool teachers has undergone tremendous transformation in the past two decades, moving from a 3-year course of study at a college for preschool teachers to a bachelor's degree programme at a university of education, where it was connected to the

education of other teachers. Finally, it developed into a 5-year master's degree programme at a research university. In Norway, preschool-teacher education entails a 3-year bachelor's degree from a university or university college, but the preschool-teacher education is under reconstruction. A new national curriculum plan for preschool-teacher education was put into practice in 2013, requiring education in specific subject areas.

Reforms to Danish preschool-teacher education, initiated in 1992, created a unified 3.5-year preparation programme for 'social educators' across settings and age groups. The training of staff for preschools and after-school programmes was included in this new programme at colleges for social educators, but with strong borders distinguishing them from elementary school teachers. This combined profession was general in nature and emphasized the development of general educational competence in working with children, youth and adults, as well as people with social and psychological problems and special needs. Since 2006 students can choose to specialize in children and youth and take courses on the pedagogy of preschools. And again in 2014 a more general specialization in the area of 1–5 years children has been decided.

Preschool teachers in Sweden today have three and a half years' university education, with a degree that allows them to work in preschools and in preschool classes for 6-year-olds. Universities are given guidelines to use for their preschool-teacher education programmes. However, individual universities can to a certain extent shape the programme as long as they abide by the primary principles (Einarsdottir 2013).

All staff in Sweden are qualified, more than half of them holding a university degree (3.5 years) and the other having trained as nursery nurses for 2 years at upper secondary/senior high school (Pramling Samuelsson and Sheridan 2004; see also Martin Korp 2006). In Denmark, 61% of the staff have a university degree (3.5 years), and the rest have no specific education in this area. In Norway, only 33% of the staff have a university degree, and in Iceland, the situation is similar. In Finland, a third of the staff has a university degree, while the rest can be social workers or nursery nurses. However, in big cities, there is a lack of educated preschool teachers.

45.5 Development of ECEC Pedagogies in Nordic Countries

When the reasons and rationale behind ECEC in the Nordic countries over the years are analysed, it becomes evident that the rationale behind the very first ECEC centres was to assist parents, who for various reasons could not take sufficient care of their children. The second rationale was the rapid urbanization taking place, which demanded a more protected environment for children. The third rationale, calling for more space in early childhood centres, was the increasing parental employment in the latter part of the twentieth century. Finally, the fourth rationale for increasing early childhood programmes, which became stronger as time passed,

evolved around the children: their education, development and social upbringing (Jónasson 2006).

The ideas behind the first Nordic ECEC reflect the spirit of the times and are in accordance with the knowledge about child development and early childhood education that was available at that time. ECEC were mainly social-welfare institutions emphasizing children's happiness, play and social development through caregiving (Barnavinafélagið Sumargjöf 1976; Lenz Tagguchi and Munkhammar 2003).

The educational ideas were based on traditions dating back to Rousseau, Pestalozzi and Fröbel and the child-psychology theories of the times, which emphasized growth and development evolving from within as a result of children's innate capacities, nurtured by caregivers. Consequently, education in daycare centres/preschools was viewed as activity based. Primarily play and practical-aesthetic activities (e.g. music, dance, drawing and painting) are seen as the important activities, helping children to form their personalities and developing their language, imagination, social and communicative skills. The central ingredient required for a successful preschool, a place where children could develop happily from within, was the establishment of warm, caring, almost familial relationships between adults and children (Einarsdottir 2006; Johansson 2011).

Thus, in the Nordic countries in general, up to the 1980s and 1990s, preschools had a very open educational approach. For instance, the framework in Norway stated that 'children should benefit from preschool and preschool should support and stimulate children's development' (Broström et al. 2010, p. 37). However, at the end of the 1980s and start of 1990s, the Nordic governments realized that early childhood education should also play a more visible educational role. The various reforms of the past few decades have prepared the way for integrating preschool into the educational system and producing a national curriculum for children in age from 1 to 5 (Ministry of Education and Culture, Iceland 2011; Ministry of Education and Science in Sweden 1998; Ministry of Social Affairs in Denmark 2004).

In Norway the first ECEC act was passed in 1975. It stated that preschool should be an educational place in order to ensure children optimal possibilities for activities and development. The act emphasized that preschool should not only be a place for the nurturing of knowledge and intellectual skills but should primarily ensure children's comprehensive development. However, in 1982, the ministerial handbook entitled *Goal-Oriented Work in Preschool* called for more teacher-directed education and an annual educational calendar. At the end of the 1990s, the development of preschool quality was encouraged via financial support of local developmental work/action research. In continuation of this movement, a new ECEC act was passed in 1995, and the first curriculum was drawn up and implemented.

In Denmark, an ECEC commission was launched in 1980, albeit with no political or educational consequences until a Circular on Daycare was decided in 1990 (Ministry of Social Affairs 1990). Yet this still expressed the tradition of a weak governance of preschools: 'Preschools should give space for play and free space combined with planned activities; preschool teachers should create conditions which support children's well-being, development and independence; preschool teachers should listen to children and give them influence balanced with

responsibility'. These very open formulations were braced up a little in a revision of the law in the Act of Social Service from 1998 (Ministry of Social Affairs 1998), in which few paragraphs on educational objectives are visible. Besides statements about the development of social competences, imagination, language, participation and interaction with nature, for the first time the concept of learning was mentioned.

In Finland, municipal preschools have been in existence since 1919, and the first act in this area was passed in 1927. The Child Welfare Act, issued in 1936, provided that local authorities would establish or maintain institutions supporting and complementing upbringing at home. Thus, preschools were brought under the municipal welfare boards. At that time, and until 1973, preschool was conceptually defined in terms of socially oriented daycare. Then, the 1973 Act on Children's Daycare introduced a focus on educational quality and, with further additions, paved the way for the official Finnish view that every child should have the unconditional right to supported growth and learning in preschool (OECD 2000). At the national level, the administration of preschool education and after-school programmes in Finland today falls under the Ministry of Education and Culture, whereas the daycare falls under the Ministry of Social Affairs and Health. There has been a long debate over whether or not the whole early-education system should be under the Ministry of Education and Culture (Utbildningsstyrelsen, 2014, 2016).

In Iceland, preschools became the responsibility of the state and were placed under the auspices of the Ministry of Education in 1973. As a result, the care and education of children prior to compulsory school was no longer viewed as a social policy that targeted poor children in particular. Early childhood programmes, regardless of whether they were full or part time, were now a part of the nation's educational policy. The separate concepts of daycare centres and playschools were used for early childhood education programmes in Iceland until 1991 (Lög um leikskóla nr. 48/1991), but since then, the term playschool has been used for all early-education programmes for children up to 6 years old or prior to the age of compulsory education. In 1994, a law came into force making preschool education the first level of schooling in Iceland, although it was neither compulsory nor free of charge (Lög um leikskóla nr. 78/1994).

In Sweden, in 1972, a government commission presented its report, which had very little connection to the 100-year Fröbel tradition. Instead, it used heavy scientific theories formulated by developmental psychologists Jean Piaget and Erik H. Erikson. The interaction aspect concerned the importance of children interacting with and learning from each other (Williams 2001), but the report also emphasized that adult interaction with children was important. Two aspects can both be related to the concepts of socialization and democracy. Children were now organized in mixed age (also a break with tradition) and with adults who would perform all daily activities in order to create learning through participation. The teacher was no longer someone who 'taught' children, or gave them opportunities to learn specific skills, but rather became a dialogue partner who would respond to individual children's needs and interests. Children were expected to initiate a dialogue on the basis of their interests. In line with this (later labelled dialogue pedagogy (Strömberg-Lind

and Schyl-Bjurman 1976), teachers tried to distance themselves from circle time, which was regarded as involving activities that were too teacher controlled. Language and communication were now both preschool items (content) and file (form). The important thing was to communicate, which led to a focus on a one-to-one relationship between child and the adult. The child as an individual with rights was now emphasized. The individual child's right was strengthened in the law prohibiting corporal punishment in 1979 and the UN Convention on the Rights of the Child 10 years later (United Nations 1989).

One definition of importance for understanding the Nordic early childhood education system and pedagogy is the German term *Didaktik*. The reason for this is that didactics in the English-speaking world are mostly related to instruction, which has a negative value in work with young children, although there are researchers who have tried to introduce didactics in a Nordic and Central European way (see, e.g., Pramling and Pramling Samuelsson 2011). *Didaktik*, as used here, is closely related to the German term *Bildung* (building) – to go beyond education and use knowledge in a wise way. We use *Didaktik* to mark that we do not mean didactics as instruction. This means that *Didaktik* within a Nordic perspective is 'educare' in its broad sense, a development of the whole child and not only the mind. However, *Didaktik* also means that children's meaning-making/mind has to be influenced. Thus, the role of the educator is of importance.

45.6 Guidelines for ECEC

All Nordic countries have national guidelines for ECEC, but they are labelled differently: in Norway they are called a framework plan, in Finland curriculum guidelines, and in Denmark, Iceland and Sweden, curriculum. They range from 5 pages (Denmark) to 40 (Finland). Despite the various labels, a similarity is a perspective of wholeness whereby play, care and learning are integrated, in what is often called 'educare' as a Nordic model. Values of the society of democracy and children's participation are spelled out, as is cooperation with between the parents and school. Social, emotional and cognitive aspects for learning and well-being are also stated, as is the importance of play (Einarsdottir et al. 2015).

In Denmark in 2003, the Ministry of Social Affairs launched a great deal of local developmental work/action research under the project Quality in Preschool, which formed the background for the first national curriculum in 2004. In line with this, in 2004 Parliament passed the Act on Educational Curriculum (Ministry of Social Affairs 2004). This was not a traditional national and centralized curriculum, but rather a requirement on each single preschool to implement six dimensions of aims and content, expressed as general themes: (1) personal competences, (2) social competences, (3) language, (4) body and movement, (5) nature and nature phenomena and (6) cultural forms of expression and values (Ministry of Social Affairs 2004). In an evaluation report in 2008 (Danish Evaluation Institute et al. 2008), preschool leaders and teachers stated that the curriculum implementation had led to

a higher quality in preschool. It also showed that many preschool teachers had not been working sufficiently with formulating goals and objectives, which resulted in a more targeted management, with an implementation of learning indicators which preschool teachers must use and document in so-called quality reports (Ministry of Finance 2009). Furthermore, a language test for 3-year-olds was implemented in 2007. Finally, in 2012 the Ministry of Social Affairs carried out a task force investigating the quality of preschools and in a report drafted a description of best practice in order to improve the quality in preschools.

In Norway the curriculum from 1996, with the heading 'Learning in play and social interaction', states five content dimensions: language and communication; physical activity and health; nature and environment; society, religion and ethics; and aesthetical subjects (Barne-og familiedepartementet 1996). The curriculum communicates that these contents are incorporated and mediated via eight dimensions: creativity, norms, happiness and humour, care, problem-solving, values and attitudes, experience and everyday activities. In 2000 the government launched a major project called 'The Good Preschool', which resulted in a report in 2005. The next quality initiative was the 1997 reform, which called for a strengthening of quality (Kunnskapsløft). Finally, in 2010 preschool was given a new preamble with an update of the aims focusing on a balance between care, play and learning, individual development and the development of community and friendship and with a general emphasis on *Bildung*, democracy and equality (Broström et al. 2010).

In Finland, the local municipal authorities are responsible for preschools, but the Ministry of Culture and Education leads and steers the national development and operating policies. Preschools must adhere to the National Curriculum Guidelines for Early Childhood Education and Care, which feature comprehensive standards for child care environments and activities that address the developmental needs of the whole child – and with more detailed early childhood plans that each municipality must create to implement the national curriculum guidelines. The Act on Children's Daycare came into force in 1973, and since 1990 parents have enjoyed the unconditional right to daycare for children below 3 years of age.

In Iceland, the Ministry of Education and Culture issues regulations and national curriculum guidelines for preschools. These provide details on how the law is to be implemented and define more clearly the role and main objectives of the schools. The first national curriculum guidelines for preschools, called the Educational Plan, were published in 1985. In 1999 a new version was published, renamed the National Curriculum Guidelines (Menntamálaráðuneytið 1999). This document is a policy-setting guideline for pedagogical work in preschools and is intended to constitute a flexible framework. Based on the guidelines, each preschool develops its own educational plan or school-working guide. These guides must include the educational aims of the preschool and demonstrate the manner in which it intends to work towards the educational standards set by the curriculum guidelines. In 2011 a new national curriculum for all school levels was published, the common thread involving six basic areas: literacy, sustainable development, health and well-being, democracy and human rights, equality and creativity. The new preschool curriculum highlights the importance of democracy, well-being and interpersonal relationships

in preschool education. The importance of the learning environment is stressed, and preschool teachers are encouraged to use play in a goal-directed way. Educational areas are integrated and grouped into the following four categories: expression and communication, health and well-being, sustainability and science and creativity and culture. There is an emphasis on cooperation with parents, built on reciprocal understanding and respect, and coordination between school levels and continuity in the children's learning is stressed. Assessment should focus on children's learning and well-being and should include the involvement of parents, children and staff. Each preschool is to compile its own guidelines based on the national curriculum (Mennta- og menningarmálaráðuneytið 2011).

In 1996 Swedish ECEC became part of the educational system when it was incorporated under the Ministry of Education. Two years later, the first national curriculum was launched. The Swedish curriculum states society's intentions with preschool, its values and how to view people. This is expressed as follows: 'inviolability of human life, individual freedom and integrity, the equal worth of all, gender equality, and solidarity with the weak and vulnerable are all values that the school should keep alive in its work with children' (Skolverket 2010 p. 4). This highlights the care, norms and attitudes regarding children. Understanding and compassion, as well as objectivity and comprehensiveness, are highlighted. The preschool mission is formulated as fun, safe and educational and should thus provide a basis for lifelong learning. Children should have the opportunity to communicate, create knowledge, interact and fantasize and express themselves in many different ways. 'Language and learning are inextricably linked, as are language and identity development' (p. 5). One should introduce children to multimedia and environmental issues, and the work with children should be based on play- and theme-oriented work. The objectives projected for children's development and learning involve norms and values, areas for children to develop and learn and children's influence. After the goals to strive for, the document sets out guidelines for how staff in preschool is to proceed in order to aid children's learning and development. The working team's mission is emphasized. A few years later, a more comprehensive review of the curriculum for preschool was done (The Swedish National Agency for Education 2011). The Swedish Education Act (2010:800), its mission formulated by the government, wrote that 'preschool shall be more educational'. This meant not only that preschool was to be more knowledge-oriented, but also that the curriculum had been expanded by four pages of text focusing on early math, language and communication and technology and science, which can easily be related to school subjects. Targeting children's attention towards and interest in language and communication does not mean that children should start writing letters, but rather that they will be supported in discovering symbols, creating a story, learning to argue and so on (see The Swedish National Agency for Education 2011). Another major change is that the concepts of documentation, evaluation and development are projected as three related phenomena in preschool. It is pointed out that it is not the child but rather the quality of the preschool that is to be evaluated.

45.7 What Does Research Tell Us About What the Everyday Reality Looks Like for Children in Nordic ECEC?

What we primarily want to highlight is that it is the intention – to give all children equal opportunities in preschool – and the reality look different. Segregation is also visible in preschool, where there are varying quality levels that give children different opportunities for learning and development. A Swedish study by Sheridan et al. (2009) found that, out of 38 surveyed preschools, 9 had high quality, 19 moderate quality and 10 poor quality. Children reached different stages of emergent mathematical understanding as well as communication and language skills even before they were 3 years old, depending on the quality of the preschool they attended. Several international studies show that it is quality that determines how much children benefit from attending in preschool (Siraj-Blatchford and Mayo 2012; Sylva et al. 2004).

In all the Nordic countries, language is also most often focussed on in the individual plan drawn up for each child and in diagnoses and evaluations, used in increasingly more settings. It also stands out as an area of support for children's problems. This trend is similar to that in other countries (OECD 2006). One question worth asking is if the Nordic countries are changing their ECEC from a wholeness and a social-pedagogical approach towards a more traditional academic curriculum. In Sweden, it has been shown that ECEC staff had problems working in a goal-directed manner without making the goals to goals to reach for the children, which was not the intention. It has also been shown that staff does not necessarily understand what a relational perspective on learning means (Johansson and Pramling Samuelsson 2003). A similar tendency is seen in Danish preschools. Until a few years ago, preschool teachers were not trained to work with a curriculum-based approach. As a result, teachers in ECEC struggle, both with the content and with this way of working with children. It has also been shown that preschools do not give children equal learning opportunities, which is one of the missions of the new Nordic preschool (Jensen 2005).

We know that quality is related to teachers' skills, group size, the environment, who the children are and the ways in which teachers work purposefully and meet each child in his/her world (Hansen 2013). And today municipalities vary considerably in terms of the number of trained preschool teachers in each group of children (this number actually varies from 0 to 3) and the number of children in each group – two factors that undoubtedly play a major role in the everyday experiences of children in preschool. For example, the Swedish National Agency for Education has reported that class sizes can vary between 11 children in a small community in northern Sweden and 23 in a community in the south. Many preschool teachers describe difficulties working based on the intentions of the preschool curriculum, depending on the number of children in the group. Studies show that preschool teachers like to work with children in large groups, but research tells us that children learn better in small groups with fewer teachers than in larger groups with more teachers (Asplund Carlsson et al. 2001; Hansen 2013). The size of child groups in

preschool is also an issue often debated by parents and politicians (Pramling Samuelsson et al. 2014). Studies also show that children learn more in small groups (Asplund Carlsson et al. 2001).

We also know that the preschool teachers' focus and goal-oriented work have an effect on children's learning, as stated earlier (Johansson and Sandberg 2010; Sylva et al. 2010), but there are also some differences. This is expressed in a comparison between Danish and Swedish preschool teachers' view on children's learning (Broström et al. 2013). The results show that from the teacher's perspectives, children's learning is connected to their social interaction and development, in which the children's own initiatives are crucial. Learning, to a great extent, results from children's active involvement. However, some differences are present. In Sweden, preschool teachers tend to consider the adult's role in children's learning very important. Swedish preschool teachers place greater emphasis on vertical relationships, as well as the importance of the child-adult relationship, than do their Danish counterparts. Danish preschool teachers focus more on horizontal relationships, i.e. the relationships between children. 'Vertical relationships' (Hartup 1989) are those in which one party has more power, knowledge and responsibility than the other. In horizontal relationships, the parties are more or less equal in terms of power, knowledge and responsibility. This opens for discussion and reflection on the preschool teacher's role.

Children live in families of 'different quality' where some children's needs and rights are met while others are not. Not all preschools can meet these challenges, due to lack of knowledge or a stressful environment with few teachers and many children (Jensen 2005). Nevertheless, it cannot be mistaken that most children love their preschool and their friends, and the emergence of joy is obvious when little Charlie comes in the morning and gets to see his friends (Løkken 2006). In addition, new Danish research involving socially marginalized children shows a positive effect on children's learning in an intervention programme whereby preschool teachers are guided to support the inclusion of children (Jensen et al. 2009).

The way learning is organized into preschools and school is deeply rooted in a process of social-historical change. In the Nordic countries today, one can distinguish two functions that are critical when it comes to understanding these changes: (1) the fact that children growing up today are socialized from an early age, in an ecology where digital tools and media are ever present and taken for granted as natural parts of life (e.g. Linderoth 2004), and (2) there is an increased emphasis on learning and teaching in preschool, for example, as reflected in the revised curriculum for ECEC in Sweden and in the Norwegian framework plan for preschools (Rammeplan for barnehagen) as well as other countries' curricula. This emphasis on learning, and the fact that kindergarten is a targeted activity, involves the need to develop what can be termed a '*Didaktik* for young children' (Broström and Vejleskov 2009).

A Nordic or European perspective on *Didaktik* takes its point of departure in the fact that the word didactics comes from the Greek words *didaskein* (meaning pointing at, demonstrating) and *technes, ikk* (skill, art or expertise) (Hopmann 2007; Nordkvelle 2003). This leads to the claim that didactics can be explained by 'the art

of pointing something out to someone' (Doverborg et al. 2013 p. 7). This is what preschool didactics is all about, making children aware of something, getting them interested in something – helping children to make sense of the world and create meaning. This happens in communication and interaction with and around various experiences and concrete situations. This can be seen as a more learning-cultivated approach, without becoming an academic preschool approach (see further Pramling and Pramling Samuelsson 2011). However, when the concept of *Bildung* is integrated, it is possible to maintain the Nordic preschool tradition and to incorporate a critical dimension, as we see, for example, in the revision of the Finnish curriculum and as described in the Danish preschool debate (Broström 2012).

Most Nordic municipalities have conducted in-service training to promote teachers' understanding of the curriculum. The first evaluation in Sweden, Preschool in a time of change, a follow-up of the curriculum by Skolverket (2004), shows that the focus on in-service training has largely been on documentation and parent cooperation, issues that are equally emphasized in both preschool and primary school. It also shows a very positive attitude towards the curriculum.

45.8 Future Development and Challenges

ECEC institutions are labelled differently in the various Nordic countries. This could be a coincidence or a matter of language, or it might mean that politically there are different ideas about what education for the youngest age groups means in the countries. On the one hand, this period of life could be seen as related to family life, that is, parents; or on the other hand, it could be viewed as involving the child him- or herself. There could still be a dichotomy between parents' (mothers') need for care for their children and the children's own needs. Do we have ECEC to give mothers the possibility to work, or is it 'better' for the child to have an ECEC where all their friends are? When we focus on care, people often think of ECEC as a replacement for parents, linked to when children can only participate during the hours their parents work and not when they have a day off. On the other hand, when we talk about education and socialization, we think about what is best for the child, as ECEC as each child's right. Although virtually all children attend ECEC in the Nordic countries from their early years, these kinds of values abound in the debate now and then and may be behind the different names of ECEC in the different countries. At the same time, it is stated in the various frameworks that care and learning are two sides of the same coin when it comes to young children, and officially ECEC has a double function: as a complement to the family and as a right of the child.

It is difficult to speculate about the future of ECEC in the Nordic countries, but one can discern different scenarios from different points of view. ECEC has a long and strong tradition and position in the Nordic countries. Society and families depend on having a high-quality ECEC, and it is highly important not least as an aspect of gender equality (Björnberg 2002). Moreover, the governments in all the

Nordic countries have realized that early childhood education and care have a crucial influence on children's future educational possibilities. Nevertheless, there can be a discrepancy between political rhetoric and practice.

Then there is the question of how the pedagogy and curricula will change. In four of five Nordic countries, the ECEC system is under the Ministry of Education or equivalent. Kagan et al. (2010) did a study on ECEC in European countries, comparing how preschool was organized, and found benefits to having ECEC under the same ministry that presided over school education. However, this trend can be regarded as a move towards a more content- and goal-driven ECEC, that is, towards a more learning-oriented approach whereby the school subjects' emergence is emphasized as content. At the same time, the intention is to keep the emphasis on play and thematic work in the early years while integrating these content areas.

Meanwhile, there is a strong emphasis on children's participation and their right to be involved in decisions concerning their own everyday life. This can be seen as linked to the vision of the competent child, who has skills and is able to do a great many things early in life if the adults around him/her simply provide the right opportunities and conditions (James and Prout 1990; Sommer 2012). This perspective can be related to both human rights and the UN Convention on the Rights of the Child (United Nations 1989), whereby adults have to both take responsibility for what is the best for each child and listen to them. Children's own voices have to come through.

The challenges for the future in ECEC in the Nordic countries are to keep a holistic perspective on children's learning and development and not fall into a narrow knowledge-oriented approach and to develop a new preschool *Didaktik* in which interaction and communication are the key issues. This demands discussion about the child as the initiative-taker for all content. There needs to be a negotiation and interaction between child and educator; the idea comes from either the teacher or the child (Doverborg et al. 2013; Pramling Samuelsson and Asplund Carlsson 2014). It is in the discourse of communication and negotiation between teacher and child that the education and well-being of the child are formulated.

References

Asplund Carlsson, M., Pramling Samuelsson, I., & Kärrby G. (2001). *Strukturella faktorer och pedagogisk kvalitet i barnomsorg och skola – kunskapsöversikt* [Structural factors and pedagogical quality within child care and school]. Stockholm: Skolverkets monografiserie.

Barne-og familiedepartementet (1996). Rammeplan for Barnehagen (1996). Oslo. http://www.regjeringen.no/nb/dokumentarkiv/regjeringen-brundtland-iii/bfd/Veiledninger-og-brosjyrer/1995/Rammeplan-for-barnehagen---kortversjon-f.html?id=87388.

Björnberg, U. (2002). Ideology and choice between work and care: Swedish family policy for working parents. *Critical Social Policy, 22*, 33–52.

Broström, S. (2006). Care and education: towards a new paradigm in early childhood education. *Child & Youth Care Forum, 35*(5–6), 391–409.

Broström, S. (2012). Curriculum in preschool. Adjustment or a possible liberation? *Nord Barnehageforskning, 5*(7), 1–14 Retrieved from http://www.nordiskbarnehageforskning.no/.

Broström, S., & Vejleskov, H.. (2009). *Didaktik i børnehaven: Planer, principper og praksis* [Didaktik in preschool: Plans, principles and practice]. Frederikshavn: Dafolo Forlag.

Broström, S., Brenna, L. J., Bjerkestrand, M., Fagerli, B., Hernes, I., Hornslien, Ø., Mogstad, M., Moser, T., Ogden, T., & Tørresdal, B.. (2010). *Med forskertrang og lekelyst. Systematisk pedagogisk tilbud til alle førskolebarn*. [Strive for research and desire to play. Systematic offer to all preschool children]. NOU, Norges offentlige udredninger 2010:8. Oslo: Kunnskapsdepartementet.

Broström, S., Frøkjær, T., Johansson, I., Sandberg, A. (2014). Preschool teacher's view on learning in preschool in Sweden and Denmark. *European Early Childhood Educational Research Journal, 22*(5), 590–603.

Danish Evaluation Institute et al. (2008). *Evaluering af loven om pædagogiske læreplaner* [Evaluation of act on preschool curriculum]. Copenhagen: Familie og forbrugerministeriet.

Doverborg, E., Pramling, N., Pramling Samuelson, I. (2013). *Att undervisa barn i förskolan* [Teaching children in preschool]. Stockholm: Liber.

Einarsdottir, J. (2006). Between two continents, between two traditions: Education and care in Icelandic preschools. In J. Einarsdottir & J. Wagner (Eds.), *Nordic childhoods and early education: Philosophy, research, policy, and practice in Denmark, Finland, Iceland, Norway, and Sweden* (pp. 159–182). Information Age: Greenwich.

Einarsdottir, J. (2013). Editorial: Early childhood education in the Nordic countries. *European Early Childhood Education Research Journal, 21*(3), 307–310.

Einarsdottir, J., Puroila, A-M., Broström, S., Emilson, A., & Johansson, E. (2015). Democracy, caring and competence: Values perspectives in ECEC curricula in the Nordic countries. *International Journal of Early Years Education, 23*(1), 94–114.

Eurochild. (2011). *Policy position. Eurochild's recommendations for EU action on early childhood education*. Retrieved from http://www.epha.org/spip.php?article4411

Eydal, G. B., & Kröger, T. (2009). Nordic family policies: Constructing contexts for social work. In T. Kröger & H. Forsberg (Eds.), *Social work and child welfare politics. Through Nordic lenses* (pp. 11–28). Boston: Policy Press.

Hansen, O. H. (2013). *Stemmer i fællesskabet* [Voices in the community] (PhD thesis). Copenhagen: Aarhus Universitet.

Hartup, W. W. (1989). Social relationships and their developmental significance. *American Psychologist, 44*(2), 120–126.

Hopmann, S. (2007). Restrained teaching: The common core of Didaktik. *European Educational Research Journal, 6*(2), 109–124.

James, A., & Prout, A. (1990). *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood*. London: Falmer.

Jensen, B. (2005). *Kan daginstitutioner gøre en forskel? En undersøgelse af daginstitutioner og social arv* [Do preschools matter? An investigation on social inheritance]. København: Socialforskningsinstituttet.

Jensen, B., Holm, A., Allerup, P., & Kragh, A.. (2009). *Effekter af indsatser for socialt udsatte børn i daginstitutioner: HPA-projektet*. [Impact of work for marginalized children in preschools: The HPA project]. Copenhagen: Danmarks Pædagogiske Universitetsforlag.

Johansson, E., & Pramling Samuelsson I. (Eds.). (2003). Barns perspektiv och barnperspektiv. Temanummer av Pedagogisk Forskning i Sverige, 1–2. Malmö: Lund Universitet.

Johansson, E. (2011). *Möten för lärande. Pedagogisk verksamhet för de yngsta*. [Meeting for learning. Pedagogical activities for the youngest]. Stockholm: Skolverket.

Johansson, I., & Sandberg, A. (2010). Learning and participation – two interrelated key-concepts in the preschool. *European Early Childhood Education Research Journal, 18*(2), 229–242.

Jónasson J. T. (2006). *Frá gæslu til skóla: Um þróun leikskóla á Íslandi* [From keeping to schooling: Evolution of preschools in Iceland]. Reykjavík: Rannsóknarstofa um menntakerfi. Félagsvísindastofnun Háskóla Íslands.

Kagan, Y., Pence, A., & Moss, P. (2010). *Cross-cultural perspectives on early childhood*. London: Sage.

Kindergarten Act – Act no. 64 of June (2005) relating to Kindergartens. Department of Education and Research, Norway. http://www.regjeringen.no/nb/dok/lover_regler/lover/barnehageloven.html?id=115281

Klinth R, Johansson T. (2010). *Nya svenska fäder* [New Swedish fathers]. Umeå: Boréa.

Lenz Taguchi, H., & Munkammar, I. (2003). *Consolidating governmental early childhood education and care services under the Ministry of Education and Science: A Swedish case study*. Paris: UNESCO.

Lien Foundation. (2012). *Starting well. Benchmarking early education across the world.* A report from the Economist Intelligence Unit. Taikoo Shing Hong Kong.

Linderoth, J. (2004). *Datorspelandets mening. Bortom idén om den interaktiva illusionen* [The meaning of computer playing. Beyond the idea of the interactive illusion]. Gothenburg: Acta Universitatis Gothoburgensis.

Lög um leikskóla, nr. 48/1991. [The Preschool Act, No. 48/1991].

Lög um leikskóla, nr. 78/1994. [The Preschool Act, No. 78/1994].

Lög um menntun og ráðningu kennara og skólastjórnenda við leikskóla, grunnskóla og framhaldsskóla nr. 87/2008 [Law on education and employment of teachers and directors of preschools, compulsory school and upper-secondary school no. 87/2008].

Løkken, G. (2006). *Småbarnspedagogik. Fenomenologiska och estetiska förhållningssätt*. Lund: Studentlitteratur.

Martin Korpi, B. (2006). *Förskolan i politiken – om intentioner och beslut bakom den svenska förskolan* [Preschool in policy – about intentions and decisions behind the Swedish preschool]. Stockholm: Utbildningsdepartementet.

Mennta-og menningarmálaráðuneytið. (2011). *Aðalnámskrá leikskóla* [National curriculum for preschools]. http://www.menntamalaraduneyti.is/utgefid-efni/namskrar/nr/3952. Reykjavík: höfundur.

Menntamálaráðuneytið. (1999). *Aðalnámskrá leikskóla*. [National curriculum for preschools]. Retrieved from http://bella.stjr.is/utgafur/leikskensk.pdf

Ministry of Education and Culture. (2011). *National curriculum guidelines for preschools*. Reykjavík: Author.

Ministry of Education and Science in Sweden. (1998). *Curriculum for preschool 1–5 years*. Stockholm: Fritzes.

Ministry of Finance. (2009). *Om projekt Faglige Kvalitetsoplysninger på dagtilbudsområdet* [On the project Quality Information in the Daycare Sector]. Copenhagen: Author.

Ministry of Social Affairs (1990). Daginstitutionscirkulæret. [Circular on day care]. Copenhagen: Author.

Ministry of Social Affairs. (1998). Lov om social Service. [Act of Social Service]. Copenhagen: Author.

Ministry of Social Affairs. (2004). Lov om pædagogiske læreplaner. [Act on educational curriculum]. Copenhagen: Author.

Myrdal, A., Myrdal, G. (1934). *Kris i befolkningsfrågan* [Crisis in the population question]. Stockholm: Bonniers.

Nordkvelle, Y. T. (2003). Didactics: From classic rhetoric to kitchen-Latin. *Pedagogy, Culture & Society, 11*(3), 315–330.

Ødegaard, E. E. (2013). *No kommer en ny rammeplan!* [Now comes a new framework plan]. Retrieved from http://www.barnehage.no/no/Nyheter/2013/Juni/Na-kommer-ny-rammeplan

OECD. (2000). *Early childhood education and care policy in Finland*. Background report prepared for the OECD. Thematic Review of Early Childhood Education and Care Policy. Paris: Author.

OECD. (2006). *Starting strong 2. Early childhood education and care. Education and skills*. Paris: Author.

OECD. (2009). *Doing better for children*. Paris: Author.

Pramling, N., & Pramling Samuelsson, I. (Eds.). (2011). *Educational encounters: Nordic studies in early childhood didactics*. Dordrecht: Springer.

Pramling Samuelsson, I., & Asplund Carlsson, M. (2014). *Det lekande lärande barnet i en utvecklingspedagogisk teori* [The playing learning child in a developmental theory]. Stockholm: Liber.

Pramling Samuelsson, I., & Sheridan, S. (2004). Recent issues in the Swedish preschool. *International Journal of Early Childhood, 36*(1), 7–22.

Pramling Samuelsson, I., Sheridan, S., Williams, P., & Nasiopoulou, P. (2014). Stora barngrupper i förskolan – i ett mediaperspektiv. [Large children's groups in preschool from a media perspective]. In A. Harju, J. Balldin, P. Lilja, & J. Dahlbeck (Eds.), *Om förskolan och de yngre barnen – nutida och historiska nedslag* (pp. 101–114). Lund: Studentlitteratur.

Schnack, K. (2003). Action competence as an educational ideal. In D. Trueit, W. E. Doll, H. Wang, & W. F. Pinar (Eds.), *The internationalization of curriculum studies* (pp. 271–291). New York: Peter Lang Publishing.

Schyl-Bjurman G, Strömstedt-Lind K. (1976). *Dialogpedagogik* [Dialouge pedagogy]. Lund: Studentlitteratur.

Sheridan, S., Pramling Samuelsson, I, & E. Johanssson. (Eds.). (2009). *Barns tidiga lärande. En tvärsnittstudie av förskolan som miljö för barns lärande* [Children's early learning]. Gothenburg: Acta Universitatis Gothoburgensis.

Siraj-Blatchford, I. (2007). Creativity, communication and collaboration: The identification of pedagogical progression in sustained shared thinking. *Asia-Pacific Journal of Research in Early Childhood Education, 1*(2), 3–23.

Siraj-Blatchford, I., & Mayo, A. (2012). *Major work international reader: Early childhood education*. London: Sage.

Skolinspektionen. (2012). *Förskola, före skola – lärande och bärnade. Kvailitesgranskningsrapport om förskolans arbete med det förstärkta pedagogiska uppdraget* [Preschool before school – learning and carrying]. Stockholm. Author: Swedish Education Act, No. 2010:800.

Skolverket, S. (2010). *Curriculum for the pre-school Lpfö 98*. Stockholm: Fritzes.

Skolverket. (2004). *Förskola i brytningstid: Nationell utvärdering av förskolan*. [Preschool in a time of change]. (239). Stockholm: Fritzes.

Sommer, D. (2012). *A childhood psychology. Young children in changing times*. London: Palgrave MacMillan.

Sommer, D., Pramling Samuelsson, I., & Hundeide, K. (2010). *Child perspectives and children's perspectives in theory and practice*. Dordrecht: Springer.

STAKES. (2004). *National curriculum guidelines on early childhood education and care in Finland*. Helsinki: National Institute for Health and Welfare.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2004). *The effective preschool education (EPPE) project: Final report. A longitudinal study funded by the DfES 1997–2004*. Nottingham: DfES Publications.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2010). *Early childhood matters*. London: Routledge.

Tallberg Broman I, Pramling Samuelsson, I. (2013). Introduktion. I I. Pramling Samuelsson & I. Tallberg Broman (red.), *Barndom, lärande och ämnesdidaktik* [Childhood, learning and didactics]. (pp. 23–41). Lund: Studentlitteratur.Swedish Educational Act (2010). Curriculum for the Preschool Lpfö 98 Revised 2010. Stockholm: Skolverket.

Swedish Educational Act. (2010). *Curriculum for the Preschool Lpfö 98 Revised 2010*. Stockholm: Skolverket.

The Swedish National Agency for Education. (2011). Curriculum for preschool, 1 to 5 years, revised 2010. Stockholm: Author.

Tjänstemännens Centralorganisation. (2012). *Pappaindex 2011, Avdelningen för samhällspolitik och analys*. Retrieved from http://www.tco.se/Templates/Page1____238.aspx?DataID=12481

UNICEF. (2008). *The child care transition. A league table of early childhood education and care in economically advanced countries*. Florence: Innocenti Research Centre Report Card 8.

United Nations (1989). UN Convention of the Right of the Child. Retrieved from http://www.unicef.org/crc/

Utbildningsstyrelsen. (2014). Grunderna för Förskolans läroplan 2014. *Föreskrifter och anvisningar*. Tammerfors: Juvenes Print.

Utbildningsstyrelsen. (2016). *Grunderna för planer för småbarnspedagogik. Föreskrifter och anvisningar*. Tammerfors: Juvenes Print.

Vittachi, A. (1989). *Stolen childhood*. Cambridge: Polity Press.

Williams, P. (2001). *Barn lär av varandra. Samlärande i förskola och skola*. [Children learn from each other]. Göteborg: Acta Universitatis Gothoburgensis.

Yearbook of Nordic Statistics. 2012. Copenhagen: Nordic Council of Ministers, 2012:001.

Chapter 46
Outdoor Education in the Nordic Region

Ellen Beate Hansen Sandseter and Olav Bjarne Lysklett

Abstract The aim of this chapter is to give an insight into outdoor education in the Nordic region. Some important factors that form the base of the Nordic view of nature as an arena for outdoor education are discussed. The curricula of the different Nordic countries early childhood education and care (ECEC) institutions are shortly presented, and outdoor play in the curricula is highlighted. Nordic ECEC practitioners often look upon nature as an important place for play and learning, and children in Nordic ECEC settings normally spend a large part of their day outdoors. Nature preschools are those who spend most of their time in nature, and some of their characteristics and routines are described. Current research and future research needs are presented in the end of the chapter. The authors are both Norwegian, and even though there are many similarities between the Nordic countries, our view will be based on our Norwegian thoughts and ideas. In that way some of our examples might not be representable for all the Nordic countries.

Keywords Early childhood education • Outdoor play • Physical environment • Nature preschools • Outdoor education research

46.1 Background

The labor force of the Nordic countries is characterized by a high rate of female labor-force participation; it is further defined by the fact that 30% of laborers work in the public sector. Universal day care for children makes it possible for both parents to work full time (Economist 2013). Most of the labor force has a 5-week mandatory vacation and a 7.5-h work day. This results in significant leisure time.

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Combined with a high living standard and a view of nature as an arena for recreation and well-being, most people in the Nordic countries spend an extensive amount of their spare time outdoors. Historically, fishing, hunting, and gathering berries and mushrooms were part of daily life for Nordic rural families. Since the seventeenth century, the use of nature has evolved from mainly supporting families with food and materials to serving economic, leisure, social, and inspirational functions (Hytonen 1995 in Borge et al. 2003). Only centuries later, due to an increased living standard, people in most of the Nordic countries (except Iceland) started to think of old forest activities as recreation and of forests as natural lands for joy and harmony. Since the end of the nineteenth century, a small upper class spent their summer holidays in cabins, cottages, and summerhouses. There, families practiced simple activities such as cutting wood, building fires, and cooking in old-fashioned ways (Borge et al. 2003). After the Second World War, economic growth, regulated working hours, and increased leisure time made nature accessible for recreational purposes to the middle and working classes. In most of the Nordic societies, outdoor life and recreation is an important part of the national cultural heritage. Across generations, the tradition of visiting nature areas and hiking in the mountains or forest areas has been kept as a natural part of daily life (Borge et al. 2003; Ejbye-Ernst 2012; Ärlemalm-Hagsér 2008; Aasen et al. 2009). This cultural heritage is also integrated into the education system as part of the basis on which the content and practices of early childhood education and care (ECEC) institutions are formed.

46.2 The Law of Common Access to Nature Areas

A law providing common access to nature areas in the Nordic countries (FME 1996, IMENR 1999; NME 1957; SME 1998) enables activities, hikes, and recreation in nature for all, included in the ECEC settings. Iceland was first among the Nordic countries to establish this law in 1956. Finland, Sweden, and Norway have a similar law, while Denmark has the similar Nature Protection Act (DME 2009). These laws give people free access to uncultivated land and the right to walk and stay in privately owned nature areas, such as woodland, mountain areas, by the seashore, by rivers, etc.

In defining the scope of access rights, Norway's Outdoor Recreation Act distinguishes between uncultivated land and cultivated land. Cultivated land includes tilled fields, meadows, and pastures, but it also means private plots around houses and holiday cabins, farmyards, plantations, and other areas where public access could cause damage or be a nuisance for the owner or user. Uncultivated land includes all areas that are not farmed or otherwise classified as cultivated land. In practice, this means most beaches and rocky shorelines, lakes, bogs, heaths, forest, and mountain areas throughout Norway.

Due to the law of common access to nature, ECEC institutions are free to make small trips in the forest and the natural surroundings around the institution. The freedom to take hikes and trips in nature whenever they want allows the Nordic

ECEC institutions to use nature as much as they do. In those cases where the institutions often visit a specific area, they should be in contact with the owner to make an agreement about the use.

46.3 Nordic Climate

The Nordic countries lie in the north tempered and the polar zones. Denmark and the southern part of Norway, Sweden, and Finland are in the north tempered zone, and Iceland and the northern parts of Norway, Sweden, and Finland are in the polar zone. The climate varies a lot during the different seasons, and there are also major geographical variations. For example, the coastal lowlands of Iceland have average January temperatures of about 0 °C (32 °F), while the highlands of central Iceland generally stay below −10 °C (14 °F). In Norway, the coastal regions have mild winters, while further inland winter is much colder. The average January temperature in Norway is somewhere between −6 °C (21 °F) and 3 °C (37 °F). Northern parts of Sweden and Finland have summer temperatures in the 8 °C (46 °F) to 16 °C (61 °F) range, while further south, the temperature is closer to 13 °C (55 °F) and 22 °C (72 °F). During midwinter, Denmark and the southern areas of Norway, Sweden, and Finland get only 5–6 h of sunlight a day, while the north gets little to no sunlight. In June and July, there is almost no darkness in the northern part of Norway, Sweden, and Finland, and this is called midnight sun. The daily and seasonal pedagogical activity in Nordic ECEC institutions is both based on and influenced by these variations in climate and sunlight.

46.4 Political Aims of Nordic ECEC

The Nordic ECEC policy is based on the values of equality and democracy, and it emphasizes children's overall development and personal formation as a vital focus for the work of ECEC institutions. Each Nordic country has a law for ECEC (DMSI 2011; FMSAH 1973; IMESC 2008; NMER 2005; SMES 1985) that places it within the wider educational system and as a part of lifelong learning. Each country's law is somewhat different, but they all focus on facilitating children's well-being, health, development, and learning as the main aims of the ECEC provision.

46.5 Nordic ECEC Curricula

Based on the ECEC laws, each Nordic country has an ECEC curriculum that describes the content and tasks of the ECEC institutions. Similar to the Nordic curricula, the work in ECEC shall be based on values such as children's participation,

democracy, human (and children's) rights, play, social relations, respect for nature, sustainability, and individual needs (DP 2004; IMESC 2011; NMER 2006/2011; SMES 2010; STAKES 2003). Children's well-being in ECEC in the Nordic countries is closely related to children's right to participation and is based on democratic values (Borge et al. 2003; Einarsdottir 2010; FMSAH 2004; Nilsen 2008; Sandberg and Ärlemalm-Hagsér 2011; UNESCO-IBE 2010/2011; Aasen et al. 2009). In practice this means that children are to be viewed as active meaning makers in their own lives. Therefore, children in Nordic ECEC institutions shall have the right to express their views on the day-to-day activities of the setting. They shall also regularly be given the opportunity to take active part in planning and assessing the activities of the setting. In the Norwegian curriculum, this is stated as "children's views shall be given due weight according to their age and maturity" (NMER 2006/2011, p. 8), and in the Finnish curriculum, "Giving due weight to the views of the child" is one of the overall principles of ECEC. Further, the curriculum states that "…children feel that they are appreciated and accepted as they are, and that they are heard and seen" (STAKES 2003, p. 13 and 15). In practice this also means that children shall have a large degree of freedom in terms of choosing their activities and where they spend their time.

46.6 Play and Learning in ECEC

In the Nordic ECEC curricula, there is a strong emphasis on children's right to play and the necessity of giving children the opportunity for free play and self-initiated exploration. This policy is based on the notion that play and learning are closely connected and that play is children's primary approach to learning. According to the curricula, the professional approach to children's learning in ECEC practice should therefore be through play (Sandberg and Ärlemalm-Hagsér 2011; Aasen et al. 2009). In this view play has an intrinsic value and is part of a child's culture. Play is regarded as a phenomenon with instrumental value and as a means for learning and developing a complex set of skills involving both expressions and impressions. Socially, play serves an opportunity for developing social competence and gaining knowledge and insight in many areas (NMER 2006/2011). Generally, play as a phenomenon is looked upon as a way of learning in the different knowledge areas/orientations that are outlined in the curricula, such as physical activity, linguistics and language, mathematics, social skills, and nature and sustainability, among others. Even though the Nordic ECEC curricula speak about learning in several knowledge areas, the Nordic ECEC model is known for not having specific learning goals/outcomes that ECEC settings needs to measure. Rather, the descriptions of what children shall learn in ECEC are formulated as broad aims focusing on more general development, understanding, and attitudes, e.g., from the Swedish curriculum (SMES 2010, p. 10): "The pre-school should try to ensure that children develop their motor skills, ability to co-ordinate, awareness of their own body, as well as an understanding of the importance of maintaining their own health and well-being."

ECEC settings or local ECEC owners may develop more specific curricula or aims for their practice, but at a national level the learning and development goals are more general. This also applies for the outdoor play that is integrated as a means of learning in all the different knowledge areas.

46.7 Outdoor Play

Play and activities outdoors on playgrounds or in nature environments are a common part of daily life and pedagogical practice for most ECEC settings in the Nordic countries. As such, the Nordic countries in general have a tradition of giving children the freedom and opportunity to play and be active in diverse outdoor environments (Mårtensson 2010). This is also reflected in the ECEC curricula of the Nordic countries, where outdoor play and experiences in nature environments are emphasized as vital for children's well-being, development, and learning. The Icelandic preschool curriculum (IMESC 2011, p. 34) states: "At preschool children should have an opportunity for varied forms of movement and outdoor activities." The Finnish curriculum (STAKES 2003, p. 21) especially focuses on the importance of the outdoors for children's physical active play: "Children should […] be allowed to use the playground equipment in their spontaneous physical activity and play. Natural areas and sport facilities in the neighbourhood should be utilised."

In the Norwegian curriculum (NMER 2006/2011, p. 16), outdoor play is particularly emphasized: "Outdoor play and activities are important parts of the child culture and that must be retained regardless of the geography and climatic conditions." Similarly, the Swedish curriculum states that "Outdoor life should give [children] opportunities for play and activities both in designed environments and in natural environments…[and that]…ECEC institutions shall have a strong emphasis on environmental questions and sustainability of nature" (SMES 2010). In the Danish curriculum (the handbook) (Kjær and Olesen 2005), this is also very much emphasized by the statement that "Children in ECEC institutions shall have the opportunity to experience the joy of spending time in nature in different seasons and they shall develop a respect for nature and environment."

In the Nordic countries, the time spent outdoors in ECEC is primarily a time for children's free play; they can make their own choices of what to play, with whom, and where (Bratterud et al. 2012; IMESC 2011; Aasen et al. 2009). In fact, a recent Norwegian study found that children's opportunities to participate and have an influence on their daily life in ECEC were significantly higher outdoors than indoors (Bratterud et al. 2012). Indoor time is more often filled with adult-organized and adult-structured activities than outdoor time where activities are more often based on children's own initiative and curiosity. Still, outdoor activities in the Nordic countries are seen as a means of fulfilling the aims of children's development and learning in the ECEC curricula. Outdoor play has a long tradition in Nordic childcare. The Lyseth committee that made the first public report addressing Norwegian childcare in 1961 stated that children should not play indoors for more than 2 h at

time. This emphasis on outdoor play is a statement that symbolizes the Norwegian childcare tradition, with its great focus on outdoor play in different seasons (Korsvold 1997, s 95).

46.8 Organizational and Practical Implications

Due to the seasonal variation in climate, children need to have clothes that are suitable for varying conditions. Proper clothes and boots for rain, snow, and cold and hot weather are needed. It is required that parents clothe children according to the variable conditions. The staff inform parents if the children miss something or if some gear or clothes are ruined and need to be changed or repaired (Lysklett 2013).

The ECECs have different gear for outdoor use, i.e., tricycles, balls, small shovels, and buckets. During wintertime, children use sliding boards or mattresses to slide down small hills. In some institutions, they also use skis and skates. Normally the children use their own skis and skates, but a few institutions buy skis and skates to lend the children.

Food is normally served in all the ECECs in the Nordic countries. Iceland, Sweden, and Finland have long traditions of serving a hot meal for lunch. In Norway and Denmark, it is more common to bring a food box containing food that is eaten for lunch. Fruit is normally served each day in all ECECs. Meals are an important routine in the ECECs and make the frame of the day. Depending on whether the food is eaten indoors or outdoors, meals will affect the activity in different ways. If the children need to take off most of their clothes to eat indoors, they have to stop the play and change focus. It could then be difficult to return to the play or activity after the meal. Eating outdoors might give the children the opportunity to get back to their play more easily because they won't need to undress and dress again.

46.9 Outdoor Areas/Physical Environment

As previously mentioned, the tradition of outdoor play is long. Based on the understanding that it is beneficial for children's well-being (Borge et al. 2003; Ejbye-Ernst 2012; FMSAH 2004; Nilsen 2008; Ärlemalm-Hagsér 2008; Aasen et al. 2009), playing outdoors is one of the core elements characterizing Nordic ECEC. The normal practice is that children in Nordic ECEC settings spend a large part of their day outdoors, often between 30% and 70% (2–4 h) of their time (Ejbye-Ernst 2012; Haataja et al. 2000–2003; Moser and Martinsen 2010; Mårtensson 2004).

People in the Nordic countries maintain a habit of traveling to parks, playgrounds, and nature areas for hiking and recreation in their spare time with family and friends (Borge et al. 2003; Jensen 2012; Metla 2010; Nilsen 2008; Sandell 2009). The strong tradition of outdoor life in the Nordic countries could be one of

the reasons why this also holds a strong tradition in ECEC and why the practitioners make use of the outdoor environment when working with children. Another reason is that most children in these countries also have access to diverse outdoor environments near the ECEC settings (see section about the law of common access).

Outdoor playgrounds in Nordic ECEC settings are usually designed with standardized equipment, similar to playgrounds in many other Western countries. There are swings, slides, sandpits, walls for climbing, boats for playing, and other items designed for children's play. Even though the standardized playgrounds might resemble ECEC playgrounds in England, Australia, America, and other countries, there are indications that the Nordic ECEC playgrounds are to some extent larger, more varied, and include more nature features (Little et al. 2012). Having larger and more stimulating outdoor playgrounds in ECEC would make it easier and more attractive for both children and practitioners to spend more time outdoors for play and learning. It also affords the children more opportunities for varied play, activities, and experiences.

In addition to spending a lot of time outdoors in the ECEC setting's playground, Nordic ECEC practitioners also look upon nature as an important place for play and learning. Many ECEC settings in Nordic countries spend a great amount of time outdoors, and they often make their own campsites in local nature areas for regular visits. Children usually have access to the wild landscape in the neighboring areas, which provides multiple opportunities for free play and learning situations. Children's ability to move around freely, the independent mobility license, is also an important factor for enabling children's free action and their urge to escape the control of adults, and it is thus closely linked to the ability to optimally utilize their play environment (Kyttä 2004). In the Nordic countries, the ECEC practitioners are more liberal in regard to risk in children's play and activities, and the children are offered a great deal of freedom to move around and use their play environment as they like (Guldberg 2009; New et al. 2005; Sandseter 2009).

46.10 Nature Preschools

Even though there is a common focus on outdoor education in Nordic ECEC, there is a trend in the Nordic countries (Norway, Denmark, and Sweden) of a growing outdoor ECEC provision through institutions that have a particularly strong focus on outdoor play and learning in nature (Lysklett 2013). We define a nature preschool as an ECEC institution that uses nature as a pedagogical fundament for the activity and that spends most of the daily hours outdoors in natural environments. Nature preschools are one of the arenas where the Nordic ideas of childcare are developed and represented. This is the reason this particular type of ECEC setting will be described in more detail in this chapter. In the Nordic countries, about 5–10% of all ECEC institutions have nature and outdoor settings, although there could be even more due to the difficulties of defining this type of ECEC and the fact that the settings are autonomous in their pedagogical profile and what they choose to call

themselves. Because of the different national terms used to describe this type of ECEC institution, the term nature preschool will be used.

This phenomenon is mostly found in the Nordic countries, but Germany also has a relatively high number of so-called *Waldkindergarten* (Lysklett 2013). Finland has few preschools that have a strong focus on outdoor play and learning in natural surroundings. Finnish preschools mostly focus on outdoor activities on the ECEC playgrounds. Iceland doesn't have any nature preschools that are entirely outdoors. Some preschools have one outdoor classroom (department) where children stay outside almost all day, and many preschools have a neighborhood forest that they visit regularly.

Denmark was the first Nordic country to establish ECEC institutions that focused on outdoor life and hiking. These first provisions emerged as early as around 1950, although the first Danish nature preschool, as we now know them, was established in 1985 (Ejbye-Ernst 2012). Today, Denmark has more than 500 ECEC settings of this kind, and they are called *Skovbørnehave* (forest kindergartens). In Denmark the nature preschools were developed with a mixed argument of outdoor provision being beneficial for children's development and learning, but also as a consequence of a need for offering more Danish children a place in ECEC in the 1980s (Eilers 2005).

In Norway there were also some early versions of nature preschools in the late 1940s, where the motto was to get the children "up in the heights and out in the nature" (Lysklett 2013). Still, the modern nature preschool appeared for the first time around the late 1980s. It was somewhat inspired by the Danish *Skovbørnehave* but also strongly based on Norwegian culture and tradition, which encouraged a close relationship with nature and outdoor life and believed that being outdoors and in close contact with nature was beneficial for children's development and well-being (Borge et al. 2003). The real number of nature preschools in Norway is not certain due to difficulties of counting them (there is no governmental definition or register of such settings). Still, calculations show that in 2005/2006 there were more than 400, and one might presume that today there are even more (Ejbye-Ernst 2012).

Sweden's first nature preschool was also established in 1985, and in Sweden these settings are called *I Ur och Skur-førskola* (outdoor preschool) (Drougge et al. 2007; Änggård 2012). Today there are more than 200 outdoor settings in Sweden (Ejbye-Ernst 2012; Änggård 2012). The development of the Swedish nature preschool was based on the idea that children's desire for knowledge, physical activity, and social relations is better provided in nature environments than in indoor environments (Änggård 2012). Sweden has also had a strong focus on children's development of the understanding of nature, knowledge about nature, and sustainable development as a part of ECEC and particularly in nature and outdoor settings (Drougge et al. 2007; Änggård 2012; Ärlemalm-Hagsér 2008). Swedish nature preschools are mostly members of the Swedish Outdoor Association (*Friluftsfrämjande*), and *I Ur och Skur* is *Friluftsfrämjandet*'s pedagogic activity for children within preschool and school, child minding groups, and after-school recreation centers (Drougge et al. 2007). The activity is, to some extent, regulated by formal rules and pedagogical guidelines from *I Ur och Skur*. Examples of this are different figures

that live in certain habitats, such as Mulle who lives in the forest and Laxe who lives in water. *I Ur och Skur* has developed pedagogical programs based on these figures that the nature preschools use in their work.

Nature preschools typically emphasize nature environments as a space for their pedagogical practice and work, and they focus on actively making use of the diverse and changing features of nature, across seasons and climate, throughout the year (Drougge et al. 2007; Ejbye-Ernst 2012; Lysklett et al. 2003). Nature preschools usually spend most of the daily hours outdoors in diverse environments (Borge et al. 2003). The pedagogical practice, as such, is very much based on the environments to which the preschools have access, the season, the climate, and both the children's and the practitioners' interests and initiative. The pedagogical arguments for these practices are that children gain knowledge and understanding from close contact with nature and activities in diverse nature environments and that knowledge about the local natural and cultural environment is an important factor in preserving cultural heritage. There is also a strong belief that children develop motor and physical skills through encountering challenges in natural environments (Fiskum 2004; Fjørtoft 2000; Grahn et al. 1997).

The Norwegian white paper about outdoor life (friluftsliv) (NME 2000–2001) places a great responsibility upon ECEC and schools to secure outdoor life as an important part of the upbringing of Norwegian children. Nilsen (2008) discusses how this might be a way that policy is used to ensure that these old Norwegian traditions are reproduced in the younger generations in a time when there is a worry that these traditions will decline because of new activities and sports for young people. Another discussion in Norway is that nature preschools are just a modern form of Fröbel's original concept of kindergarten – gardens for children, where children learn and develop by being in the center of things and acting out in the physical world – such as a garden (Borge et al. 2003). Still, the Nordic nature preschools are solidly rooted in the populations' (politicians', practitioners', and parents') belief that children are happy playing outside (Borge et al. 2003; Ejbye-Ernst 2012; Ärlemalm-Hagsér 2008).

The nature preschools spend time outdoors relatively frequently throughout the year. In wintertime most of the nature preschools in Norway (69%) spend more than 4 h outdoors. Norwegian nature preschools all spend more than 4 h outdoors during spring and summer, while almost all (87%) spend more than 6 h outdoors during summer (Lysklett 2005). More than 6 h would mean from 9 a.m. to 3 p.m., which is nearly all day. Thus many parents deliver and retrieve their children outdoors. The nature preschools usually make trips or take walks away from the day-care center. They visit areas that are outside of the center's boundaries, such as regular destinations. These areas are called reference areas, and nature preschools often give these areas specific names. Nature preschools in Norway might have tens of names of such places, like the eagle's nest or moose marsh (Lysklett 2013).

To be outside or in the forest, most of the day requires well-established routines and organization. The Norwegian nature preschools have developed many routines to make the time spent in the forest as good as possible for children and employees.

We have seen similar routines practiced in Sweden and Denmark, too (Lysklett 2013).

In nature preschools, the parents are told that children's clothes are essential. Often the parents get a list of what kinds of clothes are required, for example, raingear, winter suit, and woolen underwear and sweaters. Clothing is usually a subject in the first meeting between staff and parents.

In Norway and Denmark, many of the nature preschools don't have fences around their buildings, and the children are allowed to walk away, but only to the invisible border. The invisible border surrounds the building and is seldom marked. Every fall, when new children attend the nature preschool, the adults focus on these borders. The rule is that the children can go to the invisible border, and if some children cross the border, the other children should tell them not to or tell the adults. If some children exceed the border, they will be mildly sanctioned, for example, stay close to one of the adults for a period. These rules are based on confidence, and the employees work a lot with this when children are introduced to the nature preschool. Trust and confidence are also the basis of other rules in the nature preschools, and this is a major subject (Lysklett 2013).

When the nature preschools make trips to one of the reference areas (Lysklett 2005), they usually walk along known paths, and the children can walk by themselves to the first waiting place. These places are not marked, but the children know where the waiting places are, just like the invisible borders. When the first group of children reach the waiting place, they have to wait for the rest of the group. They could climb in trees, play, or just relax. At the time when the whole group has arrived at the waiting place, the children can continue on to the next waiting place. Very often the oldest children run away to be the first ones to arrive. The adults often walk with the last children. Trust and confidence are the basis of this rule, too, and if there are some children that don't respect the waiting place, they have to walk together with the adults (Lysklett 2013).

Most children carry a backpack with some extra clothes and their food (in Norway and Denmark). The staff often bring a backpack, trolley, or a pulk (small sled) when there is snow. In the backpack, they have a first aid kit, drinks for the children, toilet gear, diapers, gear that is needed because of the pedagogical aim of the day, etc. (Lysklett 2013). At the time the children have reached their destination, they take off their backpacks. Now it is time for play or some organized activity. If the destination is known, the nature preschool normally has invisible borders. If not, the children usually need to be able to see one of the adults. If the group needs to be gathered, the nature preschool often has a bell or a whistle that they use. When the bell rings, the children have to go to the adults. During the day, the adults count the children, and if they are not able to see the whole group, they normally ask the other children. Thus the adults often get a good overview, and they don't need to have each individual child in sight (Lysklett 2013).

46.11 Current Research and Future Research Needs

There has been a growing academic interest in the use of outdoor spaces for children's play and learning during the last decades, and outdoor play is seen as a significant part of a child's development as well as a connection to the natural world. However, there is limited scientific evidence of how children may benefit from their outdoor experiences. Even though there is a lack of a systematic research and evaluation on outdoor education, we will present some of the existing research on the topic in the following section.

46.12 Democracy, Equality, and Creativity

Outdoor play is considered important for children to develop democratic values and practices. This is achieved through social interaction, by learning how to create and recreate the features in their environment, and through actively participating and being part of decisions concerning their daily life and environment (Aasen et al. 2009). The child's self-worth and independence are also strengthened through learning how to manage the environment and nature where they live, play, and explore (Nilsen 2008). Research has also shown that there is more creative play among children in nature playgrounds (Lee 1999) and that children playing in nature are significantly more attentive and inventive than children playing on structured playgrounds (Vigsø and Nielsen 2006).

Research indicate that an outdoor environment gives potential for more equal play and that materials in nature are less associated with being girlish or boyish, which is the case with the toys inside the ECEC setting (Sandberg and Ärlemalm-Hagsér 2011). This means that there might be more equal opportunities for play, development, and learning for both boys and girls in outdoor play. Still, studies have shown that even though practitioners seem to interpret the outdoors as a gender-neutral zone, the practices of both practitioners and children are still gender stereotyped (Änggård 2009; Ärlemalm-Hagsér 2010). Research has also found that male practitioners are more playful and engage more in, e.g., physical active play (Sandberg and Pramling-Samuelsson 2005) and also are more liberal to risky forms of outdoor play (Sandseter 2013) than female practitioners.

46.13 Risky Play

The aforementioned culture in the Nordic countries for acknowledging and emphasizing outdoor life, with a strong heritage and tradition of visiting nature areas, hiking, and exploring in the mountains or forest areas, is assumed to be vital for the more liberal approach to children's risk taking that these countries hold. For

instance, according to Guldberg (2009, p. 60), “the Norwegians have a special love for outdoor pursuits and are reluctant to restrict children’s freedom to roam outdoors – without adults watching them – to the same extent that other nations do.” Similarly, New et al. (2005) point out that Norwegian, Swedish, Danish, and, to some extent, Italian preschool teachers have fewer concerns about children’s risk taking than do American preschool teachers. Research on requirements for playground safety in Australia (Little 2006), New Zealand (Chalmers 2003; Greenfield 2003), Britain (Ball 2002, 2004), and the USA (Caesar 2001; Sawyers 1994; Swartz 1992; Wardle 1997; Zeece and Graul 1993) indicates that the efforts to regulate and strictly monitor the children are stronger in these countries than in Nordic countries, where the benefits of mastering risks, experiencing various weather conditions, and exploring the national landscape are widely acknowledged and encouraged (New et al. 2005). The large and diverse outdoor playgrounds in Nordic ECEC institutions and the frequent use of nature as a play environment also enable ECEC practitioners to offer children more challenging play environments than they would have been able to by staying on the standardized playground. The opportunity for children to meet physical challenges and risks are particularly good in nature preschools (Sandseter 2009). The children spend most of their time in challenging nature areas, and they play in a wide range of stimulating and challenging environments.

46.14 Physical Activity

The outdoor environment’s effect on children’s play has been studied and discussed by several researchers. In a Norwegian study of children’s play in nature vs. standardized playgrounds, Fjørtoft (2000) found that functional play such as gross-motor activities and basic skills (running, jumping, throwing, climbing, crawling, rolling, swinging, and sliding) was predominant when children played in nature as opposed to playing on a traditional preschool play area and that landscape structures such as steep slopes, rough cliffs, and trees afforded play such as climbing and sliding. According to Fjørtoft, preschool children consider traditional playgrounds to be more boring than natural playscapes, and children develop better motor abilities when playing in nature as opposed to traditional playgrounds. In accordance with this notion, Kaarby (2004) found, in a study of Norwegian children’s play in a nature preschool (playing in nature areas), that physical activity play such as climbing up very steep hillsides and sliding down again; climbing up and jumping down from big rocks or small cliffs; climbing on trees; throwing javelins or cones; shooting with bows and arrows; rolling on the ground; balancing on stones, fallen trees, etc.; and fencing with sticks were prominent most of the time. Similarly, Mårtensson (2010) demonstrates how preschools with green, spacious, and well-integrated outdoor environments afford a higher play mood, more physically active play such as running and climbing, and swift sensory interaction.

46.15 Motor Skills and Risk Assessment

Within this view of learning and development, the Nordic approach of outdoor play and learning rests on arguments that this is beneficial for children's physical, motor, psychological, and social development. For instance, it is argued that the benefits of children's play in nature environments may be getting to know ecology, exploring the environment (Bjorklund and Pellegrini 2002), and practicing and enhancing different motor skills (Fjørtoft 2000; Grahn et al. 1997; Vigsø and Nielsen 2006) and physical skills for developing muscle strength, endurance, skeletal quality, etc. (Bekoff and Byers 1981; Bjorklund and Pellegrini 2000; Byers and Walker 1995; Pellegrini et al. 1998; Pellegrini and Smith 1998). All physical practice and training might be relevant for the developing child. Play in nature also involves training on perceptual competencies such as depth, form, shape, size, and movement perception (Fiskum 2004; Rakison 2005) and general spatial-orientation abilities (Bjorklund and Pellegrini 2002). Research also indicates that through challenging play, especially play in wild nature areas, children show improved risk assessment and learn how to master risk situations; their subjective perception of the risk becomes more realistic (Ball 2002; Boyesen 1997; Sandseter 2010, 2012; Smith 1998; Stutz 1999). In this way, through risky play children prepare for handling real risks and dangers (Adams 2001).

46.16 Future Research Needs

There is limited scientific evidence of how children may benefit from their outdoor experiences. Young children's well-being in outdoor spaces and the general health benefits of outdoor play have in some way been investigated, but studies of long-term effects of children's nature contact in ECECs are needed. Examples of areas that need to be explored are development of motor skills, children's relation to and knowledge of nature, the possible benefits of early environmental awareness, and how young children can participate toward a transformative education with significant emphasis on sustainability. Learning outcomes of outdoor experiences in early years are also examples of areas that need to be investigated. In addition, it seems that the potential for more gender-neutral play in outdoor environments is not yet fully utilized because both practitioners and children still fall into traditional gender roles in their practice. This is a theme that should be further explored in ECEC practice and research.

46.17 Summary

The aim of this chapter was to give an insight into outdoor education in the Nordic region, which lies in the northern part of Europe and consists of Norway, Sweden, Denmark, Finland, and Iceland. The Nordic countries have, despite their somewhat cold climate, a strong cultural heritage and tradition for outdoor life, which is also brought into the education system and forms an important part of ECEC content and practices. In addition, the Nordic ECEC policy is strongly based on values such as children's participation, democracy, human (and children's) rights, play, social relations, respect for nature, sustainability, and individual needs. These values have contributed to the Nordic ECEC model where children's right to free play, with an emphasis on outdoor play and activities, is central. The normal practice in Nordic ECEC therefore includes extensive amounts of time spent by children outdoors for play and learning each day, yearlong. This is regarded as an important way of learning in the different knowledge areas/orientations that are outlined in the curricula, such as physical activity, linguistics and language, mathematics, social skills, and nature and sustainability, among others. This also provides a strong focus on children's outdoor environment and how the environment supports children's play and learning. Some of the Nordic countries also have a growing trend of establishing nature preschools: ECEC institutions that use nature as a pedagogical fundament for activities and spend most daily hours outdoors in natural environments. While we need more systematic scientific research and evidence on how children benefit from outdoor education, there are some studies indicating that this has a positive impact on children's development of democracy, creativity, physical development, motor skills, risk management, and gender equality in play.

References

Aasen, W., Grindheim, L. T., & Waters, J. (2009). The outdoor environment as a site for children's participation, meaning-making and democratic learning: Examples from Norwegian kindergartens. *Education 3–13, 37*(1), 5–13.

Adams, J. (2001). *Risk*. London: Routledge.

Änggård, E. (2009). Skogen som lekplats. Naturens material och miljöer som resurs i leken. [The forest as playground: natural objects and environments as means for play]. *Nordisk Pedagogik, 29*, 221–234.

Änggård, E. (2012). Att skapa platser i naturmiljöer. Om hur vardagliga praktiker i en I Ur och Skur-förskola bidrar till at ge platser identitet. [Creating places in natural environments. On how every day practices in an outdoor preschool contribute to place identity]. *Nordic Early Childhood Education Research, 5*(10), 1–16.

Ärlemalm-Hagsér, E. (2008). Skogen som pedagogisk praktik ur et genusperspektiv. [The forest as pedagogical practice through a gender perspective]. In A. Sandberg (Ed.), *Miljöer för lek, lärande och samspel [Environments for play, learning and interaction]* (pp. 107–135). Lund: Studentlitteratur.

Ärlemalm-Hagsér, E. (2010). Gender choreography and micro-structures – Early childhood professionals' understanding of gender roles and gender patterns in outdoor play and learning. *European Early Childhood Education Research Journal, 18*(4), 515–525.

Ball, D. J. (2002). *Playgrounds – Risks, benefits and choices (Vol. 426/2002). Health and Safety Executive (HSE) contract research report*. London: Middlesex University.

Ball, D. J. (2004). Policy issues and risk-benefit trade-offs of "safer surfacing" for children's playgrounds. *Accident Analysis and Prevention, 36*, 661–670.

Bekoff, M., & Byers, J. A. (1981). A critical reanalysis of the ontogeny and phylogeny of mammalian social and locomotor play: An ethological hornet's nest. In K. Immelmann, G. W. Barlow, L. Petrinovich, & M. Main (Eds.), *Behavioral development: The bielefield interdiciplinary project* (pp. 296–337). Cambridge: Cambridge University Press.

Bjorklund, D. F., & Pellegrini, A. D. (2000). Child development and evolutionary psychology. *Child Development, 71*(6), 1687–1708.

Bjorklund, D. F., & Pellegrini, A. D. (2002). *The origins of human nature: Evolutionary developmental psychology*. Washington, DC: American Psychological Association.

Borge, A. I. H., Nordhagen, R., & Lie, K. K. (2003). Children in the environment: Forest day-care centers modern day care with historical antecedents. *The History of the Family, 8*, 605–618.

Boyesen, M. (1997). Den truende tryggheten [The impending danger]. Dissertation, The Norwegian University of Science and Technology Norway, Trondheim.

Bratterud, Å., Sandseter, E. B. H., & Seland, M. (2012). Barns trivsel og medvirkning i barnehagen. Barn, foreldre og ansattes perspektiver [Children's well being and participation on ECEC. Children, parents and practitioners' perspective]. Skriftserien til Barnevernets utviklingssenter Midt-Norge, Rapport 21/2012 NTNU Samfunnsforskning, Trondheim.

Byers, J. A., & Walker, C. (1995). Refining the motor training hypotesis for the evolution of play. *The American Naturalist, 146*(1), 25–40.

Caesar, B. (2001). Give children a place to explore. *Child Care Information Exchange, 3*(1), 76–79.

Chalmers, D. (2003). Playground equipment safety standards. *Safe Kids News, 21*, 4.

DME. (2009). *Nature protection act, LBK no. 933 of 24/09/2009*. Copenhagen: The Danish Ministry of the Environment.

DMSI. (2011). *Act of pre-primary education: LBK nr 668 af 17/06/2011*. Copenhagen: Danish Ministry of Social Affairs and Integration.

DP. (2004). *Lov om ændring af lov om social service (Pædagogiske læreplaner i dagtilbud til børn) [Pedagogical curriculum of day care for children]*. Copenhagen: The Danish Parliament.

Drougge, S., Kranse, C., & Friluftsfrämjandet. (2007). *I ur och skur i skolan: en handledning från Friluftsfrämjandet [Outdoors in school: A guide from Friluftsfrämjandet]*. Stockholm: Friluftsfrämjandet.

Economist. (2013). Lessons: The secret of their success. The Nordic countries are probably the best-governed in the world. Retrieved June 24, 2013, from http://www.economist.com/news/special-report/21570835-nordic-countries-are-probably-best-governed-world-secret-their

Eilers, C. (2005). Den danske skovbørnehave - hva er det? [The danish forest kindergarten – What is it?] In: O. B. Lysklett (Ed.), *Ute hele dagen! Artikkelsamling basert på nasjonal konferanse om natur- og friluftsbarnehager* [Outdoors all day! Proceedings from the national conference on nature- and outdoor preschools] (pp 41–44). Trondheim: Queen Maud University College of Early Childhood Education.

Einarsdottir, J. (2010). Children's experiences of the first year of primary school. *European Early Childhood Education and Research Journal, 18*(2), 163–180.

Ejbye-Ernst, N. (2012). Pædagogers naturformidling i naturbørnehaver [Pedagogues' communication about nature in nature preschools]. Dissertation, VIA University College, Aarhus.

Fiskum, T. (2004). Effekt av barnehagemiljø på motorisk og spatial kompetanse hos barn. En tverrsnittstudie av den motoriske og spatiale kompetansen hos barn i en friluftsbarnehage og barn i en tradisjonell barnehage. [The effect of ECEC environment on motor- and spacialcompenetce among children. A cross-sectional study of the motor- and spacial competence of children in a outdoor preschool and traditional preschool]. Master thesis, Nord-Trøndelag University College, Levanger.

Fjørtoft, I. (2000). Landscape and playscape. Learning effects from playing in a natural environment on motor development in children. Dissertation, Norwegian School of Sport Science, Oslo.

FME. (1996). *The Nature Conservation Act 1096/1996*. The Finnish Ministry of the Envronment: Helsinki.

FMSAH. (1973). *Child Day Care Act (36/1973)*. The Finnish Ministry of Social Affairs and Health: Helsinki.

FMSAH. (2004). *Early childhood education and care in Finland (Brochures of the Ministry of Social Affairs and Health 2004:14)*. Finnish Ministry of Social Affairs and Health: Helsinki.

Grahn, P., Mårtensson, F., Lindblad, B., Nilsson, P., & Ekman, A. (1997). Ute på dagis [Outdoors in preschool]. The University of Agriculture in Sweden, Alnarp.

Greenfield, C. (2003). Outdoor play – The case of risks and challenges in children's learning and development. *Safe Kids News, 21*, 5.

Guldberg, H. (2009). *Reclaiming childhood. Freedom and play in an age of fear*. Oxon: Routledge.

Haataja, K., Lindroos, S., Blomberg, L., Snellman, U., & Remsu, M. (2000–2003). Care work with children. Helsinki City College of Social and Health Care, Helsinki City Social Services Department, Helsinki.

IMENR. (1999). *The Nature Conservation Act no. 44/1999*. Reykjavik: The Icelandic Ministry for the Environment and Natural Resources.

IMESC. (2008). *The Preschool Act, No. 90, 12 June 2008*. Reykjavik: Islandic Ministry of Education, Science and Culture.

IMESC. (2011). *The icelandic national curriculum guide for preschools*. Reykjavik: Islandic Ministry of Education, Science and Culture.

Jensen, F. S. (2012). Monitoring outdoor recreation trends in Denmark. Paper presented at the The sixth international conference on monitoring and management of visitors in recreational and protected areas: Outdoor recreation in change – Current knowledge and future challenges, Stockholm.

Kaarby, K. M. E. (2004). Children playing in nature. Paper presented at the CECDE conference: Questions of quality, Dublin.

Kjær, B., & Olesen, J. (2005). *Informationshåndbog om pædagogiske læreplaner i dagtilbud [Handbook of information on the pedagogical curriculum in day care]*. Copenhagen: Danish National Board of Social Services.

Korsvold, T. (1997). *Profesjonalisert barndom: Statlige intensjoner og kvinnelig praksis på barnehagens arena 1945-1990 [Professionalized childhood: Government intentions and female practices in kindergarten arena 1945-1990]*. Trondheim: Historisk institutt, Det historisk-filosofiske fakultet, NTNU.

Kyttä, M. (2004). The extent of children’s independent mobility and the number of actualized affordances as criteria for child-friendly environments. *Journal of Environmental Psychology, 24*, 179–198.

Lee, S.-H. (1999). The cognition of playground safety and children’s play – A comparison of traditional, contemporary, and naturalized playground types. In M. L. Christiansen (Ed.), *Proceedings of the international conference of playground safety*. Pennsylvania: Penn State University, Center for Hospitality, Tourism & Recreation Research.

Little, H. (2006). Children’s risk-taking behaviour: Implications for early childhood policy and practice. *International Journal of Early Years Education, 14*(2), 141–154.

Little, H., Sandseter, E. B. H., & Wyver, S. (2012). Early childhood teachers’ beliefs about children’s risky play in Australia and Norway. *Contemporary Issues in Early Childhood, 13*(4), 300–316.

Lysklett, O. B. (2005). Uteleik året rundt i kjente omgivelser [Outdoor play all year round on familiar environments]. In O. B. Lysklett (Ed.), *Ute hele dagen! Artikkelsamling basert på nasjonal konferanse om natur- og friluftsbarnehager* [Outdoors all day! Proceedings from the national conference on nature- and outdoor preschools] Proceedings from the national conference on nature- and outdoor preschools (pp 15–22). Trondheim: Queen Maud University College of Early Childhood Education.

Lysklett, O. B. (2013). *Ute hele uka, Natur- og friluftsbarnehagen. [Outdoors all week. The nature- and outdoor preschool]*. Oslo: Universitetsforlaget.

Lysklett, O. B., Emilsen, K., & Hagen, T. L. (2003). Hva kjennetegner natur- og friluftsbarnehager? [What characterizes nature- and outdoor preschools?]. *Barnehagefolk, Pedagogisk forum, 4*, 78–85.
Mårtensson, F. (2004). Landskapet i leken. En studie av utomhusleken på förskolegården [The landscape in play: A study of outdoor play on the preschool playground]. Dissertation, The University of Agriculture in Sweden, Alnarp.
Mårtensson, F. (2010). Outdoor play at the core of health promotion. *Children in Scotland, 19*, 14–15.
Metla. (2010). Recreational use of forests – Outdoor recreation statistics 2010. Retrieved June 24, 2013, from http://www.metla.fi/metinfo/monikaytto/lvvi/en/statistics_2010/2010-table01.htm
Moser, T., & Martinsen, M. (2010). The outdoor environment in Norwegian kindergartens as pedagogical space for toddlers' play, learning and development. *European Early Childhood Education Research Journal, 18*(4), 457–471.
New, R. S., Mardell, B., & Robinson, D. (2005). Early childhood education as risky business: Going beyond what's "safe" to discovering what is possible. *Early Childhood Research & Practice 7*(2):online journal without page numbers.
Nilsen, R. D. (2008). Children in nature: Cultural ideas and social practices in Norway. In A. James & A. L. James (Eds.), *European childhoods: Cultures, politics and childhoods in Europe* (pp. 38–60). Basingstoke: Palgrave Macmillan.
NME. (1957). *Outdoor recreation act, LOV-1957-06-28-16*. Oslo: The Norwegian Ministry of the Environment.
NME. (2000–2001). St.meld. nr. 39: Friluftsliv – Ein veg til høgare livskvalitet [White paper no. 39: Outoor life – A means for higher life quality]. Norwegian Ministry of the Environment, Oslo.
NMER. (2005). Act no. 64 of June 2005 relating to Kindergartens (the Kindergarten Act). Norwegian Ministry of Education and Research, Oslo.
NMER (2006/2011). Framework plan for the content and tasks of kindergartens, issued 1. March. Norwegian Ministry of Education and Research, Oslo.
Pellegrini, A. D., & Smith, P. K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development, 69*(3), 577–598.
Pellegrini, A. D., Horvat, M., & Huberty, P. (1998). The relative cost of children's physical play. *Animal Behavior, 55*, 1053–1061.
Rakison, D. H. (2005). Infant perception and cognition: An evolutionary perspective on early learning. In B. J. Ellis & D. F. Bjorklund (Eds.), *Origins of the social mind: Evolutionary psychology and child development* (pp. 317–353). New York: Guilford Press.
Sandberg, A., & Ärlemalm-Hagsér, E. (2011). The Swedish National Curriculum: Play and learning with fundamental values in focus. *Australiasian Journal of Early Childhood, 36*(1), 44–50.
Sandberg, A., & Pramling-Samuelsson, I. (2005). An interview study of gender differences in preschool teachers' attitudes towards children's play. *Early Childhood Education, 32*(5), 297–305.
Sandell, K. (2009). Nordiskt friluftsliv och allemansrätt: Nationella identitetsprojekt och ekopolitisk inspiration [Nordic outdoor life and the law of common access: National identity projects and ecopolitical inspiration]. Paper presented at the Kultur-Natur: Konferens för kulturstudier i Sverige, The Advanced Cultural Studies Institute of Sweden (ACSIS), Norrköping.
Sandseter, E. B. H. (2009). Affordances for risky play in preschool – The importance of features in the play environment. *Early Childhood Education Journal, 36*, 439–446.
Sandseter, E. B. H. (2010). Scaryfunny. A qualitative study of risky play among preschool children. Dissertation, Norwegian University of Science and Technology, Trondheim.
Sandseter, E. B. H. (2012). Restrictive safety or unsafe freedom? Norwegian ECEC practitioners' perceptions and practices concerning children's risky play. *Childcare in Practice, 18*(1), 83–101.
Sandseter, E. B. H. (2013). Early childhood education and care practitioners' perceptions of children's risky play; examining the influence of personality and gender. *Early Child Development and Care, 184*(3), 434–449.

Sawyers, J. K. (1994). The preschool playground. Developing skills through outdoor play. *Journal of Physical Education, Recreation & Dance, 65*(6), 31–33.
SME. (1998). *The Swedish Environmental Code (1998:808)*. Stockholm: The Swedish Minsitry of the Environment.
SMES. (1985). *Education Act (1985:1100)*. Stockholm: Swedish Ministry of Education and Science.
SMES. (2010). *Curriculum for the preschool: Lpfö 98*. Stockholm: Swedish Ministry of Education and Science.
Smith, S. J. (1998). *Risk and our pedagogical relation to children: On playground and beyond*. New York: State University of New York Press.
STAKES. (2003). *National curriculum guidelines on early childhood education and care in Finland*. STAKES: Helsinki.
Stutz, E. (1999). Rethinking concepts of safety and the playground: The playground as a place in which children may learn skills for life and managing hazards. In M. L. Christiansen (Ed.), *Proceedings of the international conference of playground safety*. Pennsylvania: Penn State University: Center for Hospitality, Tourism & Recreation Research.
Swartz, M. K. (1992). Playground safety. *Journal of Pediatric Health Care, 6*(3), 161–162.
UNESCO-IBE. (2010). *World data on education. Island (updated version, June 2012)*. Unesco: International Bureau of Education.
Vigsø, B., & Nielsen, V. (2006). *Børn & udeliv [Children and outdoor life]*. Esbjerg: CVU Vest Press.
Wardle, F. (1997). Outdoor play: Designing, building, and remodeling playgrounds for young children. *Early Childhood News, 9*(2), 36–42.
Zeece, P. D., & Graul, S. K. (1993). Grounds for play: Sound, safe, and sensational. *Day Care and Early Education, 20*(4), 23–27.

Chapter 47
Toddlers in Nordic Early Childhood Education and Care

Anne Greve and Ole Henrik Hansen

Abstract Nordic countries were among the first to introduce parental leave, including a period earmarked for fathers, and have high childcare coverage, also among children under 3 years of age. While many countries distinguish between childcare (for children aged 0–2) and pre-school (3–6), the so-called Nordic model represents a unified system of early childhood education and care (ECEC). This chapter underlines the distinctive shared characteristics of the Nordic approach to play and learning, and care and education, where participation, democracy, respect for other cultures and religions and the possibility of achieving a healthy and stimulating childhood comprise the key elements. Furthermore, the chapter demonstrates some of the challenges when attempting to ensure quality childcare and education. The Nordic pedagogic tradition is seen as reflecting both social development and the culture and character of the Nordic people. Here, there is a strong foundation in an ideal of freedom, democracy, equality, influence and sustainability, but also a focus on education that emphasises the toddler as a learning being. However, toddlers in ECEC represent an area in need of more attention and new research.

Keywords Toddlers • Nordic pedagogic tradition • Nordic model • Welfare • Day care

47.1 Introduction

The so-called Nordic model in early childhood education and care (ECEC) differs from many other countries' early childhood education in offering a holistic approach to education and care both in terms of curricula and in integrating the whole age group from birth to 6 years of age in the same early years settings (Jensen 2007).

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Many other countries have childcare from birth to 3 years of age and pre-school from 3 to 6 years of age. Yet, it has been claimed that the Nordic model is being challenged as a consequence of globalisation and a rapidly changing world (Halvorsen 2011). It is, therefore, important that we pay attention to what may constitute the 'Nordic model', especially with regard to the youngest children, so that we may both understand and face these challenges.

Although the practice of children from birth to 3 years of age attending ECEC is quite well established in the five Nordic countries, i.e. Denmark, Finland, Iceland, Norway and Sweden, there is a significantly longer tradition for children of 3 years old and older being enrolled in ECEC. That said, in the last 5–10 years, the proportion of toddlers (i.e. children from birth to 3 years of age) attending ECEC has increased considerably in all of the Nordic countries (Nordic Statistic 2013).

The Nordic ECEC as a 'concept' can give an impression that there is a uniform or standardised ECEC for children from birth to 3 years of age. This is, of course, incorrect. There are, for example, considerable differences in legislation, curricula and systems and methods of administering and running a setting both in terms of individual settings within each of the five Nordic countries and between each of the countries. Nevertheless, our intentions are to highlight some of the central characteristics of ECEC for toddlers, and in doing so, we will stress the significance of attending ECEC for children from birth to 3 years of age in the Nordic countries. By critically examining Nordic practice, we aim to show the complexity and dilemmas that circulate around ECEC, thus avoiding an overidealised set of perceptions concerning our youngest citizens in becoming a pre-school child (Månsson 2011).

First, we will describe the historical background in which ECEC for toddlers in the Nordic countries is situated paying particular attention to the significance of Nordic culture. Secondly, we will examine the theoretical paradigms that frame ECEC for toddlers and which form a basis for what is referred to as 'Nordic ECEC' in contemporary times. We will also foreground some of the theoretical underpinnings, which lend credence to a variety of practices that can be found within a majority of settings, focusing particularly on the relationship between play and learning, as well as the relationship between education and care. In the final section of this chapter, we will discuss some of the challenges the field of ECEC for toddlers face in the Nordic countries.

47.2 The Political Context: The Significance of Nordic Welfare Model

The Nordic countries are constantly trying to extend Nordic welfare models so as to guarantee a secure standard of living for each individual. Extensive and economically available childcare opens up the opportunity to combine family life with working life. It is because there is economic need for both parents to work outside of the home, as well as to secure further education themselves that there has been gathering momentum in the demand for day-care institutions that can include the very

Table 47.1 Percentages of 1- and 2-year-olds in ECEC in 2010; the most recent statistics and the length of parental leave

2010	0 years (%)	1 year (%)	2 years (%)	Parental leave
Denmark	17.5	86.1	94.1	12 months
Finland	1	29.8	51.4	9 months
Iceland	6.8	65.9	93.6	9–12 months
Norway	4.2	71.2	88.9	13 months
Sweden	0	49.3	91.4	16 months

Source: Nordic statistics (2013)

young ones. Yet, we must not think that the Nordic countries have been developing something that is entirely new. Since the 1900s, there has been a tradition among Nordic countries to have crèches. The demand and establishment of these were spearheaded by female politicians, middle-class women and Christian organisations whose 'target' demographic at this time were the children of single mothers. A form of philanthropic philosophy drove the establishment of these crèches, so that the child could be 'suitably' looked after while the mother was at work. These crèches were the first institutions for toddlers (Rifbjerg 1966).

In 1970, there was a considerable increase in ECEC institutions in all Nordic countries, which coincided with the emergency of a variety of agreements concerning paid maternity leave and extended parental leave. Finland and Iceland have the shortest leave (9 months). Sweden has the longest leave with 16 months, Norway with 13 months and Denmark with 12 months. However, there are several different ways of organising the leave, and there are different arrangements that provide the possibility to extend the parental leave in each country.

As is evident from Table 47.1, there is a considerable difference in ages in terms of when children start in day care in the Nordic countries. In Denmark, it is usually between 10 and 12 months. In Finland and Iceland, it is a little later. In Norway, however, there is a tendency towards sending the children to day care early. In Sweden, no child starts until after 12 months of age because of the Swedish rules about parental leave.

There is no systematic correlation between the length of parental leave and the age of children attending ECEC in these five Nordic countries. In Finland, the child is about 9 months old when the parental leave ends. After the leave ends:

- The father can take paternity leave and receive paternity allowance.
- The mother, father or another carer may stay at home to look after a child under three years of age and receive child home-care allowance.
- The child may be cared for by a private childcare provider, in which case the family may claim private day-care allowance.
- The family may hire a carer alone or together with other families and receive child home-care allowance or private day-care allowance, depending on the age of the child.
- The child may attend municipal day care.

In Iceland, the leave period will be extended over the next 3 years, but the new government from spring 2014 decided not to accomplish this. Iceland is the only country among the Nordic countries where there is a gap between the end of parental leave and the starting in pre-school, but many children between 1 and 2 years of age are in official family day care (Eydal and Rostgaard 2011). The correlation between the parental leave and the age of children attending ECEC is more obvious in Denmark and Norway. In Sweden, the parental leave makes it possible to keep the infant at home longer, and the majority of children begin attending ECEC at the child's second birthday. Thus, it's clear that there are local, political, historical and cultural differences that influence when children start in ECEC. In Norway, there is a tendency towards a child starting a little earlier, and in that sense, Norway is emulating practices found in Denmark. Here, nine out of ten children begin ECEC at the age of 1 year, which coincides with the end of parental leave (Nordic Statistic 2013).

None of the five Nordic countries have any specific guidelines for the toddlers in ECEC in their legislation. There are different structural elements, such as the Danish legislation, *Dagtilbudsloven* (Retsinformation 2012), where special kinds of institutional settings for children in different ages are mentioned in general, or, as in the Finnish curriculum on ECEC, *Förordning om barndagvård* (Finnlex 1973), where it is stated that if the children are younger than 1 year of age, there can only be 6 children in a group and 12 children between the age of 1–2 years.

Children of different ages are in all five national curricula and legislation's considered alike, regardless of different characteristics for their age or it is mentioned that they shall be treated and cared for, according to their age, as in the act on ECEC, *Lag om barndagvard* (Finnlex 1973). All children from birth to school age are covered with general pedagogical themes and values, such as participation, democracy, play, care and learning.

47.3 Theoretical Approaches in the Field

We will look at two theoretical approaches to the Nordic ECEC that have had, and still have, a special impact on ECEC for the youngest children: developmental psychology and sociocultural approach.

47.3.1 Developmental Psychology

The psychoanalytic theories of Sigmund Freud had an impact on Nordic understandings of children and childhood in ECEC (Korsvold 2008). Furthermore, the work of both Jean Piaget and Erik H. Eriksson, which placed an emphasis on the staged development of children, gained acceptance within Nordic ECEC. Thus, public documents, including curriculum guidelines, as well as research debates were influenced by psychological development theories until the late 1980s and, to

a certain extent, still are. Developmental psychology describes children's needs related to the age and maturity of the child with a strong individual focus. One consequence of developmental theory was a view of a toddler as a 'vulnerable' child, and it had as an additional premise the notion that toddlers thrived best within the home, ideally with a single caregiver, the mother (Korsvold 2008). These thoughts were influenced by John Bowlby's theories. Even though Bowlby (1951) primarily studied children in orphanages, and not day-care centres, his conclusions lead to the idea that, for the youngest children, no institution could provide a proper substitute for maternal, home-based education and care. Psychologists including Anna Freud and René Spitz also emphasised the vital relationship between mother and child. As a result, the caring mother served as a model for teachers in ECEC. The Norwegian psychologist Åse Gruda Skard was internationally acknowledged as the president of the World Organization for Early Childhood Education. She emphasised the child-centred approach within developmental psychology in her research exerting a strong influence on the Nordic approach to ECEC (Skard 1954).

From the beginning of the 1970s, researchers such as the development psychologist Daniel Stern used video observations in their studies (Greve et al. 2013). This enabled more detailed study of the interactions between mother and child, resulting in the development of new knowledge about children. More recently Stern (2004) has proposed that the ability to share emotional intentionality is one of the most important aspects of the child's development of 'self'. Stern's research has had great influence on our understanding of the child as a 'competent' individual from birth and has thus helped to pave the way for current pedagogic thought about the youngest children in ECEC in the Nordic countries (Hansen 2013).

47.3.2 A Sociocultural Approach

The Soviet psychologist Lev Vygotsky (1962) laid the foundations for the sociocultural approach in emphasising humans as cultural beings and processes of learning as activities in zones of proximal development which balance between what the child learns by herself and what she learns in activity with more competent others. In the Nordic countries, a number of researchers are influenced by the work of Vygotsky, including Broström (2006), Pramling Samuelsson (1994), Einarsdottir (2002), Hännikäinen (1995) and Lindahl (2002). Within a sociocultural approach, the child gains social and cultural abilities as a consequence of human ability to interact where participation in social interactions including cognition, culture and emotional intentionality are influential in the development. Both learning and development are facilitated due to stimulation from the outside world (Bruner 2004; Hännikäinen 2010; Johansson and Pramling Samuelsson 2001; Stern 2004). According to Bruner (2004), the creation of cultural significance, which makes cultural reflection of consciousness possible, is similarly embedded in cultural participation. In this way, culture is superorganic where additionally it potentiates the consciousness of individuals (Bruner 2004). This understanding of development in

Nordic pedagogic is established in an understanding of 'the child' as a social construction and connects elements, such as care and learning in an 'edu-care' model (Broström 2006; Johansson and Pramling Samuelsson 2001).

47.4 Nordic Research in the Area

While this cannot be a systematic review, we will nevertheless try to illustrate a number of significant research projects and their influence on pedagogical approaches. We are also mindful of the research reports written in the native language, including Finnish and Icelandic, which are largely inaccessible for the other Nordic countries. We are also leaning on the Nordic research review edited by Bjørnestad and Samuelsson (2012), assigned by the Norwegian Ministry of Education, as well as the special issue of the International Journal of Early Childhood that is devoted to research in early childhood education and care programmes for children aged birth to 3 years (Broström and Hansen 2010; Greve and Solheim 2010; Hännikäinen 2010; Johansson and Emilsson 2010). On the whole, Nordic research has pursued a qualitative trajectory where the focus is on the effects of ECEC, everyday life in the ECEC, learning and play, education and care and participation (Bjørnestad and Pramling Samuelsson 2012).

While both the Nordic and the international research up to the 1970s were preoccupied with the positive effects of ECEC for children over 3 years of age, research concerning younger children focused on the question of whether ECEC was damaging (Sjølund 1969). Additionally, previous research has been more occupied by what the youngest children could not do rather than focusing on their competencies (Larsen et al. 2011). These have been the significant arguments in terms of whether very young children should, or should not, attend ECEC. Pre-school teachers, as well as scientists, have focused on these issues (Johansen 2009; Jónsdóttir 2012; Løvgren and Gulbrandsen 2012; Stefansen and Farstad 2010).

With the noticeable increase in the number of children under 3 years of age in Nordic ECEC (Nordic Statistic 2013), there has also been an increase in research about this age group. Most Nordic studies have continued to be situated within a qualitative paradigm where four main themes can be identified. These include (1) relationships, peer culture and play; (2) learning, language and creation of meaning; (3) care and participation; and (4) effects of ECEC.

47.4.1 Relationships and Peer Culture

Løkken (1996, 2000, 2004) was one of the first researchers in the Nordic countries with a pedagogical background, who focused on toddlers in ECEC. She presented a phenomenological approach, inspired by the French philosopher Merleau-Ponty (Merleau-Ponty 1962) and the Canadian researcher van Manen (Van Manen 1991),

where the child's mind and body are seen as one unity. Løkken talks about intersubjectivity between human bodies, not only on a preverbal level but also on a prereflexive level, and explores a particular toddler culture that develops within the toddler groups in ECEC.

The interaction between children has also been investigated by other Nordic researchers (Alvestad 2010; Engdahl 2011; Greve 2007, 2009; Hellman 2010; Michélsen 2004), as well as the interaction between a child and a pre-school teacher (Brodin and Hylander 1999; Emilson 2008; Hansen 2013; Månsson 2011; Pálmadóttir and Einarsdóttir 2012; Ødegaard 2007). These studies indicate that the toddlers are able to establish friendship relations and negotiate with peers and that toddlers have their own culture, which evolves among the youngest in their everyday encounters in ECEC. Moreover, toddlers can communicate with body language, as well as verbal utterances. Several studies have found that toddlers with verbal skills are more likely to establish friendship relations, find playmates and dominate in conversations with teachers (Ødegaard 2007; Alvestad 2010; Greve and Winje 2012; Hansen 2013). Nærland's (2011) work identified that the toddler's competences as a dialogue partner are more important than linguistic skills when it comes to their social role.

47.4.2 Play, Learning and Creation of Meaning

Pramling Samuelsson (1994) introduced a phenomenographic understanding, an approach that sheds light on children's subjective world and their ways of creating understanding of the world around them. Hännikäinen (1995), in her doctorate thesis, developed the research methodology and theory of play by investigating the transition to role play as a developmental stage of play. The study emphasises the complexity of play and that play in general, and the transition to role play in particular, is impossible to grasp in full, even by combining two theoretical approaches and research traditions: the Piagetian and the Vygotskian.

The Nordic researchers Samuelsson (1994), Sheridan (2001), Hännikäinen (2001), Lindahl (2002), Einarsdottir (2006), Broström (2006) and Johansson (2008) are all exponents of an educational approach, inspired by the continental-European Bildung theory, where a child's Bildung, i.e. education and learning, is in focus, as well as elements, such as well-being and play. Here, play and learning, education and care are correlating phenomena that are united in the child's learning and development in the understanding of the child as a recognised participant, growing up in a democratic environment.

The connection between play and learning has been important elements in the Nordic understanding of the child's development in ECEC, and several attempts have been made in order to explain the dynamic correlation between them, both theoretical and in practice (Broström and Vejleskov 1999; Hirsh-Pasek et al. 2009; Johansson and Pramling Samuelsson 2011). In the concept of play and learning, 'play' is considered as an isolated activity having learning potential (Johansson

2011). Here, the assumption is that play and learning conducted in a dialectical relation would create coherence and consistency, as well as progression in the pedagogical environment (Broström 2013). Both Johansson and Pramling Samuelsson (2011) emphasise the need for a general acceptance from the surrounding society to exceed the common conception of play and learning and to understand both elements as important issues in humans' lifelong learning, e.g. in the national curricula for ECEC. One of the questions asked is shall the pre-school teacher be involved in the play or shall the play be protected from adult involvement? Nordic research, therefore, has studied the role of educational personnel in children's play in order to understand the practitioner's attitudes and opinions concerning children's play, as well as their views of their own roles and functions in relation to play (Einarsdottir 2002). The pre-school teachers seem to emphasise a supportive environment for play by providing ample space, time, materials and equipment. However, Einarsdottir (2006) found that the pre-school teachers play different roles during the children's free play where they can either be physically present and actively involved with children, or be at a distance, leaving the children alone. This can be seen as a combination of two pedagogical issues where on one hand, there is an emphasis on free play (Einarsdottir and Wagner 2006), while on the other hand, adults play a role in terms of playful learning and educational caregiving (Berthelsen et al. 2009; Broström and Hansen 2010; Johansson 2003; Løkken 2004; Sheridan et al. 2009). Pálmadóttir and Einarsdóttir (2015) studied toddler's views of pre-school teachers. The findings show that three main categories illustrate children's perspectives on the role of the pre-school teacher: (a) assistance connected to play situations and play material, (b) support connected to children's social interaction and (c) participation in play and playful actions. The findings reveal that the pre-school teacher's role in children's play reflected mainly 'traditional' views on children competences and Nordic pedagogical ideology on children's play and the roles of the pre-school teachers.

Research has been concentrated on learning in different forms. Lindahl (1996) emphasises the teacher's responsibility concerning learning for toddlers in ECEC. Her study showed that toddlers are competent, but they need support from the teacher in order to fulfil their (learning) projects. Johansson and Pramling Samuelsson (2001) discussed the connection between care and learning in a study with toddlers at mealtime, from Swedish pre-schools. Johansson (2003) found in her study in Swedish pre-schools that many teachers are aware of their responsibilities regarding their interaction with the small children in learning processes but that there is a need for more knowledge about relations between children and ethical perspectives, e.g. on conflicts between peers. Pre-school teachers are, it seems, sometimes confused where there is a concern on whether it is learning that should be their focus or whether it is play (Johansson and Pramling Samuelsson 2011). Further, there are structural conditions that have an impact on the free play, where, for example, it is difficult for practitioners to let playfulness be expressed, if there are too many children in the group. The challenge for the teacher is to reflect upon how to involve creativity, imagination and children's control in such situations. An example from practice is a song circle with toddlers, where the teacher controls with

explicit features in different creative forms. The teacher connects embodiment, meaningfulness and life worlds. Together with the children, they sing, dance and play with words, all in different pace. Joy and engagement are obvious in such a group activity (Johansson and Pramling Samuelsson 2011).

There are also several studies emphasising linguistic acquirement and children's use of conversation (Aukrust 1995; Johansson 2003; Ødegaard 2007; Grindland 2012; Hansen 2013). Aukrust (1995) showed how care and learning are interwoven during the changing of nappies, an activity that occurs several times during the day in ECEC. Aukrust (1995) found that the child is active in the interaction with the teacher and that the routines in connection to changing of nappies give the toddler language experiences that are important for language acquisition. Johansson (2003) investigated the encounters between teacher and children in ECEC and opportunities for learning within these encounters. She emphasises the importance of teachers' competences and possibilities of intimate interaction between teacher and child. Rutanen (2007) studied toddlers' negotiation with peers and teachers in their play with water. She observed that the teachers' intentions come into play by the ways in which they arrange and prepare the activity. The toddlers' actions correspond more and more with the teachers' intentions during the study. Ødegaard (2007) found that conversations at mealtime can give opportunities for talking about feelings and experiences that go beyond the actual moment here and now.

Regarding early numeracy and early literacy, Hannula et al. (2005) conducted a quasi-experimental study in a Finnish ECEC with 3-year-old toddlers. The aim of this study was to investigate whether it is possible to enhance children's tendency to spontaneously focus on numeracy. Björklund (2007) investigated toddlers' engagement with mathematics in ECEC and identified possibilities for learning. Similarly, Reis (2011) investigated young children's abilities to explore mathematics in ECEC. She found that toddlers' mathematical development is situated in the 'here-and-now' situations. Toddlers' ability to organise and sort rings on a tower is a crucial preparation for understanding of mathematics. Björklund (2008) studied early reading and literacy among toddlers in a Swedish pre-school. She found that children participate and interact while engaged in storytelling and reading, and toddlers are also engaged in early literacy activities in their daily life in ECEC.

47.4.3 Care and Education

The Nordic ECEC is characterised by a holistic view on education and care (Organisation for Economic Co-operation and Development (OECD) 2006). The Nordic countries' curricula state that pre-schools should provide children educational activities, where care, nurturing and learning should all form a part of the complete package. According to Johansson and Pramling Samuelsson (2001), caregivers with the lowest education in terms of qualifications have traditionally worked with the youngest children, and care has been more emphasised than education. Education has primarily been seen in the ECEC with the older pre-school children.

However, a combination of care and education is an important element in the Nordic pre-school, as well as for the youngest children (Broström and Hansen 2010).

Studies of everyday life involve elements such as care, ethics and children's crying (Johansson 1999; Eide 2008; Eide and Winger 2008; Rossholt 2010). The majority of the studies conclude that it is important that the teachers should involve and interact with the children and that the teachers should connect with the children mentally and physically. Os (2012) found in her study regarding the teachers' mediation of peer relations that there are two main involvements from teachers: (1) a drop-in involvement and (2) a lasting involvement. The latter is favourable for enhancing children's play. Abrahamsen (1997) emphasises the teacher's responsibility to comply with small children's emotional expressions.

Palmérus et al. (1991) conducted a pedagogical development project aimed at Swedish and Finnish pre-school teachers working in early childhood groups. In the beginning of the project, the pre-school teachers saw that their main task was to compensate for the mother's absence from their children while the mothers were at work. Most professionals also felt that care was the most important element when working with young children. Education was a secondary consideration. But, at the end of the project, the teachers emphasised educational care. Interestingly, the project identified that the pre-school teachers used care in an educational way.

A survey was conducted among Danish and Swedish pre-school teachers (Broström et al. 2012). In this survey, the Danish pre-school teachers found that education and learning are more difficult to work with than care. The Swedish pre-school teachers, however, are more familiar with the concepts of education and learning. In Norway, there was a general feeling expressed by pre-school teachers that the curriculum from 2006 placed more emphasis on learning, which they felt was to the detriment of care (Østrem et al. 2009). This is also the case in Iceland where the first national curriculum guidelines for pre-school published in 1999 was called Pedagogical Plan, but is now called Curriculum Guidelines.

Hundeide (2001), Lindahl (2002), Bae (2012), Einarsdottir (2006), Sheridan et al. (2009) and Broström and Hansen (2010) addressed different forms of careful dialogues that clarify care positions in education. By dialogue, we do not necessarily mean verbal talk. According to Merleau-Ponty (2010), communication may also be bodily meaning-making, for many cases of interactions with toddlers. Further, as we see it, these dialogues are not separate. They should be seen more as dialectic, where a different focus in teachers' strategies has a different appearance depending on the context and the child's aspirations.

Rutanen (2007) conducted a study that focuses on the negotiation of constraints and meaning construction among 2–3-year-old children, a pre-school teacher and the researcher in settings with water. The study follows the sociocultural tradition in psychology, particularly the co-constructivist theory of human development; Rutanen (2007) also found that children co-constructed novel movements and meanings in relation to the initiatives and objects offered. The participants attempted to make sense of the ambiguous intentions and fuzzy boundaries of promoted and possible actions: individualised yet overlapping features were continuously negotiated by all the participants. Throughout the months, children's actions increasingly

corresponded adults' (redefined) conceptions of 'water researchers' as an emerging group culture. Water became an instrument and a context for co-regulations.

47.4.4 *Effects of ECEC*

A Swedish research review (Holmgren 2009) suggested that toddlers at risk and toddlers from poor families particularly benefit from ECEC. High-quality ECEC may reduce the relation between child poverty and poor developmental outcomes. The same study showed that cognitive and language development improved when children entered a high-quality ECEC at an early age (Holmgren 2009). These results are supported by other projects, namely, the Norwegian Mother and Child Cohort study (Schjølberg et al. 2008; Zachrisson et al. 2009), a Swedish study of children's learning (Sheridan et al. 2009) and the EPPE study from Great Britain (Sylva et al. 2010).

From 2013, an ongoing project based on the quality and effectiveness in Norwegian ECEC is going to explore the characteristics and quality of different kinds of early years of provision and the kind of impact of various types of settings have on children's well-being, attainment, progress, learning and social, emotional and cognitive development (Doscher 2012).

In summary, the research in Nordic ECEC emphasises the importance of competent teachers with knowledge about a child's perspectives and the necessity of being close to the children in their encounters and interactions. What we lack information about, according to Bjørnestad and Pramling Samuelsson (2012), and what must be the subject of further research are processes of learning, children with another native language than the majority and didactic questions about our youngest children. We also need to investigate about the ECEC teacher training and development of the teaching profession (Bjørnestad and Pramling Samuelsson 2012).

47.5 ECEC for Children Under 3 Years Old in Nordic Countries: Some Challenges

The main challenges regarding ECEC for the children under 3 years of age in Nordic countries, as we see it, are (a) lack of trained teachers, staffs and large groups of children; (b) the relationship between learning and play; and (c) the development of policy based on research.

47.5.1 Lack of Trained Teachers, Staffs and Large Groups of Children

One important criterion for quality is educated teachers (Sheridan et al. 2009). In Norway and Iceland, the majority of those who work in ECEC are uneducated preschool teachers. Further, challenges and dilemmas in ECEC for toddlers, expressed by ECEC teachers in Iceland, Norway and Sweden, have been studied by a group of Nordic researchers (Alvestad et al. 2013). They found that a larger number of toddlers belonging to one group were one of the main challenges for the teachers. With a larger number of toddlers, the teachers had less time for an individual child. More children required more structure. Combined with lack of staffs, e.g. due to illness, the teachers experienced that the quality of the ECEC in groups with a large number of toddlers was challenged. In a Swedish survey of children from 30 to 54 months of age investigating the correlation between staffing and stress, Nielsen and Christoffersen (2009) found increased amounts of stress hormones, adrenalin and noradrenalin in children's urine after a change in staffing from three to five children per adult. This resulted in reduced well-being. Changes in staffing had a distinct effect on children, and they became 'worried and inhibited children' (Cederblad and Höök 1980; Hestbæk and Christoffersen 2002). In our opinion, these findings should be taken very seriously with reference to future development quality in ECEC for toddlers.

There is, however, new research, which points out that quality in ECEC for the under 3-year-olds is not just a question of staffing, but of the planned use of these resources. This means how pedagogical work with the children is planned, the size of each group and the age-range within the group (Hansen 2013). In this way, the Nordic countries also have a didactic tradition, where didactics are thought of as a framework within which pedagogical considerations and decisions are made. The reason for this didactic perspective in the Nordic countries is a basic social constructivism idea, which presupposes that the little child develops through relations to carers, friends and the surrounding world.

ECEC as a learning environment is thus first and foremost a secure place, where the child can experience solidarity with empathic teachers who manage to plan and implement activities and social contact suited to the child's stage of development, so that the child learns and develops through these relations. Didactic considerations in working with the youngest children require that the professional carer reflects self-critically about the pedagogic processes and takes into account stages of development, the intentions of learning plans and the physical framework of the institution, as well as children's perspectives, ideas and strengths. Thus, it is didactics that prepare the framework for a pedagogic perspective, which gives professionalism a direction towards creating a good social learning environment in ECEC. This has been shown by Hansen (2013) in his PhD thesis on interactions between toddlers and caregivers and underlines the importance of trained teachers with knowledge about the youngest children.

47.5.2 The Relationship Between Learning and Play

In line with the OECD's target of early intervention and learning for life (Longworth 2013; OECD 1996, 2012), the concept of learning has become more relevant in connection with day care. Biesta (2011) considers it as a challenge that the concept of learning is connected to both product and process. Governing documents for ECEC in all the Nordic countries lay great weight on play. However, it can also seem to be a turn towards more definite learning, if play is used to a greater extent as a means of learning and less as an activity with value in itself (Greve and Løndal 2012). Play gives children important experiences in a holistic perspective, as they form an understanding of their physical and social surroundings. This form for holistic learning can be linked to the concept of education, as an interaction between the child and the world is taking place (Greve and Løndal 2012).

A current project about adult participation in children's dramatic play showed that teachers in the Norwegian ECECs can have difficulties in organising the day in such a way that there is time and space for play in small groups where the teachers can take part (Greve and Kristensen 2013). The challenges faced by the teachers include many other obligatory activities (e.g. language training in special groups) and meetings. At the same time, it is also difficult to organise smaller groups when there are too many children per adult.

47.5.3 The Development of Policy Based on Research

The Nordic ECEC for the youngest children is facing challenges from various sides (Bennett 2010). Despite increased research and understanding, there are other factors, which form a basis for policies developed in the Nordic countries regarding ECEC, e.g. globalisation and an increased focus on schoolification (Greve and Solheim 2010). Here, the question is at what extent these factors can influence the future of ECEC in the Nordic countries. These countries are known for their desire to be an influential part of global society and to take part in globalisation. In the past 15 years, this has partially resulted in the welfare state taking the character of a competitive society (Campbell and Pedersen 2001). The combination of the welfare state and competitive society is based on a high level of education for both men and women. The institutionalised childhood has become a part of this welfare state, and ECEC has become a part of the education system, as a link in lifelong education (OECD 2004). At the same time, the political currents that create a basis for the practice of day-care institutions seem to become increasingly centred on learning. The typical Nordic ECEC model has placed the child in the centre for its pedagogics, which have been described by OECD (2006) as a social-pedagogic tradition. Childhood is regarded as having value in itself. This stands as a form for paradox to the more school-preparatory tradition, which has been emphasised to a greater extent in other countries. However, the tendency in recent years reveals that the

school-preparatory influence is also gaining a foothold in the Nordic countries. Ability tests have been introduced, which aim at ensuring that all children achieve general abilities, such as linguistic, motoric, social, etc. The target is that children will succeed in school (Frandsen et al. 2003). However, in Finland, there are no national assessments of the quality of ECEC, and as in Sweden, the assessment is first and foremost of the ECEC institutions and not directed towards an individual child.

The development of national and local policies in the Nordic countries, as in most of the world, is to a large extent based upon research. But, there might be a challenge to select the appropriate research results to be consulted when national and local policies are decided upon. As in other areas of research these years, there has been a tendency to emphasise the larger, longitudinal, quantitative research projects; however, little of these kinds of research take place in the Nordic countries. One example that has had an influence on the policy in the Nordic countries is a survey, which showed the economic advantages of ECEC: The Productivity Argument for Investing in Young Children (Cunha et al. 2005). This survey was not made by researchers from the pre-school area and is an example of policy, which stems from research made by other professionals, such as economists and teachers of special education. This research is more oriented towards profitability and remedial actions rather than a holistic approach to education and care with an emphasis on democracy, children's participation and Bildung. This has consequences on the policy, which is enforced (Greve and Solheim 2010), and can ultimately result as a threat to the typical Nordic ECEC model, where equality and togetherness are important elements.

Fröbel asserted already in the nineteenth century that a child's learning should start early, an idea which has, at present, been given increased relevance (Johansson and Pramling Samuelsson 2013; OECD 2012; Cunha et al. 2005). An English survey showed that children who have attended day care with well-trained personnel manage better at schools (Sylva et al. 2010). It is difficult to disagree with the view that quality pays.

At the same time, there can be a cause for concern as ECEC is moving steadily towards being preparatory to school, even in the Nordic countries (Johansson and Pramling Samuelsson 2013; Greve et al. 2013). In this current scenario, the focus is increased on the child's individual abilities in ECEC. The idea behind this is that the academic abilities are established in the early years of childhood. According to Kampmann (2004), this resulted in an additional focus on pedagogic, which would prepare the child to live up to the criteria of tests and evaluation, which were chosen centrally. The challenges influence our impression of what is normal and, thus, what is abnormal. The criteria for normality thus become an important part of the pedagogic basis upon which ECEC builds. Now, the question is whether criteria of normality can be established so early in a person's life, just as it is disputed whether play can become the secondary, and learning the primary, activity. Furthermore, it may also impose a challenge to adapt day-care possibilities for the under 3-year-olds, so that they do not end with a content of care and hygiene, while the pedagogic

activities for the over 3-year-olds can become more school-like. It may also create a problem that training of pedagogues has too little focus on the under 3-year-olds.

A common factor among the studies we referred to in this chapter is the fact that working with the youngest children demands a pedagogic environment with mutual, emotionally accepting interactions. We believe that there can be reasons to enquire how these relations take place in the present ECEC in the Nordic countries.

47.6 Discussion and Conclusions

This chapter can only give a brief view into a very wide range of pedagogical settings and different pedagogical traditions and research arenas. However, despite our shortcomings, we have tried to highlight what is distinctive and common to the Nordic approach in relation to play and learning, and care and education, where participation, democracy, respect for other cultures and religions and the possibility of achieving a healthy and stimulating upbringing are the key elements. We have also tried to demonstrate what some of the challenges are when attempts are made to ensure quality childcare and education because of labour and marked forces. In brief, the Nordic model is not split between childcare from birth to 3 years of age and pre-school from 3 to 6 years of age, but is holistic ECEC.

The Nordic pedagogic tradition emphasises democracy, equality, participation, influence, health and linguistic, well-being and social and cultural abilities. The concept of ECEC has developed as a consequence of two parallel and connected tendencies in socio-economic development, partly industrialisation, which resulted in a need for women entering the labour market, and partly emancipation, which was pronounced in the Nordic countries; this means that women should have an equal opportunity as men for both education and employment. During this development, children's well-being, learning and development became a matter of public interest. In the last half of the twentieth century, the modern families became dependent on ECEC units for taking care of their children during the working hours of the parents. Relevant training was developed for pedagogues who subsequently could be expected to ensure the children's needs. The political intention in the Nordic ECEC, from first to last, was to establish a pedagogical service that could give all children a good start in life with a great emphasis put on children's play, participation in learning about democracy and, not the least, the importance of recognising relations between adult and child. Equality, influence and solidarity are significant elements, which have great importance in all Nordic countries and are an integral part of the Nordic spirit. The constant relationship between social development and ECEC reflects the values in the pedagogic foundation of the Nordic countries. The Nordic pedagogic tradition is thus seen as a reflection, partly of social development and partly of the Nordic culture and the spirit of the Nordic people. Here, there is a strong foundation in an ideal of freedom, democracy, equality, influence and sustainability (Løgstrup 2010). But, also as shown in the chapter, an educational attention that emphasises the toddler as learning beings. However, toddlers in ECEC

represent an area that needs a continued focus, and an area where new research is needed.

References

Abrahamsen G. (1997). *Det nødvendige samspillet* [The necessary interaction]. Oslo: Tano.

Alvestad T. (2010). *Barnehagens relasjonelle verden - små barn som kompetente aktører i produktive forhandlinger* [Negotiations among the youngest children in pre-school]. Ph.D thesis, Gothenburg studies in educational sciences/Acta Universitatis Gothoburgensis.

Alvestad, T., Bergem, H., Eide, B., Johansson, J. E., Os, E., Pálmadóttir, H., Pramling Samuelsson, I., & Winger, N. (2013). Challenges and dilemmas expressed by teachers working in toddler groups in the Nordic countries. *Early Child Development and Care*. doi:10.1080/03004430.2013.807607.

Aukrust V. G. (1995). *Fortellinger fra stellerommet. To-åringer i barnehage. En studie av språkbruk – innhold og struktur* [A study of language – content and structure]. Ph.D thesis, Faculty of Education, Oslo University, Oslo.

Bae, B. (2012). Kraften i lekende samspill. Potensial for medvirkning og ytringsfrihet [The power in playful interaction. Potential for participation and liberty of expression]. In B. Bae (Ed.), *Medvirkning i barnehagen* [Participation in kindergarten] (pp. 33–56). Bergen: Fagbokforlaget.

Bennett, J. (2010). Pedagogy in early childhood services with special reference to Nordic approaches. *Psychological Science and Education, 3*, 16–21.

Berthelsen, D., Brownlee, J., & Johansson, E. (Eds.). (2009). *Participatory learning in the early years*. New York: Routledge.

Biesta, G. (2011). From learning cultures to educational cultures: Values and judgments in educational research and educational improvement. *International Journal of Early Childhood, 43*(3), 99–210.

Björklund C. (2007). *Hållpunkter för lärande. Småbarnsmöten med matematik* [Milestones for learning. Young children's encounters with mathematics]. Ph.D thesis, Åbo Akademisk förlag, Åbo.

Björklund, E. (2008). *Att erövra litteracitet. Små barns kommunikativa möten med berättande, bilder, text och tecken i förskolan* [To conquer literacy. Young children's communicative encounters with pictures, text and signs in ECEC]. Ph.D thesis, University of Gothenburg, Acta Universitatis Gothoburgensis, Göteborg.

Bjørnestad E, Pramling Samuelsson, I. (eds.) (2012). *Hva betyr livet i barnehagen for barn under tre år? En forskningsoversikt* [What does life in ECEC mean for children under the age of three? A research review]. Oslo: Oslo and Akershus University College.

Bowlby, J. (1951). *Maternal care and mental health: a report prepared on behalf of the World Health Organization as a contribution to the United Nations programme for the welfare of homeless children*, *Monograph series no. 2*. Geneva: WHO.

Brodin M, Hylander I. (1999). *Å bli seg selv. Daniel Sterns teori i barnehagens hverdag* [To become a self. Daniel Stern's theory in the pre-school's everyday life] Oslo: Pedagogisk Forum.

Broström, S. (2006). Care and education: Towards a new paradigm in early childhood education. *Child & Youth Care Forum, 35*(2), 391–409.

Broström, S. (2013). Læring i overgang mellem dagtilbud og skole. [Learning in transition from preschool to school]. *Pædagogisk psykologisk tidsskrift., 50*(3), 60–71.

Broström, S., & Hansen, O. H. (2010). Care and education in the Danish crèche. *International Journal of Early Childhood, 42*(2), 87–100.

Broström S, Vejleskov H. (1999). *Lærerig leg og legende læring*. [Learning play and playful learning]. Copenhagen: Danmarks Lærerhøjskole.

Broström, S., Frökjær, T., Johansson, I., & Sandberg, A. (2012). Pre-school teacher's view on learning in pre-school in Sweden and Denmark. *European Early Childhood Research Journal*, 1–14. doi:10.1080/1350293X.2012.746199.

Bruner J. (2004). *Uddannelseskulturen* [Culture of education]. Copenhagen: Hans Reitzels Forlag.

Campbell, J. L., & Pedersen, O. K. (2001). *Theories of neoliberalism and institutional analysis*. Oxford: Princeton University Press.

Cederblad M, Höök B (1980). *Daghemsvård för treåringar* [Daycare for three-year olds]. Stockholm: Karolinkska Institutet.

Cunha, F., Heckman, J. J., Lochner, L., & Masterov, D. V. (2005). Interpreting the evidence on life cycle skill formation. In E. A. Hanushek & F. Welch (Eds.), *Handbook of the economics of education* (pp. 697–805). Amsterdam: North Holland/Elsevier.

Doscher, C. (2012). *Better provision for Norway's children in ECEC*. Retrieved 2013–09.19 from http://www.hioa.no/Forskning-og-utvikling/Hva-forsker-HiOA-paa/FoU-LUI/Better-Provision-for-Norway-s-children-in-ECEC.

Eide, B. (2008). Barns medvirkning. Eksempler fra lekesituasjoner i barnehagen. [Children's participation. Examples from play situations in Pre-school]. *Barn, 26*(1), 43–62.

Eide, B. J., Winger, N. (Eds.). (2008). *Glimt fra små barns hverdagsliv i barnehage, 2. delrapport fra prosjektet "Barns omsorgskarrierer. Barnehagen som et ledd i en omsorgskjede for barn opp til 3 års alder."* [Glimpses of young children's everyday life in ECEC] Oslo: HiO-rapport nr. 18.

Einarsdottir, J. (2002). Tradition and trends: Practices and beliefs of two Icelandic pre-school teachers. *International Journal of Educational Policy, Research, and Practice, 3*(3), 47–68.

Einarsdottir, J. (2006). Between two continents. Between two traditions: Education and care in Icelandic pre-schools. In J. Einarsdottir & J. T. Wagner (Eds.), *Nordic childhoods and early education* (pp. 159–183). Greenwich: IAP.

Einarsdottir, J., & Wagner, J. T. (2006). Nordic ideals as reflected in Nordic childhoods and early education. In J. Einarsdottir & J. T. Wagner (Eds.), *Nordic childhoods and early education. Philosophy, research, policy and practice in Denmark, Finland, Iceland, Norway and Sweden* (pp. 1–12). Greenwich: Information Age Publishing.

Emilson, A (2008). *Det önskvärda barnet. Fostran uttryckt i vardagliga kommunikationshandlingar mellan lärare och barn i förskolan*. [The desirable child in pre-school – values communicated in teacher and child interactions]. Ph.D thesis, University of Gothenburg. Faculty of Education.

Engdahl, I. (2011). *Toddlers as social actors in the Swedish pre-school* Ph.D thesis, Stockholm University, Sweden.

Eydal, G. B., & Rostgaard, T. (2011). Gender equality revisited – changes in Nordic childcare policies in the 2000s. *Social Policy and Administration, 45*(2), 161–179. doi:10.1111/j.1467-9515.2010.00762.x.

Finnlex (1973). Retrieved from http://www.finlex.fi/sv/laki/alkup/1973/19730239.

Frandsen, F. S., Andersen, I. E., & Bech-Jørgensen, B. (2003). *Vefærd fremover – en udfordring* [Wellfare in the future – a challenge]. Copenhagen: Folketinget.

Greve, A. (2007). *Vennskap mellom små barn i barnehagen* [Friendship between toddlers in pre-school]. Ph.D thesis, Faculty of Education, Oslo University, Oslo.

Greve, A. (2009). Friendships and participation among young children in a Norwegian kindergarten. In D. Berthelsen, J. Brownlee, & E. Johansson (Eds.), *Participatory learning in the early years. Research and pedagogy* (pp. 78–92). London: Routledge.

Greve, A., & Kristensen, K. O. (2013). *Adult's participation in children's dramatic play in a Norwegian kindergarten*. Paper presented at OMEP- conference, Zagreb, Croatia, 8th–11th May 2013.

Greve, A., & Løndal, K. (2012). Læring for lek i barnehage og skolefritidsordning. [Learning for play i pre-school and after school program]. *Nordisk barnehageforskning, 5*(19), 1–14.

Greve, A., & Solheim, M. (2010). Research on children in ECEC under three in Norway: Increased volume, yet invisible. *International Journal of Early Childhood, 42*(2), 155–163.

Greve, A., & Winje, A. K. (2012). Friendships between one-year-olds in a Norwegian childcare institution (Barnehage). *Problemy Wczesnej Edukacji [Issues in early education], 4*(19), 42–56.

Greve, A., Jansen, T. T, & Solheim, M. (2013). *Kritisk og begeistret. Barnehagelærernes profesjonshistorie*. [Critical and enthusiastic. Pre-school teachers' professional history]. Bergen: Fagbokforlaget.

Grindland, B. (2012). På kanten av kaos. Om orden og uorden i måltidsfellesskap på småbarnsavdeling i barnehagen [At the edge of chaos. About order and disorder during mealtime with toddlers in ECEC]. In B. Bae (Ed.), *Medvirkning i barnehagen*. Potensialer i det uforutsette [Participation in kindergarten] (pp. 57–78). Fagbokforlaget: Bergen.

Halvorsen, K. (2011). *Nordic early childhood and care – effects and challenges. Research – practice – policy making*, *Report, Grand Hotel Oslo, 18–20th May, 2011*. Oslo: Norwegian Ministry of Education and Research.

Hännikäinen, M. (1995). *Nukesta vauvaksi ja lapsesta lääkäriksi: roolileikkiin siirtymisen tarkastelua piagetilaisesta ja kulttuurihistoriallisen toiminnan näkökulmasta* [A child, a baby doll and a doctor: the role of play – A piagean and cultural-historical activity perspective]. Jyväskylä: Jyväskylä University.

Hännikäinen, M. (2001). Playful actions as a sign of togetherness in daycare centres. *Journal of Early Years Education, 9*(2), 125–134.

Hännikäinen, M. (2010). 1 to 3-year-old children in daycare centres in Finland: An overview of eight doctoral dissertations. *International Journal of Early Childhood, 42*(2), 105–115.

Hannula, M., Mattinen, A., & Lehtinen, E. (2005). Does social interaction influence three year old children's tendency to focus on numerocity? A quasi-experimental study in daycare. In L. Verschaffel, E. De Corte, G. Kanselaar, & M. Valcke (Eds.), *Powerful environments for promoting deep conceptual and strategic learning* (pp. 63–80). Leuven: Leuven University Press.

Hansen, O. H. (2013). *Stemmer i fællesskabet* [Voices in the community]. Ph.D thesis, Aarhus Universitet, Copenhagen.

Hellman, A. (2010). *Kan Batman vara rosa? Förhandlingar om pojkighet och normalitet på en förskola* [Can Batman be pink? Negotiations of boyishness and normality in a kindergarten]. Ph.D thesis, Acta Universitatis Gothoburgensis, Göteborg.

Hestbæk, A. D, & Christoffersen M. N. (2002). *Effekter af dagpasning – en redegørelse for nationale og internationale forskningsresultater*. [Effects of daycare]. Copenhagen: Social Forsknings Institutet (SFI).

Hirsh-Pasek, K., Golinkoff, R. M., Berk, L. E., & Singer, D. G. (2009). *A mandate for playful learning in pre-school*. New York: Oxford University Press.

Holmgren, S. (2009). *Child daycare center or home care for children 12–40 months of age: What is best for the child? A systematic literature review (R 2009:09)*. Stockholm: Swedish National Institute of Public Health Retrieved from http://www.fhi.se/PageFiles/6290/R2009-09-Child-day-care-center-or-home-care.pdf.

Hundeide, K. (2001). *Ledet samspill fra spedbarn til skolealder* [Guided participation from infants to school-age] (2nd ed.). Nesbru: Vett & viten.

Jensen, B. (2007). A Nordic approach to early childhood education (ECE) and socially endangered children. *European Early Childhood Education Research Journal, 17*(1), 7–21.

Johansen, B. (2009). Førskolelærere om barns oppholdstid i barnehagen [Preschool teachers about children's attendance in kindergarten]. *Nordisk Barnehageforskning, 2*(3), 99–113.

Johansson E. (1999). *Etik i små barns värld: Om värden och normer bland de yngsta barnen i förskolan* [Ethics in young children's world. Values and norms among the youngest children in pre-school]. Ph.D thesis, University of Gothenburg, Acta Universitatis Gothoburgensis, Gothenburg.

Johansson, E. (2003). *Möten för lärande. Pedagogisk verksamhet för de yngsta barnen i förskolan*. [Meeting place for learning. Pedagogical action for the youngest children in pre-school]. Stockholm: Skolverket.

Johansson, J. E. (2008). *Children under three in daycare in the Nordic countries*. Paper presented at the 33rd Congress in Nordic Educational Research Association, Oslo.

Johansson, E., & Emilsson, A. (2010). Toddlers' life in Swedish preschool. *International Journal of Early Childhood., 42*(2), 165–179.

Johansson, E. (2011). Möten för lärande: pedagogisk verksamhet för de yngsta barnen i förskolan. [Encounters for learning: pedagogical activities for the youngest children in preschool]. Stockholm: Skolverket.

Johansson, E., & Pramling Samuelsson, I. (2001). Omsorg – en central aspekt av förskolepedagogiken. Exemplet måltiden. [Care – a central aspect of pre-school pedagogic. Example the meal.]. *Pedagogisk forskning i Sverige, 6*(12), 81–101.

Johansson, E., & Pramling Samuelsson, I. (2011). *Lærerig leg – børns læring gennem samspill* [Playful learning – children's learning through interaction]. Frederikshavn: DAFOLO.

Johansson, J. E., & Pramling Samuelsson, I. (2013). En demokratisk pedaogogik i samspel med barnen. [A democratic pedagogic interaction with children]. In A. Greve, S. Mørreaunet, & N. Winger (Eds.), *Ytringer om likeverd, demokrati og relasjonsbygging i barnehagen* [Expressions of equality, democracy and building relationships in the kindergarten] (pp. 91–103). Bergen: Fagbokforlaget.

Jónsdóttir, A. H. (2012). *Professional roles, leadership and identities of Icelandic preschool teachers: Perceptions of stakeholders*. Ph.D thesis, Institute of Education, University of London. Sótt 18. október 2013 af. http://hdl.handle.net/1946/13199.

Kampmann, J. (2004). Beyond the Competent Child: Exploring contemporary childhoods in the Nordic welfare societies. In H. Brembeck, B. Johansson, & J. Kampmann (Eds.), *Societalization of childhood: New opportunities? New demands?* (pp. 127–152). Frederiksberg: Roskilde Universitetsforlag.

Korsvold, T. (2008). *Barn og barndom i velferdsstatens småbarnspolitikk* [Children and childhood in the welfare states toddler policy]. Oslo: Universitetsforlaget.

Larsen, M. S, Jensen B, Johansson I, Moser T, Ploug N, Kousholt D. (2011). *Forskningskortlægning og forskervurdering af skandinavisk forskning i året 2009 i institutioner for de 0–6årige (førskolen)*. [Research review and research assessment of Scandinavian research in the year 2009 in institutions for the 0–6 years old children (pre-school)]. Dansk Clearing house for Uddannelsesforskning, DPU, Aarhus Universitet.

Lindahl, M. (1996). *Inlärning och erfarande. Ettåringers möte med förskolans värld*. [Learning and experience. One year olds meeting with the pre-school]. Ph.D thesis, Acta Universitatis Gothoburgensis, Gothenburg.

Lindahl, M. (2002). *Vårda – vägleda – lära [Caring – Guiding – Teaching]*. Gothenburg: Acta Universitatis Gothoburgensis.

Løgstrup, K. E. (2010). *Den etiske fordring* [The ethical challenge] (4th ed.). Århus: Klim.

Løkken, G. (1996). *Når små barn møtes*. [When small children meet]. Oslo: Cappelen Akademisk Forlag.

Løkken, G. (2000). *Toddler peer culture: The social style of one and two year old body-subjects in everyday interaction*. Ph.D. thesis, Norwegian University of Science and Technology (NTNU), Trondheim.

Løkken, G. (2004). *Toddlerkultur*. [Toddler culture]. Oslo: Cappelen Akademisk.

Longworth, N. (2013). *Lifelong learning in action*. London: Kogan-page.

Løvgren, M., & Gulbrandsen, L. (2012). How early and how long? *Nordisk Barnehageforskning, 5*(7), 1–9.

Månsson, A. (2011). Becoming a preschool child: Subjectification in toddlers during their introduction to preschool, from a gender perspective. *International Journal of Early Childhood, 43*(1), 7–22.

Merleau-Ponty, M. (1962). *Phenomenology of perception*. London: Routledge.

Merleau-Ponty, M. (2010). *Child psychology and pedagogy*. Evanston: North-western University Press.

Michélsen E. (2004). *Kamratsamspel på småbarnsavdelingar* [Friendship relations in crèches]. Ph.D. thesis, University of Stockholm, Stockholm.
Nærland, T. (2011). *Social status and communicative competence in pre-school years: An observation-based approach*. Ph.D. thesis, University of Oslo, Department of Special Needs Education, Oslo.
Nielsen, A. A., & Christoffersen, M. N. (2009). *Børnehavens betydning for børns udvikling*. [The pre-school's impact on children's development]. Copenhagen: SFI – Det Nationale Forskningscenter for Velfærd.
Nordic Statistic (2013). Nordic statistics. Retrieved from Table: CHIL03: Children in day-care by reporting country, age, type, and time. http://91.208.143.50/pxweb/pxwebnordic/dialog/statfile1.asp.
Ødegaard E. E. (2007). *Meningsskaping i barnehagen: innhold og bruk av barns og voksnes Samtalefortellinger* [Meaning creation in kindergartens: the content and use of children's and adults' conversation stories] (Ph. D.-thesis). Gothenburg: Gothenburg Studies in Educational Sciences.
Organisation for Economic Co-operation and Development [OECD]. (1996). *Lifelong learning for all*. Paris: Organisation for Economic Co-Operation and Development.
Organisation for Economic Co-operation and Development [OECD]. (2004). *Completing the foundation for lifelong learning*. Paris: OECD, Studien Verlag.
Organisation for Economic Co-operation and Development [OECD]. (2006). *Starting strong II. Early childhood education and care*. Paris: Organisation for Economic Co-operation and Development.
Organisation for Economic Co-operation and Development [OECD] (2012). Starting strong III. A quality toolbox for early childhood education and care. Retrieved from http://www.oecd.org/edu/school/startingstrongiii-aqualitytoolboxforearlychildhoodeducationandcare.htm.
Os, E. (2012). *Skal, skal ikke….: Voksnes mediering av jevnaldringsrelasjoner i små barns lek* [Should, should not…: Adult mediation of peer relationships in small children's play]. Nordisk barnehageforskning (forthcoming).
Østrem, S., Bjar, H., Føsker, L.I., Hogsnes, H. D., Jansen, T. T., Nordtømme, S., & Tholin, K. R. (2009). *Alle teller mer. En evaluering av hvordan rammeplanen for barnehagens innhold og oppgaver blir forstått, brukt og erfart* [All matters more. An evaluation of how the curriculum for kindergarten's content and tasks are understood, used and experienced] Tønsberg: Vestfold University College.
Pálmadóttir, H., & Einarsdóttir, J. (2012). Yngstuleikskólabörnin. *Samfélag í leik [The youngest pre-school children: Community in play] Uppeldiogmenntun, 21*(2), 43–69.
Pálmadóttir, H., Einarsdóttir, J. (2015). Young children´s views of the role of prescool educators. *Early Child Development and Care*, 185(9), 1480–1494.
Palmérus, K., Pramling, I., & Lindahl, M. (1991). *Daghemför småbarn [Nurseries for small children]*. Gothenburg: University of Gothenburg.
Pramling Samuelsson, I. (1994). *Kunnandets grunder prövning av en fenomenografisk ansats till att utveckla barns sätt att uppfatta sin omvärld.* [The grounds of educations examination of phenomenographically to develop the child's way of perceiving the world around them]. Gothenburg: Acta Universitatis Gothoburgensis.
Reis, M. (2011). *Att ordna, från ordning till ordning Yngre förskolebarnsmatematiserande* [To order, from order to order: Toddlers' mathematizing]. Ph.D thesis, Gothenburg University, Gothenburg. Retrieved from http://hdl.handle.net/2077/27889.
Retsinformation. (2012). *Dagtilbudsloven*. Retrieved from http://www.retsinformation.dk/.
Rifbjerg, S. (1966). *Træk af den moderne opdragelses historie*. [Sides of the modern upbringing history]. Copenhagen: Gyldendal.
Rossholt, N. (2010). Gråtens mange ansikter; toner og tempo i barnehagen [The many faced cry. Tones and tempo in pre-school]. *Nordic Studies in Education, 30*, 102–115 Retrieved from http://www.idunn.no/ts/np/2010/02/art03.

Rutanen, N. (2007). *Water in action. Encounters among 2- to 3-year-old children, adults, and water in daycare*. Ph.D thesis, University of Helsinki.

Schjølberg S, Lekhal R, Wang, M.V, Zambrana, I.M, Mathiesen, K. S, Magnus P, Roth C. (2008). Delayed language development. Report 2008:10, Norwegian Institute of Public Health.

Sheridan, S. (2001). *Pedagogical quality in pre-school. An issue of perspectives*. Ph.D. thesis, Acta Universitatis Gothoburgensis, Gothenburg.

Sheridan, S., Pramling Samuelsson, I., & Johansson, E. (2009). *Barns tidiga lärande. [The child's early learning]*. Gothenburg: University of Gothenburg.

Sjølund, A. (1969). *Børnehavens og vuggestuens betydning for barnets udvikling. En analyse av foreliggende undersøgelser [The effect of daycare institutions on children's development. An analysis of present research reports]*. Copenhagen: Social Forsknings Instituttet.

Skard, Å. G. (1954). *Hva kan vi vente av barn på ulike alderstrinn [What can we expect from children at different ages]* (Vol. 1). Oslo: Sosialdepartementets småskrift.

Stefansen, K., & Farstad, G. (2010). Classed parental practices in a modern welfare state: Caring for the under threes in Norway. *Critical Social Policy, 30*(1), 120–141. doi:10.1177/0261018309350811.

Stern, D. N. (2004). *The present moment in psychotherapy and everyday life*. New York: W.W. Norton.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (Eds.). (2010). *Early childhood matters: Evidence from the effective pre-school and primary education project*. London: Routledge.

Van Manen, M. (1991). *The tact of teaching: The meaning of pedagogical thoughtfulness*. Albany: State University of New York Press.

Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: MIT Press.

Zachrisson, H. D., Lekhal, R., & S., S. (2009). Barnehage og psykisk helse hos sped – og småbarn. In V. Moe, K. Slinning, & M. Bergum Hansen (Eds.), *Håndbok i sped – og småbarnspsykiske helse [Handbook in infants' and small children's mental health]*. Oslo: Gyldendal Chapter 39.

Chapter 48
Values in Nordic Early Childhood Education: Democracy and the Child's Perspective

Anette Emilson and Eva Johansson

Abstract The aim of this chapter is to outline and discuss the development of Nordic research on democracy in the field of early childhood education and care (ECEC). We will show how research over a relatively short time has altered from normative and political arguments for democracy in ECEC via an interest in how to implement and operationalize democratic ideas into practice, leading towards a more critical approach addressing complexity to democracy. Through this process a new concept of democracy connected with shared life and pluralism appears to emerge. Communication becomes important. In turn, ambiguity and even conflicting ideas appears to be accepted as a base for democracy.

Keywords Democracy • Child's perspective • Influence • Participation • Children's rights • ECEC

Nordic early childhood education is often described as being deeply rooted in the idea of lifelong learning where democracy plays a significant role even among the youngest children in the educational process. From Organisation for Economic Cooperation and Development, OECD, reports (2001, 2006, 2012) we learn that ECEC in the Nordic countries is built upon democracy and equality. The child's perspective as a base for education is also viewed to be important. Nordic ECEC programmes are known to be of high quality and in the forefront when it comes to democracy issues, also in an international perspective (OECD 2001, 2006, 2012). Moss (2007) argues for Nordic ECEC settings as places of political practice – and specifically of democratic political practice (p. 6). A democratic political practice is neither evident nor self-driven – the issue of democracy in ECEC settings is a choice to make and strive for:

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> Democratic participation is an important criterion of citizenship: it is a means by which children and adults can participate with others in shaping decisions affecting themselves, groups of which they are members and the wider society. It is also a means of resisting power and its will to govern, and the forms of oppression and injustice that arise from the unrestrained exercise of power. Last but not least, democracy creates the possibility for diversity to flourish. By so doing, it offers the best environment for the production of new thinking and new practice. (Moss 2007, p. 6)

But what do we know about democracy processes in the field of ECEC in the Nordic countries, and what kind of research is available? How do ECEC researchers approach democracy issues and what kind of dilemmas can be identified?

This chapter reports on a study in which we have analysed research on democracy issues connected to ECEC institutions in the Nordic countries and presented in international scholarly journals, published PhD theses and a few books during the period of year 2000–2013. Used data links are foremost ERIC and Google Scholar. To find available research keywords as democracy, ECEC settings, teachers and children, children's perspectives, participation and influence are combined in different ways. This resulted in 91 publications in total, of which all adopt a qualitative approach. One study used both qualitative and quantitative methods. Approximately two-thirds of the studies were based on empirical data (mainly observations and interviews), and one-third addressed more theoretical/political/normative issues (see Appendix).

Dominating research was found in Sweden (51 publications) and Norway (21 publications), a few publications were connected from Denmark (6), Finland (5) and Iceland (4). Four publications addressed a Nordic perspective and also represented a particular country[1], and three (3) publications referred to two or three Nordic countries. We have carefully read the publications in order to identify approaches to democracy, research questions and available results. This is a hermeneutic process (Riceour 1971) where different readings may lead to more complex understandings of the issues, questions and results.

The result of the analyses inform changes and/or different discourses in the performed research, in the questions raised and the identified dilemmas connected to democracy in ECEC institutions. The research process in this field seems to start with notions of democracy, children's rights and children's perspectives, often from an ideological and theoretical point of view. Then the argumentation seems to become more and more empirically grounded, focused on how to implement these democratic ideas in ECEC. Alongside these approaches is a more critical approach where dilemmas and contradictions on how to define democracy, how children can participate and how the child's perspective are addressed. This means that we suggest some kind of timeline for how the research on democracy in ECEC has changed in focus during this period, from foremost being ideological to the more practical and then the more critical. Suggested timeline should however not be

[1] Two publications also represented Denmark, one publication also represented Finland and another publication represented a 'pure' Nordic perspective. For details on the different studies, please see Appendix.

viewed as definite. There are studies crossing the line: early studies that are both close to practice and critical and later studies of theoretical and ideological character.

From previous research, three main arguments are outlined: children's rights to democracy, children as active participants and preschool as a democratic arena. The arguments can be seen as ideologically, empirically or critically based. These different approaches reflect how the research interest, to some extent, has changed over time from a normative, political and rhetorical argument to one focussed on how to transform and implement the democratic ideas into concrete praxis. It also now raises critical questions about preschool as a democratic arena.

48.1 Children's Participation and Rights to Democracy: A Normative Argument

In the beginning of this century, children's rights to democracy were strongly emphasised, both in research and in the political debate in the Nordic countries. The argumentation was often based on United Nations Convention on the Rights of the Child 1989 (Bartley 2001; Broström 2006, 2012; Einarsdottir 2005, 2010; Lindahl 2005; Lindgren and Halldén 2001; Moss 2007). The Convention describes the rights of children, regardless of class, gender, ethnicity and age. In turn, it means that, for signatory countries, the Convention should be followed, irrespective of context and situation. This context independence, based on rational insights about what is the best for children, has been problematized by Bartley (2001). She argues that realising rights also requires a societal framework. The challenge, according to Bartley, is to transform these abstract constructions into concrete human rights and to apply them in everyday life. Several studies from this time were occupied with how to concretize the Convention, based on a normative and ideological argumentation rather than on empirical studies (i.e. Bartley 2001; Broström 2005; Lindahl 2005; Lindgren and Halldén 2001; Moss 2007).

In the Nordic countries, the Convention was rapidly and enthusiastically ratified and, with that, followed a view of children as fully vested human beings (Broström 2005). Thus, to view children as citizens with specific rights, like adults, can be seen as relatively new, and this radical change has been conceptualised by Sommer (1998) as a paradigm shift. This shift holds a view of children as competent and capable of learning how to manage the environment in an autonomous way. Children are described as reflecting, observing and reasoning persons who experiment, draw conclusions and solve problems. Gaining access to children's perspectives is not only about their rights, it is a matter of getting information from people involved in education. This also demands ethical considerations (Broström 2012; Dahlberg et al. 2002; Johansson 1999; Lindahl 1996; Pramling 1983; Qvarsell 2001; Öberg 2003).

A lot of researchers started to seek an understanding of what it is for adults to come close to children's perspectives (e.g. Einarsdottir et al. 2009; Halldén 2003;

Johansson 2003, 2011b; Løkken et al. 2006; Løkken 2008; Pramling Samuelsson and Sheridan 2003; Puroila et al. 2012; Qvarsell 2003; Sommer 2003; Sommer et al. 2010). Research showed that children's perspectives were used and understood differently by adults and children.

In different definitions of children's perspectives, the common emphasis is on the child's own experiences, intentions and understandings. Focus is on the child as a subject and how adults must try to come close to, respect and understand the child's life-worlds. A child perspective, on the other hand, is described as created by adults who are working for children's best. This stance focuses on the group of children in society and the objectification of children (Halldén 2003; Pramling Samuelsson and Pramling 2009; Sommer et al. 2010). Thus, the two perspectives concern different levels, a micro and a macro level, and can be seen as useful in different ways. In relation to democracy, there is an argument that adults' closeness to the child's perspective is necessary for children to participate, with participation seen as every child's right (Bae 2010; Emilson 2008; Lindahl 2002; Pramling Samuelsson and Sheridan 2003; Sandberg and Eriksson 2008). Thus, participation and children's perspective are considered as interdependent concepts (Pramling Samuelsson and Sheridan 2003).

An interesting issue, raised by Bae (2004) and Østrem (2012), for example, is the discussion about recognising the child as subject based on Schibbyes' (1993) theoretical ideas. For children to be recognised as a subject means to be given status as an equal participant in interpersonal encounters. This discourse is based on an ethical and philosophical, but also a psychological, discussion about what it means to be a human and how to create a good life and a good society. Children's rights to be heard, or the child's perspective, have also been stressed as an important political instrument in the changed welfare state (Broström 2012; Lindgren and Halldén 2001; Qvarsell 2003). The point is that the UN Convention must be taken into account in every political decision concerning children. Lindgren and Halldén (2001) ask in the beginning of this century why the interest currently is so focused on children's voices and portrayals of children as autonomous and competent. The only reasonable answer, according to the researchers, is a desire to more clearly view children as political subjects. Eleven years later, Broström (2012) stresses that children are political subjects since they have achieved status as equal democratic members of society. He has identified a shift in focus in ECEC in the Nordic countries, from a situation where teacher's ambition is to cooperate with children to a situation where children really influence and participate in planning the educational processes.

How to make use of children's perspectives and their rights to participation and influence is an ongoing concern. Recent research is very occupied with children's participation, not only in a theoretical and rhetorical manner but also as it is expressed in practice. So far the normative argumentation that favours children's rights to democracy has been presented. Next we will outline some essential results from empirical studies, focused on how democracy appears in ECEC practice.

48.2 Children's Participation and Rights to Democracy: An Empirical Argument

Above we have shown that participation and emergent democracy learning are stressed as children's rights and that the child's perspective is emphasised and used as an umbrella term embracing a variety of interdependent concepts and philosophical stances (Sommer et al. 2010). Now we will present empirical research focused on how such ideas appear and are expressed in practice.

Recently there have been several studies analysing concrete expressions of democracy work in preschool (e.g. Bae 2009; Eide et al. 2012; Emilson and Folkesson 2006; Emilson 2007, 2008; Emilson and Johansson 2009, 2013; Hännikäinen and Rasku-Puttonen 2010; Johansson 2007; Karlsson 2009; Rydjord Tholin and Thorsby Jansen 2011; Grindheim 2011; Puroila et al. 2012; Qvarsell 2011; Westlund 2011). The studies are often focused on teachers' attitudes to or understandings of democracy but also on how democracy is expressed in teacher and child interactions. There are, however, other studies concerning rights and democracy from the perspectives of children, but still such studies are underrepresented in Nordic research (e.g. see Johansson 2007).

The most common fundamental idea in studies during this time is the view of children as active and competent participants in their everyday life in preschool. Commonly, participation is associated with opportunities to take the initiative and to make choices. It may seen to be letting children do what they want to do during a day. This, in turn, appears as conditional upon teachers' attitudes, their use of power and rules and their trust in children's contributions (Eide et al. 2012; Einarsdottir 2005, 2010, 2011; Ekström 2006; Emilson 2007; Emilson and Folkesson 2006; Emilson and Johansson 2013; Hännikäinen and Rasku-Puttonen 2010; Puroila et al. 2012; Sheridan 2001; Rydjord Tholin and Thorsby Jansen 2011). Sandberg and Eriksson (2008) have identified that adults in preschool define participation in three ways: (1) the ability to influence, (2) the sense of belonging and (3) the performance of activity. Another research finding is that adults in preschool understand children's participation in terms of self-determination and individual freedom to choose why emergent democracy learning in terms of participation becomes individual oriented (Bae 2010; Emilson 2007; Kjørholt 2005; Østrem et al. 2009; Seland 2009; Westlund 2011).

Research has shown that this individual-oriented idea often appears to be the basis of teachers' democracy work in preschool (Emilson 2007, 2008; Kjørholt 2005; Westlund 2011), and the concrete expressions of this is letting children make their own choices. Children are often encouraged to make their own choice without allowing themselves to be influenced by others (e.g. Westlund 2011). Nevertheless, from a study about communicated values between teachers and toddlers in preschool, Emilson and Johansson (2009) conclude that the values of influence and participation have different orientations. While influence in preschool often has an individual orientation, the value of participation is more collectively oriented.

48.3 Spaces for Participation

Previous research shows that children's participation is given space when the teacher's control of the content and form of the communication is weak and characterised by closeness to the child's perspective, emotional presence and playfulness (Bae 2009; Emilson 2007, 2008; Emilson and Folkesson 2006; Emilson and Johansson 2009, 2013). Bae (2012) describes such relational qualities in child-adult communication by using the metaphor of spacious patterns. She has shown how spacious patterns hold a dialogical atmosphere including silent features such as focused attention on the part of teachers, tolerance of mistakes, willingness to admit misunderstandings, relatively few closed questions, emotional expressivity and a playful attitude. According to Bae, such relational premises create opportunities for children to exert their right to participate and express their views. Johansson (2013) claims that communication, in a broad sense, concerns democracy and the possibility for children to be part of the communicative society (culture) in preschool. To gain access to language, to learn about codes of communication and to be an active participant in the communicative culture are essential, yet not evident, for all children. Children with minority language, for example, seem to be overlooked as active partners in the ongoing dialogues (also Zachrisen 2013). Zachrisen (2013) shows how children with minority language are ignored, becoming silent and often given/taking following rather than driving positions in interethnic play. Palludan (2007) illuminates how teachers' voices influence whether children are included or not in the continuing dialogues in preschool. According to Palludan, children with minority ethnic backgrounds are most likely to being excluded. This may be due to the particular ways in which teachers address and tune in their intentions to these children. Hundeide (2003) has especially pointed out the informal dialogue with a sensitive adult able to tune into the child and use positive emotional expressions. Such dialogue is especially prevalent with infants and their caregivers, but according to Hundeide, this emotional dialogue continues through the whole lifespan. Thus, there seems to be concordance between a qualitative communication to communicate participation. Emilson (2008) has also shown how the how aspect of the communication is related to the what aspect, that is, how teachers communicate influences what is possible to actually mediate. This means that democratic values, such as participation and influence, cannot be communicated in any way. Specific communication qualities such as those mentioned above, are needed. When more strategic communication occurs and when the teacher maintains control over the communication, the value of participation seems to vanish (Emilson 2008; Emilson and Johansson 2013).

Also Grindland (2011) has shown how control in terms of social order can restrict children's participation. In a study focused on practitioners' talk about mealtimes in preschool, she found two competing discourses: order and exploration. While the discourse of order restricted participation, the discourse of exploration seemed to give room for children's participation on their own terms.

Thus, several studies highlight situations of an informal character as essential for children's participation and influence. The argument is that these situations seem to feature important characteristics for emergent democracy learning that may be summarised as mutual understanding and respect between the child and the adult. These, in turn, lead to more evenly distributed power between the two parties (e.g. Emilson 2008). It is important, however, to emphasise that formal situations do not automatically mean limited opportunities for children's participation and influence. Formal situations can also be based on what Bae (2009) conceptualised as 'spacious patterns' where both children and teachers can contribute to the communication (also, e.g. Emilson 2007).

So too, Alasuutari and Karila (2010) describe how conceptions of childhood and the functions of ECEC settings are rooted in traditional discourses, approaches and practices and leads to the fact that the child's view and the child as an agent in her ⁄his world is not present. Hännikäinen and Rasku-Puttonen (2010) indicate contrasting results. From a study of the social construction of participation in joint activities, they revealed how children's participation was supported in many ways in both contexts. Teachers invited children to participate, by supporting them in joint activities and providing appropriate scaffolding based on children's interests and needs. The teachers treated the children as worthy members of a community by listening to their proposals, posing questions, respecting their views and being interested in their world. These practices, conclude the authors, reflect the efforts made by teachers to stimulate learning as interaction and engagement in collective meaning-making. Kultti (2012), also Grindheim (2011), and Rydjord Tholin and Thorsby Jansen (2011) point to similar results in a recent study with toddlers in preschool. Analyses revealed ample space for individual participation in social activities and for children to manage or change their level of participation. Various resources for participation (other than verbal communication) were offered, such as repetition of actions, use of artefacts and involvement in music (p. 172).

48.4 Participation and Structure

There seems to be an agreement that participation is connected also to structure. Studies taking this into account are, however, rare. In a recent study, Melin (2013) seeks to explain social participation for children with and without Down's syndrome. The analyses show that preschool structures impact the situation in which the interaction and the actions of the individual occur and, thus, the emergence of social participation. There were also important relationships between structure and agency that allowed children's social participation in collective activities. Four aspects of social participation appeared to constitute the structure and define the basic properties and nature of social participation. The aspects were 'belonging to the preschool', 'interpersonal interaction leading to acknowledge', 'commitment' and 'situational dependent autonomy'. Internal relationships between these aspects,

concludes the author, are open for social participation, which, in turn, coordinate roles and produce cooperative activity (p. 212).

Another result from previous research is that children's participation is conditional on children's own willingness to participate. Children are often obliged to participate in preschool activities. Yet it is also shown that they often are present on their own terms, which means that they can decide how involved they want to be (Emilson and Johansson 2013). Participation in preschool is, therefore, both about being involved at the invitation of others and taking the initiative to get involved. By that, participation can be seen as both a right and an obligation. As a right, the value refers to being part of something, the right to being included and accepted but also the right to be engaged and to have access to needed resources (Molin 2004). Participation, in turn, as an obligation appears as an expectation and a responsibility to contribute to the community and also to maintain social order (Emilson and Johansson 2013). One can, however, ask if participation always relates to the degree of activity. The question is if an observing child can experience participation in almost the same way as a child who takes a lot of initiative. The concept of participation is ambiguous and without a unitary understanding. Put simply, it has different meanings in different contexts.

Children's participation in relation to gender, for example, reveals conflicting results. On the one hand, research has highlighted that boys in preschool dominate, initiate and interact with pedagogues to a significantly greater extent than girls (e.g. Månsson 2000). Recent research, however, has suggested that girls are more likely to seek and achieve influence in educational activities, and it is also revealed that they seem to be more comfortable in such an active position than the boys (Emilson and Johansson 2013; Hellman 2010; Tallberg Broman et al. 2002). Other research has shown that children are able to both maintain and transgress traditional gender patterns at the same time as stereotyped expectations from teachers and friends (Eidevald 2009; Hellman 2010). Löfdahl and Hägglund (2007) have shown how a common traditional ring game holds several gender stereotypes. The ring game was chosen to deliberately encourage children's participation, but instead the children's acting became a reproduction of social segregation of gender and of age. Emilson and Johansson (2013) suggest that participation also is conditional on age, competence, needs, position and ethnicity. Participation as a gender question is, indeed, complex.

48.5 Democracy from Children's Perspectives

Research studies on democracy and rights from the perspectives of children are, as we have already indicated, rare in the Nordic countries, with the few exceptions mostly referring to Swedish ECEC contexts. This means that children's voices, to a large extent, are still underrepresented in Nordic research despite the claim of a strong discourse about children's viewpoints being sought and respected (e.g.

Brostöm 2006; Einarsdottir et al. 2009; Engdahl 2011; Greve 2006; Johansson 1999, 2007, 2011c; Lindahl 1996; Løkken 2000; Michélsen 2005; Pramling 1983).

The studies conducted differ from interest in children's experiences of values, to inclusion/exclusion processes between children and children's strategies for social order. Initially, Johansson (1999, also 2007, 2011a,b) studied communication of values between children in preschool. Johansson found rights to be a central issue from the perspectives of children. Even the youngest children appeared to experience their own and others' rights as important values in their interplay. The children were concerned about their right to things, to share worlds with others, to have an opinion and raise their voice on matters of their interest. Rights from the perspective of children appeared to have existential meaning as part of children's life-worlds in a phenomenological sense (Merleau-Ponty 1962). Alvestad (2010) took an interest in how preschool children negotiate in play. Children gain insight in what kind of strategies are useful and how they can influence and change their play agreements. He describes children as competent and creative negotiation partners driven by a strong interest to uphold their interplay and their relations. Löfdahl (2006) studied how children make use of content in play to gain position in their peer culture. Through interpreting communication in play, Löfdahl identified various strategies for positioning used by children. Apart from efforts to gain significant props in play, the children referred to age, appearance, clothes and other personal traits, to reach a desirable position in play. The results illuminated how children contribute to values of both inequality and justice in their community. In addition, Löfdahl and Hägglund (2007) investigated preschool children's communication in relation to social participation and power. Analyses revealed how children's social representations of power and participation in play included various justifications for joining or not joining the play. Children developed strategies for allowing exceptions to the main rule that 'anyone can join'. A strong argument for exclusion concerned age and was expressed as 'smaller is less value'. Younger children were referred to as less attractive, having less social status and as being incapable of making decisions for the group.

Markström and Halldén (2009) studied children's strategies for influencing, defending and constructing social order in preschool. Preschool is a particular context for children's agency both as individuals and for the sake of the collective, write the authors (p. 120). Even though there is a high degree of routinized activity, there are possibilities for children (and teachers) to negotiate the social order. The children employ social practices that enable them to use the resources and restrictions in various ways. They use strategies for ignoring and negotiating the boarders. Through collaborating and rescuing, children play and act as if the institution is a child's place. The authors' conclusion was that preschool is defined by the perspective used, that is, that of the children or that of the adults.

Karlsson (2009) studied democratic values communicated between 3- and 6-year-old children. Democratic values, according to Karlsson, are about responsibility, care and respect. Children's agency, defined as influence through action, was considered in relation to the values communicated. In addition gender differences were analysed according to agency. The study revealed how children initiate respon-

sibility for everyday matters on behalf of themselves and others. Care was expressed when children related to the needs of others and supported each other within their community. Children's way of caring were sometimes at odds with the perspectives of the adults. Respect was expressed when children acted to benefit the interest of peers, but also to obey and respect rules and teachers' positions.

Possibilities for participation among peers in their play was analysed by Grindheim (2011). The community of peers in kindergarten was seen as an arena for democracy. Children were regarded as creators of citizenship through participatory processes in their local play-communities in kindergarten. Grindheim identified certain patterns of importance for participation. These patterns concerned rights, friendships, age, initiated play and amount years in the actual preschool. Play is a complex arena for negotiations. Reasons for being (successful) in those negotiations often went beyond the individual's competence or lack of competence. The concept of participation needs, according to the author, to be reconsidered in relation to ECEC settings.

To sum up, previous research implies how children's opportunities for participation are conditional upon several aspects and also framed by different fields of tensions. Puroila et al. (2012) described such tensions in terms of an individual child versus a group of children, children's free choice and the institutional practices; children's autonomy and adults' authority; children's learning versus adults' teaching; and the child as being here and now versus becoming in the future. The review also illuminates how children both pose and give up rights. Research indicates a complex picture of conditions that children often seem to be familiar with when asserting (and giving up) their own and others' rights. Is this ability to drive and develop their own and others' rights a result of democratic upbringing?

48.6 Limitations and Opportunities for Democracy: A Critical Argument

Analogous to the ideas of children as right holders and active agents in democracy issues, we find a growing (self) critique among researchers and practitioners connected to the concept of democracy and its use in ECEC settings. This kind of critique is gathered around three intertwined lines. First, the adequacy of democracy in ECEC is discussed by researchers and practitioners. Discussed here is the issue of power associated with democracy. Second, the effect of contextualising democratic rights as individual choices is the focus of research. The problem of asserting genuine and adequate rights to young children is considered by researchers. Finally, a concept of lived democracy is emerging in which being part of community and interactions are discussed. In this discussion new ways to define and approach democracy are revealed.

48.7 The Adequacy of Democracy

The adequacy of democracy in ECEC institutions has been problematized by different researchers both in the beginning of this research and more recently. Democracy is ultimately about power and its affordances to influence in ECEC settings offered children are seldom about power (Boström 2000; also Emilson and Johansson 2013; Johansson 2007). It can, therefore, be unfair to talk about democracy in such contexts. Besides, children will eventually discover that their participation is conditional. This can result in a distance to the democratic system (Boström 2000). Emilson and Johansson (2013) show that participation and influence when it comes to young children mostly concern trivial activities. The teacher controls the conditions for influence and power is not at all given to the children. So too, Johansson (2007) and she call for a critical discussion of the limitations for democracy in preschool. Qvarsell (2005) links similar reflections to the goal of education as a (conditional) right for children. She problematizes the idea that schooling is controlled by adults and is the prime task in preschool. If education is a right for all children, it may be interpreted not only as schooling, she claims. Qvarsell argues that adults control children's lives by deciding how and where they spend their time, but according to the author, we know little about how children perceive and live with these constraints. It is important to consider children and childhood as a collective enterprise rather than as an individual.

Knudsen and Eriksen Ødegaard (2011) note the risk that children may become objects for political intentions, rather than genuine participants in democratic processes. These researchers investigate conditions for how new digital tools may contribute to participation. There is, according to the authors, no guarantee for children's voices to be heard when allowing them new tools such as digital cameras, for example. There is rather a risk that adults' intentions take over and control the ways children's culture is to be captured and presented. Also Lindgren (2012) holds a critical approach towards participation. Participation often presupposes empowerment and is often discussed in relation to the least powerful in society and in an uncritical manner. Lindgren (2012) poses the question if, and under what conditions, children may refuse to participate. Participation is taken for granted as a democratic issue and thereby positive, yet one can question if this is true from the various perspectives of children.

The adequacy of democracy in ECEC institutions is also discussed by Jansen et al. (2011). They question the opportunity for (genuine) democracy to be realised in early childhood settings and pose questions about limitations and possibilities for democracy in these institutions. Since children have no real possibility to choose to be part of the ECEC institutions or not, the authors question if it is possible to talk about democracy in such institutions at all. Moreover the authors also draw attention to a strong tendency in practice to reduce democracy to instrumentalist methods and individual choices rather than encouraging children to participate with others in collective decision-making. Raised critical question is: what will then happen with the concept of democracy? Still we know that democracy is established as a concern

in education many years ago (Dewey 1885/1916). Therefore it is essential to problematize and clarify different interpretations of the concept of democracy in the context of ECEC practice. If we do not scrutinise the concept, its limitations and possibilities, we run the risk to diminish the concept, make it useless and vague (Jansen et al. 2011). We also run the risk to lose sight over the (unexpected) consequences of different approaches to democracy. Several researchers have discussed this dominance of neoliberal approaches to democracy issues in pedagogical practice positioning children as individual consumers (Bae 2009; Karila 2012; Moss 2007; Qvarsell 2011).

48.8 Freedom of Choice

As a result of well-intended processes for democracy, a liberal concept of democracy seems to dominate pedagogical practice. While individually oriented beliefs focus on the child's freedom, collectively oriented beliefs concern children's active participation. Research shows that it is the individual-oriented idea that often features in teachers' democracy work in preschool (Emilson 2007, 2008; Kjørholt 2005; Westlund 2011). Concrete expressions of this liberal idea tied to the individual's freedom lets children make their own choices. Children are often encouraged to make their own choice without allowing themselves to be influenced by others (e.g. Westlund 2011). This approach has, however, gradually been scrutinised and critiqued. Allowing children to make their own choices has been questioned since it may give children a false view of democratic processes in everyday life (Bae 2009; Johansson 2007; Kjørholt 2005).

Qvarsell (2011) argues that the things children are able to influence and decide about in preschool often are trivial, that is, things the adults do not think are particularly important. This strong belief in the freedom to make own choices has been questioned in recent research, and instead intersubjective interaction, characterised by reciprocity, respect and mutual understanding between adults and children, is stressed as more important (Emilson 2014; Emilson and Johansson 2013; Qvarsell 2011; Østrem 2012). From a study about communicated values in preschool, Emilson and Johansson (2009) suggest that the related concepts of influence and participation, which are often used synonymously, have different orientations. While influence in preschool often is of an individual character, the value of participation is more collectively oriented. In contrast, Qvarsell (2011) questions the idea of influencing and taking part in decisions as fundamental for democracy learning in ECEC. Democracy may also be expressed in terms of affordances, meaning-making and room for action, she argues. Possibilities for such processes are always related to whose control and power will be most influential in everyday life of preschool.

Democratic upbringing is, according to Johansson (2005) not foremost a question of acquiring rational autonomy or making independent choices. Democracy in the context of ECEC institutions is rather a question of empowering children to appreciate and tolerate differences. Differences rather than consensus would be the most important for teachers to make visible and encounters (sometimes confrontations) between teachers and children can be seen as necessary for our respect for others. It is then not the striving for agreement in the singular that is the foundation for democracy according to Johansson (2005), rather respect for contrasts and contradictions in the ethical discoveries and experiences of children and adults. Emilson (2008) has critically discussed teacher and child interactions and children's opportunities for participation in terms of asymmetry versus symmetry. She challenges the symmetrical ideal, and with reference to Erman (2006), she suggests that the concept of mutuality might be more fruitful. The concept of mutuality holds a dimension of both symmetry and asymmetry and Erman writes:

> While symmetry is synonymous with regularity, similarity and uniformity, mutuality is synonymous with common, reciprocal, bilateral and multilateral, and thus embraces more fully, not only similarity and symmetry, but also differences and asymmetry. (Erman 2006, p. 387)

Other researchers that have critiqued the normative ideal of symmetry in the context of ECEC are Bae (2004) and Østrem (2007). They propose that asymmetry is an external condition that cannot be ignored. A possible alternative is the concept of mutual recognition. Østrem suggests an understanding of asymmetry as a premise for teacher and child interaction, but at the same time she emphasises the importance of adults trying to come close to the child's perspective to minimise the risk of negative consequences.

From this research, it can be established that democracy work in preschool appears as communication and relational practice, even if the researchers seem to take starting points in different communication theory traditions. A distinction seems to be between the ideas of consensus (e.g. Emilson 2008; Johansson and Emilson 2016) and disagreement (Grindland 2011). In the Nordic countries, there seems to be a well-established tradition of consensus in early childhood settings. This implies that negotiations and smooth common agreements are viewed as important goals and strategies (Emilson and Johansson 2009; Johansson 2013; Johansson and Emilson 2016). From such a perspective, conflicts and resistance may be viewed as disturbing rather than learning moments, which is contrary to the idea of democracy based on disagreement. Research also indicates, however, that conflicts and resistance can be important for children to develop democratic skills since conflicts force children to stand up for each other and to clarify their opinions, intentions and their ethics (Johansson and Emilson 2016; Björk-Willén 2012; Grindland 2011; Johansson 2009, 2011a,b; Qvarsell 2011).

48.9 Democracy as a Form of Life

The more recent studies appear to interlink more often to the idea of democracy as a way of living (Biesta 2011) and a processional phenomenon being created by participants. The growing critic of the liberal idea of freedom of choice as the democratic ideal in preschool appears to be shifting towards more complexity in understanding democracy in this educational context. Bae (2009) suggests the term 'democratic moments' (p. 395) referring to Biesta: '… democracy as something that only happens from time to time and in very particular situations' (Biesta 2007, p. 25). Biesta (2011) talks about the subject as being constituted as a democratic citizen in concrete encounters with others. He distinguishes between education for democracy and education through democracy. The democratic human being exists not in people per se, argues Biesta; the democratic human being exists only in the action. Therefore interaction becomes important.

Knudsen and Eriksen Ødegaard (2011) define democracy with inspiration from Dewey (1985/1916) and his idea of democracy as a form of life shared with others and based on common experiences in contrast to the idea of democracy as a way to govern. They regard room, audience and influence as preconditions for democracy as a form of life. Participation is maintained as a collective entity meaning being part of and acting together. This way to look at democracy as lived and shared appears in several later studies (see, e.g. Emilson 2011; Grindheim 2011; Rydjord Tholin and Thorsby Jansen 2011). Rydjord Tholin and Thorsby Jansen (2011) points to the collective and communicative dimensions of democracy and opportunities for children to be acting subjects. Emilson (2011) talks about lived democracy. She regards communication as a condition for democracy and particularly meaning-making and mutual understanding between communication participants. Qvarsell (2011) rejects the idea of defining democracy. Instead she aims to uncover issues of importance connected to the concept. She regards democracy as being counted for and counted into a community. Democracy can be something more important than participating and influencing. Democracy is, according to Qvarsell, about being able to be understood and met on your own premises, to be respected and to have possibilities to express one-self (see also Johansson 2005). Johansson (2005) aligns democracy in the context of ECEC institutions, with empowerment and pluralism. Democracy is not empowerment per se, it is according to the author, a question of empowering children to appreciate and tolerate differences and be open for manifold voices. Grindland (2011) relates democracy to the theory of Mouffe (2005) where democracy is never reached but founded on friendly conflicts and the confrontations of various ideas.

48.10 Final Words

This review has revealed how research on democracy in early childhood education primary is based on three arguments: children's rights to democracy, children as active participants and preschool as a democratic arena. We have claimed these arguments to be founded on ideological, empirical or critical justifications for democracy in early childhood education. They reflect the development of research over time from a relatively normative, political and rhetorical argumentation via an interest in how to transform and implement the democratic ideas into praxis and how research raises critical questions about preschool as a democratic arena. It could be argued that a new concept of democracy has been developed, based on new insights into the complexity of democracy in the field of ECEC. Research and pedagogy have evolved from taking departure in more instrumental ways to look at and investigate democracy processes in ECEC settings to a more complex way to approach and define democracy. In this new concept (or rhetoric), understandings of democracy are connected with shared life and pluralism rather than a set of prepared methods to learn for democracy. Communication is important and ambiguity and even conflicting ideas appears to be accepted as a base for democracy.

Where does this new concept of democracy lead research and educational practice? Is this way of looking at democracy in relation to educational practice for young children fruitful? On the one hand, we can say that the democracy concept has become broadened when connected to shared life. On the other hand, the concept has become more vague. How can research (and teachers) identify democratic processes when almost everything appears to be included? Another issue can be that the content of the communication, for example, value conflicts, might be set aside when communication per se is placed in the forefront for democracy. Besides, will there be no limits for what kind of opinions that are communicated when conflicts are appreciated as significant for democracy? Perhaps the value of respect and the right to be met as a subject respond to these questions. Also the idea of pluralism can be helpful here. Such values have been stated as important prerequisites for democracy by several researchers. These values will help to analyse the content of the communication, the ways to communicate and the (hidden) conflicts in the democratic processes. Still the dilemma between to act and be met as a subject and the demand to adapt to existing order is unsolved, perhaps because these dimensions must always be present in any community and particularly in the relation between young children and adults. Even if democracy has a role in establishing the (democratic) order, democratic education can occur, says Biesta (2011) when this order is dismissed in favour of equality. This way of looking at democracy in education for young children may be helpful in avoiding rhetoric of democracy to become a new way to control children.

We have also identified a division between views of democracy connected to consensus versus conflict and diversity. Educational contexts involving young children are always about power, where institutional structure and teachers per se have the power to include or exclude children in democratic processes. Biesta (2011) warns for a colonial way to address democracy where education strives to teach children to become 'good democrats'. This idea is based on the assumption that there is one person (the teacher) who knows what it means to be democratic and someone else (the children) who do not have this knowledge.

This new understanding of democracy, emerged from our analyses, challenges education and educational research in many ways. First, the consensus perspective, within research and pedagogical practice, needs to be reconsidered in favour of pluralism, ambiguity and conflicts. We can also identify an emerging shift away from democracy as mainly individual influence or participation to participation from the collective perspective that goes beyond individual choice. To avoid colonialism, we need to acknowledge children as partners in democratic processes without denying the responsibility as researchers and adults to guide and empower children in such processes. This means that we, as researchers and teachers, safeguard, support and investigate those moments when democracy occurs. Such moments may occur both as conflicts and ambiguities, yet nonetheless they are important democracy processes with our youngest.

Appendix

Publication	Quantita-tive	Qualita-tive	Question-naire	Observa-tion	Interview	Theoretical	Nordic country
Alasuutari and Karila (2010)		x				x (documents)	Finland
Alvestad (2010)		x		x			Norway
Bae (2004)		x		x			Norway
Bae (2009)		x		x		x	Norway
Bae (2010)		x				x	Norway
Bae (2012)		x		x			Norway
Bartley (2001)		x				x	Sweden
Boström (2000)		x				x	Sweden
Björk-Willen (2012)		x		x			Sweden
Broström (2005)		x				x	Nordic/ Den
Broström (2006)		x				x	Denmark
Broström (2012)		x				x	Nordic/ Den
Dahlberg et al. (2002)		x				x	Sweden
Eide et al. (2012)		x					Nor/Swe
Eidevald (2009)		x		x	x		Sweden
Einarsdottir (2005)		x	x		x		Iceland
Einarsdottir et al.		x					Iceland
Einarsdottir (2010)		x			x		Iceland
Einarsdottir (2011)		x			x		Iceland
Ekström (2006)		x		x	x		Sweden
Emilson and Folkesson (2006)		x		x			Sweden
Emilson 2007		x		x			Sweden
Emilson (2008)		x		x			Sweden

(continued)

Publication	Quantitative	Qualitative	Questionnaire	Observation	Interview	Theoretical	Nordic country
Emilson and Johansson (2009)		x		x			Sweden
Emilson (2011)		x		x			Sweden
Emilson and Johansson (2013)		x		x			Swe/No
Emilson (2014)		x				x	Sweden
Engdahl (2011)		x		x			Sweden
Erman (2006)		x				x	Sweden
Greve (2006)		x		x			Norway
Grindheim (2011)		x		x	x		Norway
Grindland (2011)		x		x			Norway
Halldén (2003)		x		x		x	Sweden
Hellman (2010)		x		x	x		Sweden
Hundeide (2003)		x				x	Norway
Hännikäinen and Rasku-Puttonen (2010)		x		x			Finland
Jansen et al. (2011)		x				x	Norway
Johansson (1999)		x			x		Sweden
Johansson (2003)		x				x	Sweden
Johansson (2005)		x				x	Sweden
Johansson (2007)		x		x			Sweden
Johansson (2009)		x					Sweden
Johansson (2011a)		x				x	Sweden
Johansson (2011b)		x		x		x	Sweden
Johansson (2011c)		x				x	Sweden

(continued)

Publication	Quantitative	Qualitative	Questionnaire	Observation	Interview	Theoretical	Nordic country
Johansson (2013)		x		x			Sweden
Johansson and Emilson (2016)		x		x			Sweden
Johansson and Sandberg (2010)		x	x				Sweden
Karila (2012)		x				x	Nordic/ Fin
Karlsson (2009)		x		x			Sweden
Kjørholt (2005)		x					Norway
Knudsen et al. (2011)		x					Norway
Kultti (2012)		x					Sweden
Lindahl (1996)		x		x			Sweden
Lindahl (2002)		x		x	x		Sweden
Lindahl (2005)		x				x	Sweden
Lindgren and Halldén (2001)		x				x	Sweden
Lindgren (2012)		x					Sweden
Löfdahl (2006)		x		x			Sweden
Löfdahl and Hägglund (2007)		x		x			Sweden
Løkken 2000)		x		x			Norway
Løkken et al. (2006)		x					Norway
Løkken (2008)		x		x			Norway
Markström and Halldén (2009)		x		x			Sweden
Melin (2013)		x		x	x		Sweden
Michélsen (2005)		x		x			Sweden
Moss (2007)		x				x	Nordic
Månsson (2000)		x		x	x		Sweden
Palludan (2007)		x		x			Denmark
Pramling (1983)							Sweden

(continued)

Publication	Quantitative	Qualitative	Questionnaire	Observation	Interview	Theoretical	Nordic country
Pramling Samuelsson and Sheridan (2003)		x				x	Sweden
Pramling Samuelsson and Pramling (2009)		x					Sweden
Puroila et al. (2012)		x		x			Finland
Qvarsell (2001)		x				x	Sweden
Qvarsell (2003)		x				x	Sweden
Qvarsell (2005)		x				x	Sweden
Qvarsell 2011		x				x	Sweden
Rydjord Tholin and Thorsby Jansen (2011)		x		x			Norway
Sandberg and Eriksson (2008)		x	x		x		Sweden
Seland (2009)		x		x	x		Norway
Sheridan (2001)	x	x	x		x		Sweden
Sommer (1998)		x				x	Denmark
Sommer (2003)		x				x	Denmark
Sommer et al. (2010)		x				x	Den/Swe/Nor
Tallberg Broman et al. (2002)		x				x	Sweden
Westlund (2011)		x		x	x		Sweden
Zachrisen (2013)		x		x			Norway
Öberg (2003)		x		x			Finland
Østrem (2007)		x				x	Norway
Østrem et al. (2009)		x				x	Norway
Østrem (2012)		x				x	Norway

(continued)

Publication	Quantitative	Qualitative	Questionnaire	Observation	Interview	Theoretical	Nordic country
Total	1	91	4	41	15	35	D = 6
							F = 5
							I = 4
							N = 21
							S = 51
							N/S = 2
							D/N/S = 1
							Nordic = 4

References

Alasuutari, M., & Karila, K. (2010). Framing the picture of the child. *Children & Society, 24*, 100–111.

Alvestad, T. (2010). *Barnehagens relasjonelle verden – små barn som kompetente aktører i productive forhandlinger* [Preschool relationships – young children as competent participants in negotions]. Göteborg: Acta Universitatis Gothoburgensis.

Bae, B. (2004). *Dialoger mellom førskolelærer og barn – en beskrivende og fortolkende studie* [Dialogues between preschool teacher and children – a descriptive and interpretive study]. Oslo: Høgskolen i Oslo.

Bae, B. (2009). Children's right to participate – challenges in everyday interactions. *European Early Childhood Education Research Journal, 17*(3), 391–406.

Bae, B. (2010). Realizing children's right to participation in early childhood settings: Some critical issues in a Norwegian context. *Early Years: An International Research Journal, 30*(3), 205–218.

Bae, B. (2012). Children and teachers as partners in communication: Focus on spacious and narrow interactional patterns. *International Journal of Early Childhood, 44*, 53–69.

Bartley, K. (2001). FN:s konvention om barnets rättigheter. Om perspektiv och innehåll med relevans för skolan. [The UN convention on the rights of the child]. *Utbildning & Demokrati, 10*(2), 25–37.

Biesta, G. (2007). Don't count me in. Democracy education and the question of inclusion. *Nordisk Pedagogik, 27*, 18–21.

Biesta, G. (2011). *Avancerade studier i pedagogik. [Advanced studies in education]*. Stockholm: Liber.

Boström. B-O. (2000). Styrningen i den svenska skolans värdegrund i kritisk belysning. In B. Anderson (Ed.), *Samhällets demokratiska värdegrund: En fråga om mångfald, olikhet men olika värde* (pp. 33–57). [The democratic base for society. An issue of manifold, difference but similar value]. Göteborg: University of Göteborg.

Björk-Willen, P. (2012). Händelser vid datorn. Förskolebarns positioneringsarbete och datorspelets agens. [Events at the computer. Preschool children's positioning and the agency of the computer games]. *Barrons, 21*(3–4), 75–92.

Broström, S. (2005). Transitions in children's thinking. In A.-W. Dunlop & H. Fabian (Eds.), *Informing transitions in the early years: Research, policy and practice*. Maidenhead: McGraw-Hill/Open University Press.

Broström, S. (2006). Care and education: Towards a new paradigm in early childhood education. *Child & Youth Care Forum, 35*(5–6), 391–409.

Broström, S. (2012). Children's participation in research. *International Journal of Early Years Education*. doi:10.1080/09669760.2012.715407. 1-13.

Dahlberg, M., Moss, P. & Pence, A. (2002). *Från kvalitet till meningsskapande. Postmoderna perspektiv – exemplet förskolan*. [Beyond quality in early childhood education and care. Postmodern perspectives – preschool as an example]. Stockholm: HLS Förlag.

Dewey, J. (1985/1916). Democracy and education. In Boydston J.A. (Ed.): The middle works 1889–1924, (volume 9), Carbondale: Southern Illinois University Press

Eide, B., Os, E., & Pramling Samuelsson, I. (2012). Små barns medvirking i samlingsstunder. [Young children's participation in circle-time ituations]. *Nordisk barnehageforskning, 5*(4), 1–21.

Eidevald, C. (2009). *Det finns inga tjejbestämmare – Att förstå kön som position i förskolans vardagsrutioner och lek*. [There are no girl decision-makers – understanding gender as a position in preschool practices]. Jönköping: ARK, Jönköping University, School of Education and Communication.

Einarsdottir, J. (2005). We can decide what to play. Children's perception of quality in an Icelandic preschool. *Early Education & Development, 16*(4), 469–488.

Einarsdottir, J., Dockett, S., & Perry, B. (2009). Making meaning: Children's perspectives expressed through drawings. *Early Child Development and Care, 179*(2), 217–232.

Einarsdottir, J. (2010). Children's experiences of their first year of primary school. *European Early Childhood Education Research Journal, 18*(2), 163–180.

Einarsdottir, J. (2011). Icelandic children's transition experiences. *Early Education and Development, 22*(5), 737–756.

Ekström, K. (2006). *Förskolans pedagogiska praktik – Ett verksamhetsperspektiv*. [The pedagogical practice of preschool – an activity perspective]. Umeå: Umeå universitet.

Emilson, A. (2007). Young children's influence in preschool. *International Journal of Early Childhood, 1*(39), 11–38.

Emilson, A. (2008). *Det önskvärda barnet, Fostran uttryckt i vardagliga kommunikationshandlingar mellan lärare och barn i förskolan*. [The desirable child in preschool. Fostering expressed in everyday interactions between teachers and children in preschool] Göteborg: ACTA Universitatis Gothoburgensis.

Emilson, A. (2011). Democracy Learning in a Preschool Context. In N. Pramling & I. Pramling Samuelsson (Eds.), *Educational encounters: Nordic studies in early childhood didactics* (pp. 157–171). Dordrecht: Springer.

Emilson, A. (2014). Demokrati och inflytande i förskolan. [Democracy and influence in preschool]. In R. Thornberg & E. Johansson (Eds.), *Värdepedagogik i förskola och skola* [Values and pedagogy in school and preschool]. Stockholm: Liber.

Emilson, A., & Folkesson, A.-M. (2006). Children's participation and teacher control. *Early Child Development and Care, 3-4*(176), 219–238.

Emilson, A., & Johansson, E. (2009). Communicated values in teacher and toddler interactions in preschool. In D. Berthelsen, J. Brownlee, & E. Johansson (Eds.), *Participatory learning and the early years* (pp. 61–77). Taylor & Frances Group: Routledge.

Emilson, A., & Johansson, E. (2013). Participation and gender in circle-time situations in preschool. *International Journal of Early Years Education, 21*(1), 56–69.

Engdahl, I. (2011). *Toddlers as social actors in the Swedish preschool*. Department of Child and Youth studies: Stockholm University.

Erman, E. (2006). Reconciling communicative action with recognition. Thickening the "inter" of intersubjectivity. *Philosophy & Social Criticism, 32*(3), 377–400.

FN:s konvention om barnets rättigheter. 1989. *Konventionen om barnets rättigheter: Convention on the rights of the child*. Stockholm: Regeringskansliets offsetcentral.

Greve, A. (2006). *Vennskap mellom små barn i barnehagen*. [Friendship among young children in preschool]. Oslo: Høgskolen i Oslo, avdeling for lærerutdanning/Universitetet i Oslo, Institutt for spesialpedagogikk.

Grindheim, T. L. (2011). Barnefelleskap som demokratisk danningsarena. [Children's community as a democratic educational arena]. *Nordisk barnhageforskning, 4*(2), 91–102.

Grindland, B. (2011). Uenighet som demokratisk praksis. [Disagreements as democratic praxis]. *Nordisk barnehageforskning, 4*(2), 75–90.
Halldén, G. (2003). Barnperspektiv som ideologiskt eller metodologiskt begrepp. [Children's perspectives as an ideological or methodological concept]. *Pedagogisk forskning i Sverige, 8*(1–2), 12–23.
Hellman, A. (2010). *Kan Batman vara rosa? Förhandlingar om pojkighet och normalitet*. [Can Batman be pink? Negotiations about boyishness and normality]. Göteborg; Acta Universitatis Gotoburgensis, 299.
Hundeide, K. (2003). *Barns livsverden: Sosiokulturelle rammer for barns utvikling.* [Sociocultural frames for children's development]. Oslo: Cappelen Akademisk Forlag.
Hännikäinen, M., & Rasku-Puttonen, H. (2010). Promoting children's participation: The role of teachers in preschool and primary school learning sessions. Early years. *An international Research Journal, 30*(2), 147–160.
Jansen, K., Johansson, E., & Eriksen Ødegaard, E. (2011). På jakt etter demokratibegrep i barnehagen. [Searching for the concept of democracy in preschool]. *Nordisk barnhageforskning, 4*(2), 61–64.
Johansson, E. (1999). *Etik i små barns värld. [Ethics in young children's world]*, *Göteborg studies in educational sciences* (Vol. 141). Göteborg: ACTA Universitatis Gothoburgensis.
Johansson, E. (2003). Att närma sig barns perspektiv. [To come close to the child's perspective]. *Pedagogisk forskning i Sverige, 8*(1–2), 42–57.
Johansson, E. (2005). Children's integrity – a marginalised right? *International Journal of Early Childhood, 37*(3), 109–124.
Johansson, E. (2007). *Etiska överenskommelser i förskolebarns världar. [Moral agreements in preschool-children's worlds]*, *Göteborg studies in educational sciences* (Vol. 249). Göteborg: Acta Universitatis Gothoburgensis.
Johansson, E. (2009). Doing the right thing. Different life-worlds and similar values in toddler interactions. In D. Berthelsen, J. Brownlee, & E. Johansson (Eds.), *Participatory learning and the early years* (pp. 44–60). New York: Routledge, Taylor & Francis Group.
Johansson, E. (2011a). Moral discoveries and learning in preschool. In N. Pramling & I. Pramling Samuelsson (Eds.), *Educational encounters: Nordic studies in early childhood didactics* (pp. 127–139). Dordrecht: Springer Science+Business Media.
Johansson, E. (2011b). Investigating morality in toddler's worlds. In E. Johansson & J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 127–140). Dordrecht: Springer Science+Buisness Media.
Johansson, E. (2011c). Introduction: Giving words to children's voices in research. In E. Johansson & J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 1–14). London: Springer Science+Buisness Media.
Johansson, E. (2013). *Små barns læring. Møter mellom barn og voksne i barnehagen*. [Young children's learning. Encounters between children and adults in preschool]. Oslo: Gyldendal Akademisk.
Johansson, E., & Emilson, A. (2016). Resistance and conflicts – Educational challenges and inspirations in working with young children in preschool. *International Journal of Early Years Education*. Published online 2016-01-27.
Johansson, I., & Sandberg, A. (2010). Learning and participation: Two interrelated key-concepts in the preschool. *European Early Childhood Education Research Journal., 18*(2), 229–242.
Karila, K. (2012). A Nordic perspective on early childhood education and care policy. *European Journal of Education, 47*(4), 584–595.
Karlsson, R. (2009). *Demokratiska värden i förskolebarns vardag*. [Democratic values in preschool children's every day life]. Göteborg: ACTA Universitatis Gothoburgensis.
Kjørholt, A. T. (2005). The competent child and 'the right to be oneself': Reflections on children as fellow citizens in an early childhood centre. In A. Clark, A. T. Kjørholt, & P. Moss (Eds.), *Beyond listening* (pp. 151–174). Bristol: University of Bristol: Policy Press.

Knudsen, I. M., & Eriksen Ødegaard, E. (2011). Fotofloker. Vilkår for deltakelse når digitale bilder tas i bruk i barnehagen. [Conditions for participation when digital pictures are used in preschool]. *Nordisk Barnhageforskning, 4*(2), 115–128.

Kultti, A. (2012). *Flerspråkiga barn I förskolan: Villkor för deltagande och lärande. [Multilingual children in preschool: Conditions for participation and learning]*, *Göteborg studies in educational sciences* (Vol. 321). Göteborg: ACTA Universitatis Gothoburgensis.

Lindahl, M. (1996). *Inlärning och erfarande. Ettåringars möte med förskolans värld. [Learning and experiencing. One-year-olds meeting with the preschool world]*, *Göteborg studies in educational sciences* (Vol. 103). Göteborg: ACTA Universitatis Gothoburgensis.

Lindahl, M. (2002). *Vårda – Vägleda – Lära*. [Care – Guid – Learn]. Göteborg: ACTA Universitatis Gothoburgensis.

Lindahl, M. (2005). Children's right to democratic upbringings. *International Journal of Early Childhood, 3*(36), 33–48.

Lindgren, A., & Halldén, G. (2001). Individuella rättigheter; autonomi och beroende Olika synsätt på barn i relation till FN:s barnkonvention. [Individual rights, autonomy and dependence. Different approaches to the child in relation to UN Convention]. *Utbildning & Demokrati, 10*(2), 65–79.

Lindgren, A.-L. (2012). Ethical issues in pedagogical documentation: Representations of children through digital technology. *International Journal of Early Childhood, 44*(3), 327–340.

Löfdahl, A. (2006). Grounds for values and attitudes – children's play and peer-culture in preschool. *Journal of Early Childhood Research, 4*(1), 77–88.

Löfdahl, A., & Hägglund, S. (2007). Spaces of participation in preschool: Arenas for establishing power orders? *Children & Society, 21*, 328–338.

Løkken, G. (2000). *Toddler peer culture. The social style of one and two year old body-subjects in everyday interaction*. Trondheim: NTNU, Pedagogisk institutt.

Løkken, G., Haugen, S. & Röthle, M. (Eds.) (2006). *Småbarnspedagogik: fenomenologiska och estetiska förhållningssätt*. [Pedagogy for young children: Phenomenological and aesthetic approaches]. (1st edition) Stockholm: Liber.

Løkken, G. (2008). *Toddlarkultur: om ett- och tvååringars sociala umgänge i förskolan*. [Toddler culture: about one- and two-year-olds social interaction in preschool]. Lund: Studentlitteratur.

Markström, A.-M., & Halldén, G. (2009). Children's strategies for agency in preschool. *Children & Society, 23*, 112–122.

Melin, E. (2013). *Social delaktighet i teori och praktik. Om barns sociala delaktighet i förskolans verksamhet* [Social participation in theory and praxis. About children's social participation in preschool activity]. Institutionen för pedagogik och didaktik, Stockholms universitet: Universitetsservice US-AB.

Merleau-Ponty, M. (1962). *Phenomenology of perception*. New York: Routledge.

Michélsen, E. (2005). *Samspel på småbarnsavdelningar* [Interaction in toddler groups]. Stockholm: Liber.

Molin, M. (2004). Delaktighet inom handikappsområdet – en begreppsanalys. In A. Gustavsson (Ed.), *Delaktighetens språk* (pp. 61–81) [The language of participation]. Lund: Studentlitteratur.

Moss, P. (2007). Bringing politics into the nursery: Early childhood education as a democratic practice. *European Early Childhood Education Research Journal, 15*(1), 1–20.

Mouffe, C. (2005). *On the political*. New York: Routledge.

Månsson, A. (2000). *Möten som formar: interaktionsmönster på förskola mellan pedagoger och de yngsta barnen i ett genusperspektiv*. [Forming encounters: Patters of interactions between pedagogues and the youngest children in preschool] Malmö: Studia psychologica et paedagogica, 147.

OECD. (2001). *Starting strong: Early education and care*. Paris: OECD.

OECD. (2006). *Starting strong II: Early childhood education and care*. Paris: OECD.

OECD. (2012). Starting strong III – A quality toolbox for early childhood education and care. Elektronic acess, 2012-02-18: http://www.oecd.org/document/29/0,3746,en_2649_39263231_47955101_1_1_1_1,00.html

Palludan, C. (2007). Two tones of inequality in kindergarten. *International Journal of Early Childohood, 38*(1), 75–91.
Pramling, I. (1983). *The child's conception of learning*, *Göteborgs Studies in Educational Sciences* (Vol. 46). Göteborg: Acta Universitatis Gothoburgensis.
Pramling Samuelsson, I., & Sheridan, S. (2003). Delaktighet som värdering och pedagogik. [Participation as value and pedagogy]. *Pedagogisk forskning i Sverige, 8*(1–2), 70–84.
Pramling Samuelsson, I., & Pramling, N. (2009). Children's perspectives as 'touch downs' in time: Assessing and developing children's understanding simultaneously. *Early Child Development and Care, 179*(2), 205–216.
Puroila, A.-M., Estola, E., & Syrjälä, L. (2012). Having, loving, being: Children's narrated well-being in Finnish day care centres. Early child development and care. *Special Issue: Early Child Care and Education in Finland, 182*(3–4), 345–362.
Qvarsell, B. (2001). Juridik och politik i barnpedagogiken – om FN-konventionens dilemman. [Law and policy in child education – about dilemmas in the United Nations Convention]. *Utbildning och demokrati, 10*(2), 51–63.
Qvarsell, B. (2003). Barns perspektiv och mänskliga rättigheter. Godhetsmaximering eller kunskapsbildning. [Children's perspective and human rights. Compassion maximization or knowledge]. *Pedagogisk Forskning i Sverige, 8*(1–2), 101–113.
Qvarsell, B. (2005). Early childhood culture and education for children's rights. *International Journal of Early Childhood, 37*(3), 99–108.
Qvarsell, B. (2011). Demokrati som möjlighet i små barns liv och verksamhet. [Democracy as an opportunity in toddler's life and practice]. *Nordisk Barnhageforskning, 4*(2), 65–74.
Ricoeur, P. (1971). The model of the text: Meaningful action considered as a text. *Social Research, 38*(3), 529–562.
Rydjord Tholin, K., & Thorsby Jansen, T. (2011). Demokratiske samtaler i barnehagen? [Democratic dialogues in preschool]. *Nordisk Barnhageforskning, 4*(2), 103–114.
Sandberg, A., & Eriksson, A. (2008). Children's participation in preschool – on the conditions of the adults. Preschool staff's concepts of children's participation in preschool everyday life. *Early Child Development and Care, 180*(5), 619–631.
Schibbye, A.-L. L. (1993). The role of "acknowledgement" in the resolution of a specific interpersonal dilemma. *Journal of Phenomenological Psychology, 2*, 175–189.
Seland, M. (2009). *Det moderne barn og den fleksible barnehagen: En etnografisk studie av barnehagens hverdagsliv i lys av nyere diskurser og kommunal virkelighet*. [The modern child and flexible preschool: An ethnographic study about every day life in preschool in the light of new discourses and the reality of the municipality]. Doctoral dissertation, Norges teknisk-naturvitenskapelige universitet, NTNU, Norge.
Sheridan, S. (2001). Pedagogical quality in preschool: An issue of perspectives. In*Göteborg studies in educational sciences 160*. Göteborg: Acta Universitatis Gothoburgensis.
Sommer, D. (1998). The reconstruction of childhood – implications or theory and practice. *European Journal of Social Work, 1*(3), 311–326.
Sommer, D. (2003). Børnesyn i udviklingspsykologien: Er et børneperspektiv muligt? [The view of the child in developmental psychology. Is a childperspective possible?]. *Pedagogisk forskning i Sverige, 8*(1–2), 85–100.
Sommer, D., Pramling Samuelsson, I., & Hundeide, K. (2010). *Child perspectives and children's perspectives in theory and practice*. Dordrecht: Springer.
Tallberg Broman, I., Rubinstein Reich, L., & Hägerström, J. (2002). *Likvärdighet i en skola för alla. Historisk bakgrund och kritisk granskning* [Equivalence in a school for everyone. Historical background and critical review], Skolverket, Forskning i fokus. Stockholm: Fritzes.
Westlund, K. (2011). *Pedagogers arbete med barns inflytande: en demokratididaktisk studie. [Teachers' work with the influence with preschool children – a study of democracy education]*, *Malmö Studies in Educational Sciences: Licentiate Dissertation Series*(p. 21). Malmö: Malmö Högskola. Lärarutbildningen.2011

Zachrisen, B. (2013). *Interetniske møter i barnehagen. Vilkår for barns samhandling i lek*. [Interethnic encounters in preschool. Conditions for children's participation in play]. PhD thesis no 203, University of Stavanger, Faculty of Art and Education, Stavanger.

Öberg, C. (2003). Småbarn löser problem. In E. Johansson & I. Pramling Samuelsson (Eds). *Förskolan – barns första skola*. [Preschool – the child's first school]. Lund: Studentlitteratur.

Østrem, S. (2007). Barnehagen som læringsarena: Realisering av tanken om anerkjennelse. [Preschool as an arena for learning: Realization of the idea of recognition]. *Nordisk Pedagogik, 27*(3), 277–290.

Østrem, S., Bjar, H., Føsker, L. R., Hogsnes, H. D., Nordtømme, S., & Tholin, K. (2009). *Alle teller mer. En vurdering av hvordan Rammeplan for barnehagens inhold og oppgaver blir innført, brugt og erfart*. [Everyone is counting more. An evaluation of how the framework plan is implemented, used and experienced]. Tønsberg: Høgskolen i Vestfold.

Østrem, S. (2012). *Barnet som subjekt. Etikk, demokrati og pedagogisk ansvar*. [The child as subject. Ethics, democracy and pedagogical responsibility]. Oslo: Cappelen Damm Akademisk

Chapter 49
New Directions in Early Childhood Education Practice: International Developments and Practice Gaps

Marilyn Fleer, Feiyan Chen, and Bert van Oers

Abstract Understanding children's development in the context of the practices of teachers, curriculum writers and governments interested in young children has always been complicated, dynamic and diverse. In Volume 2 of this handbook, a global picture of this complexity is presented in terms of innovative and long-standing early childhood programs, curriculum and assessment practices, pedagogy and diverse conceptualisations of child, family and communities. Two central questions drove the analysis of the content reported in this volume: What and how are practices being developed in early childhood education settings? What and how are new directions and insights in research and practice being paved for children's development in families and communities? As will be shown in this first chapter of Volume 2 of the handbook, models of curricula, assessment and pedagogy appear to be based on fundamentally different conceptions of child development, the role of the teacher, what is play and how children are positioned within or across the family and early childhood setting. As might be expected in an international analysis, long-standing and contemporary models of early childhood practice should speak directly to plurality. However, through an analysis of early childhood practices across countries from the perspective of the northern and southern hemispheres, a very different picture emerges. The findings suggest that first, the dominant early childhood education models and practices have come from Eastern and Western European countries, many of which have been adopted in countries in the southern hemisphere. It

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is argued that this colonising act is due in part to the dominant modes of communication through English journals and established networks that inform what counts as an innovative program, curriculum or pedagogical practice. Second, the analysis shows an emerging global trend for re-conceptualising child development dialectically to include family and community who are also in a process of development, rather than to attribute child development to just the child or as the result of an early childhood program. These findings, in addition to what is reported in Volume 1 of this Handbook, seek to make a scholarly contribution to moving the compass from the Northern and the Southern hemispheres. This volume leaves room for more localised models and practices from the global South that speak differently to what and how early childhood practices are regularly conceptualised and promoted.

Keywords Curriculum • Assessment • Family • Community • Early childhood program • Pedagogy

49.1 Introduction

In any handbook, textbook or scholarly papers and books that examine early childhood practice, authors will always write about innovative and long-standing programs (van Oers, Chap. 50, volume 1), the curriculum and assessment models in place across countries (Geerdina van der Aalsvoort, Chap. 58, this volume), the pedagogical practices of teachers (Pramling and Pramling Samuelson, this volume) and the place of family and communities for supporting the development and learning of children (Højholt, Chap. 76, this volume). What generally emerges is a reflection or analysis of philosophies and programs, such as long-standing and recent programs that use Maria Montessori's work (Gustafsson, Chap. 74, this volume) or the more recent philosophy from the Reggio Emilia region (Giudici and Cagliari, Chap. 75, this volume). These and others (Highscope Curriculum, Epstein and Schweinnhart, Chap. 70; Waldorf Kindergarten, Frödén and von Wright, Chap. 72, this volume) reflect important directions in early childhood practice found in the Western European region.

Programs based on the long-standing theoretical work of Vygotsky and those that followed, which have been developed into programs and models in Russia, such as Golden Key Schools (Kravtsova and Kravtsov, Chap. 52, this volume) and "From Birth to School" (Salmina and Veraksa, Chap. 19, volume 1), have also made an international contribution. For instance, we see this in the Elkonin-Davydov preschool curriculum developed and implemented in Latvia (Zeltserman, et al., Chap. 21, volume 1) or the Vygotskian-inspired playworlds (Lindqvist 2003) originating in Sweden, and further researched in Finland, and found in the narrative methodology of Hakkarainen and Bredykite (Chap. 53, this volume). In addition, theoretical inspiration from Eastern Europe can be found in programs in the US, such as Tools of the Mind (Bodrova and Leong, Chap. 56, this volume), or Developmental

Education in the Netherlands (Pompert and Dobber, Chap. 57, this volume; van Oers 2012). These programs and more (Veraksa and Veraksa, Chap. 73, this volume) make an important contribution to early childhood practice because they draw upon concepts from cultural-historical and activity theories, to explain the role of the teacher, to articulate a concept of play and to discuss a very different theory of child development to that which has dominated Western early childhood education for some time, such as Developmentally Appropriate Practice (DAP) (Sanders and Farago, Chap. 71, this volume). These international developments signal how new models of practice become appropriated and how they impact on local communities. For instance, Donner (Chap. 80, this volume) in studying the interactions between Indian middle-class mothers and preschool teachers noted that mothers were pressured into changing their family practices to accommodate new Western European pedagogies: "…mothers mentioned that, whilst they were aware of the need to employ new methodologies like 'playful' learning, they worried about having to use educational resources, in particularly English books and media".

As with other handbooks and scholarly works written in English that discuss early childhood practice, the dominant models and programs are primarily from European countries (with the exception of DAP from the North American region). What appears to be missing in handbooks, including this volume, are models and programs developed in the countries in the global South. This appears to be a gap generally in books and articles written in English, where a need for presenting models and programs from countries other than Europe is urgently needed. A similar concern was expressed in Chap. 1 of Volume 1 of the handbook (Fleer and van Oers, see Volume 1), where diversity and the conceptualisation of research needs were different between countries loosely located between the North and South. As such, we begin this chapter by foregrounding a caution about how knowledge is constructed and promoted, followed by a discussion of the findings from the two questions that drove the analysis of the content of Volume 2 of the handbook: What and how are practices being developed in early childhood education settings? What and how are new directions and insights in research and practice being paved for children's development in families and communities?

As with Volume 1, we used Hedegaard's (2009, 2012) model of personal, institutional and societal perspectives to guide our analysis (see Fleer and van Oers, Volume 1, for details of the methodology and method). This framing allowed us to examine the structure, process and the dynamics of the programs and models for each of the countries, whilst also taking account of the societal, institutional, personal and activity settings specific to these models and programs.

49.2 How Knowledge Is Constructed and Promoted: Caution and Critique

An important outcome of this Handbook has been the documentation of what curricula and assessment practices can be found in specific countries. These reflect a particular moment in the history of a particular country, where knowledge

Table 49.1 Overview of curricula and assessment practices presented in Volume 2

Region	Unique localised dimensions of practice	Imported concepts informing practice
Western European and the UK regions	Playful learning and playful pedagogy, observation for assessment (Broadhead, Chap. 63, this volume); take children's perspective to develop curriculum (Lipponen, Kumpulainen and Paananen, Chap. 65, this volume); Play-ased curriculum (Pompert and Dobber, Chap. 57, this volume)	
Middle East	Compensatory education, subject matter disciplines and academic standardisation; formal assessment, the Mabatim instrument (Broody, Chap. 61, this volume)	Froebel and Montessori approaches emphasising a play-based curriculum
Asia	Integrated theme-based curriculum and school-based curricula (Zhu and Zhang, Chap. 60, this volume)	The project approach, Reggio Emilia and Montessori
Australia	Play-based learning, intentional teaching and learning outcomes, assessment for learning (Grieshaber, Chap. 62, this volume)	Free play and emergent approaches
South America	Transversal themes (i.e. a method to deal with interdisciplinary contents) (Campos, Chap. 59, this volume)	Constructivism
North America	Guided play, i.e. a playful and developmentally appropriate pedagogy (Hassinger-Das, et al., Chap. 64, this volume)	Montessori, Reggio Emilia

construction and what a community deems to be valuable for children to learn is reflected. In contrast to the remainder of this chapter, we can say that what is unique and more localised are the curricula and assessment practices for specific countries, as noted in China (Zhu and Zhang, Chap. 60, this volume), Brazil (Campos, Chap. 59, this volume), England (Broadhead, Chap. 63, this volume), Finland (Lipponen, Kumpulainen and Paananen, Chap. 65, this volume), Israel (Broody, Chap. 61, this volume), Hong Kong (Grieshaber, Chap. 62, this volume), the Netherlands (Steenbeek and van Geert, Chap. 66; van der Aalsvoort, Chap. 67, this volume) and Turkey (Hassinger-Das, Hirsch-Pasek and Golinkoff, Chap. 64, this volume). What has emerged here are practices that mirror the dominant societal values and needs of communities (as represented by the authors in Volume 2). Table 49.1 above is a summary overview.

Table 49.1 shows that European-American ideas are dominant in curricula and assessment across the world, although there are some localised practices emerging. This is a caution that needs attention and is discussed in the following section.

49.3 Caution and Critique

Knowledge is represented globally in English language as the main vehicle for disseminating European-American ideas of early childhood education around programs (long-standing contemporary), curriculum and assessment. Many countries such as Brazil (Campos, Chap. 59, this volume), China (Zhu and Zhang, Chap. 60, this volume) and Israel (Broody, Chap. 61, this volume) have borrowed European-American ideas of early childhood education in their development of early childhood education programs, curriculum and assessment. Taking China as a particular example, the recent curriculum reform heavily borrowed European-American ideas, including theories of Dewey, Piaget and Vygotsky, as well as curriculum models encompassing the Project Approach, the Montessori curriculum, Reggio Emilia and the developmentally appropriate approach. This phenomenon of borrowing led to contradictions between the new curriculum and the local socialcultural contexts in the implementation of the curriculum. The authors, Zhu and Zhang (Chap. 60, this volume), argued that “it is very important that while indigenizing ideas from the west, our curriculum reform should reflect on our own culture’s merit and try to preserve it and be sensitive to its demand”. A similar point is also emphasised by Campos and Broody in Brazil and Israel that it is essential to echo socialcultural environment especially its diversity and cultural values in the curriculum reform and assessment.

Besides borrowing Western ideas, English language that dominates early childhood education literature globally is another gap, which strengthens the predominant role of European-American ideas in early childhood education programs, curriculum and assessment. English language may hamper the communication of national or local innovations in early childhood education worldwide. On the one hand, there is a lack of timely English language publications on local innovations in early childhood education, such as the recent AnjiPlay (Dai and Qiu 2016) in China. On the other hand, those who read only their mother language and the English language cannot access publications in other languages. Therefore, English language privileges European-American ideas, and what we can see in the English language literature may not reflect the whole picture of local early childhood education development. This situation may give a skewed representation of what is known about early childhood education globally.

It is possible that what appears to be evident is a proposition yet to be proven. If we as authors were multilingual across a greater number of languages, it is probable that we would have access to more research and programs and could identify more programs. We expect future editions of Volume 2 would be more inclusive. As discussed by Zhu and Zhang (Chap. 60, this volume), we need to move beyond borrowing everything from Western European and Eastern European countries. We should also value and discover more about the models and programs developed within countries from the southern hemisphere.

49.4 What and How Are Practices Being Developed in Early Childhood Education Settings?

Child-environment interactions, rather than the child's individual activities, are considered fundamental in children's learning and development in this volume. Amongst diverse child-environment integrations, the development of early childhood education practice in this volume highlights a major theme of adult-child interactions. It conceptualises the adult's role and the child, as well as the forms of interactions such as play.

This growing worldwide awareness of the centrality of adult-child interactions in the construction of new understandings and approaches to early childhood education feature prominently on the research agenda and the agenda of practical innovations in Western Europe and the UK. The growing pressure of many governments to advance direct instruction to younger ages (especially when less privileged children are involved – see Soler and Flecha, Volume 1) is countered in the argument against "schoolification" (Bingham and Whitebread, Chap. 15, Volume 1). "Schoolification" is a serious concern that needs further discussion and research, and this awareness is obviously present in many chapters across the two volumes of the Handbook. Although many changes and adjustments nowadays in early childhood practices are just cosmetic changes to comply with financial-economic constraints, many scholars do realise that more radical innovations are needed to cater for all children and to prepare them for the expected exigencies of the future (requiring creative problem solving, autonomy and responsibility, critical thinking, self-regulation, etc.). It is evident that this calls for new ways of professionalisation of practitioners (Pirard, Camus and Barbier, Chap. 17, Volume 1).

However, not only economically driven policies increasingly try to get a grip on early childhood education. Scientific discoveries too are often taken as productive points of view that should inform the further development and rationalisation of early childhood practices, even if these developments are not always directly responding to current needs of early childhood practices. A good case can be made here with regard to interesting discoveries of neuropsychology (see Sinclair-Harding, Vuillier and Whitebread, Chap. 14, Volume 1). At this moment we have to be very cautious, though, with directly applying this neuropsychological knowledge to early childhood practices, definitely when the answer is still disputed whether neuropsychology should inform pedagogy, or the other way around: pedagogy should inform neuropsychology about developmental-emancipatory practices. At the moment this is a growing area of research that early childhood researchers and practitioners have to evaluate very carefully and cautiously. Another academic discipline that is informing early childhood education is Developmental Psychology. In general, this research is more closely related to the needs of early childhood practices. Promising developments in child developmental theory and research with regard to the formation of self-regulation is increasingly used in early childhood practices, emphasising the need for play, and producing empirical evidence for the importance of promoting self-regulation in young children (see Whitebread,

Chap. 13, Volume 1). It also implies well-orchestrated classroom conversations with young children.

This call for radical (rather than cosmetic) innovations in early childhood education is not exclusive to Western Europe and the UK (fortunately). These topics however are trending in this region and deserve further discussion and research all over the world. For instance, the majority of the chapters in the volume privilege the adults' role as an active participant in adult-child interactions (Bodrova and Leong, Chap. 56; Epstein and Schweinhart, Chap. 70; Grieshaber, Chap. 62; Hakkarainen and Bredikyte, Chap. 53; Pompert and Dobber, Chap. 57; Sanders and Farago, Chap. 71, this volume). For example, Hakkarainen and Bredikyte (Chap. 53, this volume) describe the plurality of the active adult's role changing from being supporters, organisers, observers, creators, mediators, model, cocreators of joint activities and co-players. Supporters or partners are the main role of adults in most programs. In Australia, the new early childhood education curriculum framework shifts its attention to educators' active role in children's learning and development from the traditional focus on free play and emergent approaches (Grieshaber, Chap. 62, this volume). Intentional teaching is therefore stressed in Australian early childhood education practice. Due to the important role of adults, many programs emphasise the significance of adult development. For instance, an essential result of implementation in the Russian Golden Key program is the purposeful development of teachers and parents. Kravtsov and Kravtsova (Chap. 52, this volume) state that "if we do not educate the children's parents, if we do not involve them in our work, then all of our efforts will be in vain". The developmental narrative play pedagogy in Finland also contributes to the adult development that is along with child development (Hakkarainen and Bredikyte, Chap. 53, this volume).

A different case of the adult's role is the Waldorf education is presented (Frödén and von Wright, Chap. 72, this volume). In this program, the teacher-children relation is uneven. This means that teachers are not active participants in children's play. They do not usually and directly get involved in children play unless children invite them to participant. However, they still are a supporter of children's play.

The child is conceptualised a central role in adult-child relations. This role is particularly reflected in practices based on child-centred curriculum (e.g. Sanders and Farago, Chap. 71, this volume). Lipponen, Kumpulainen and Paananen (Chap. 65, this volume) claim that children are active agents in developing early year curriculum and assessment. It is important that we take children's perspective to inform curriculum and assessment. Children are also competent (Giudici and Cagliari, Chap. 75, this volume) and need both intellectual and physical freedom (Gustafsson, Chap. 74, this volume).

In addition to the conceptualisation of the adult's role and the child, play, a form of interactions, is another focus of the volume. An evident direction about play is to keep the balance between play and learning, contrasting to prioritising either of them individually. In the USA, Ilgaz et al. (Chap. 64, this volume) point out a loss of play in early education. In traditional practice in Australia, there was too much free play (Grieshaber, Chap. 62, this volume). This resulted in problems and the need for a balance between play and learning being realised. This balance is reflected

in the forms of curriculum and pedagogy, including play-based learning (Grieshaber, Chap. 62, this volume), playful learning (Broadhead, Chap. 63, this volume) and guided play (Ilgaz et al., Chap. 64, this volume, Play-based curriculum (Developmental Education), Pompert & Dobber, Chapt. 57, this volume).

In summary, *both* adults and children are perceived as active agents instead of passive entities. They actively participate in activities. Their interactions, rather than individual activities, create the conditions for their learning and development. They learn and develop in a collective context. The practice that focuses on either extreme (i.e. too adult centred or child centred) and ignores the other may break the effective context for learning and development. Hence, the significant message here is that the conceptualisation of the adult and the child in early childhood education practice needs to be dialectical. That is, the adult and the child are viewed as relational. The adult, the child and the environment are related and impact on each other. The second message of this volume is the relation between play and learning, which informs the relation between the adult and the child. The aforementioned conceptualisation of the adult and the child supports the balance between the adult and the child.

49.5 What and How Are New Directions and Insights in Research and Practice Being Paved for Children's Development in Families and Communities?

In any review of early childhood education can be found a direct commentary on the role of families and communities in supporting the development of the young child. An analysis of the chapters found in the final section of this Handbook (see Part VII, this volume) show that early childhood is conceptualised holistically because it takes into account the developing child found not only in the early childhood education programs but also as participating in the everyday practices of home and community (Hedegaard 2014).

A strong message that pervades many of the chapters in the final section of the handbook is a movement away from traditional individualised conceptions of the developing child to a collective conception of child development. This is a remarkable change in child development noted through the critiques of scholars who follow a cultural-historical (Højholt, Chap. 76, this volume) and also post-developmental theories (see Volume 1).

This concept of child community moves the lens away from the lone developing child and into the community and contexts in which the child participates. Cultural-historical theory, like poststructuralism, has also critiqued traditional individualistic conceptions of child development. Conceptualising child development as a passage or engagement of children with new practices as they move between home, preschool or school and community activities (Hedegaard 2012) introduces societal, institutional and personal values and motives into any study of child development.

How a child meets the new demands within the activity settings the child participates in has been shown to contribute to her or his development (see Hedegaard, Chap. 79, this volume).

The importance of context emerges as a key dimension of child development, as evidenced through how children participate in chains of care (Andenaes and Haavind, Chap. 77, this volume), in how families are influenced by preschooling (Hedegaard, Chap. 79, this volume) and the cultural-ecological dimensions of child-rearing (Tudge, Martins, Mecon-Vergas, Dellazzana-Zanon, Piccinini and Freitas, Chap. 78, this volume) where activity settings, such as the dinner setting, are an important part of everyday practice (Hedegaard, Chap. 79, this volume). Further, different societal values and practices create contradictory family pedagogy that shape context, as noted by Donner (Chap. 80, this volume) "…in more affluent families, very young children are routinely looked after by dedicated domestic workers (often adolescents), whose main responsibility is the feeding, bodily care and physical surveillance of a toddler". In these settings, the parents worry about the different values, spoken language of the carers and the child-rearing practices being used by the domestic workers which may be at odds with the parents' values and practices. Together, these studies give evidence that child development can no longer be viewed as a biologically predetermined process that is only influenced by context.

The place of families in creating the conditions for children's development has also been influenced by globalisation of Western beliefs and practices about what constitutes quality early childhood education. The values and beliefs held by communities about what matters for their child's development, determine the practices found in early childhood programs and family homes. For instance, Donner (Chap. 80, this volume) noted that in India, middle-class mothers' role in the upbringing of children is to find early childhood programs that are based on Western pedagogy, such as the programs of Maria Montessori (see also Tudge et al., Chap. 78, this volume). As noted by Donner (Chap. 80, this volume), "When speaking to parents about nursery education it is apparent that Indian pre-schools are in the business of creating global – and assumedly transferable – experiences of education. These are modelled on ideals of schooling associated with US, European and South East Asia, and are consumed by all newly entitled middle-class consumers". What Donner draws attention to is how the concept of upbringing for middle-class Indian families includes the practices of the preschool, where the ideals of Western practices are highly valued and expected. For instance, she observes that India preschools are named as "Little Angles, Morning Glory, Booming Rose or Playhouse Montessori, which are markers of an English medium orientation. Furthermore, indicating 'fun' and playful learning', the sites draw on similar imagery – the walls are adorned with popular cartoon characters and English alphabets and number charts. Another global reference is the display of foreign-made counterfeit toys and books which nurseries never fail to show parents and visitors as 'equipment' to emphasise their pedagogic program". Family practices and their role in children's development clearly do not sit on their own or are static, but are also in a state of changing and developing.

New conceptualisations of child development appear to need a global framing, because it is not just the development of the individual child that is being discussed

but rather the development of families in global contexts, the community and the teachers in these changing and developing settings. This *global framing* is a new perspective on child development. What is foregrounded is the child as embedded and contributing to these different societal contexts, where different communities create new practices that children participate in. These new societal conditions need different conceptions of child development. For instance, Andenaes and Haavind (Chap. 77, this volume) argue that "the child is neither constructed as a baton in a relay race, delivered from one caregiver to the next, nor as a task that is easily split into pieces, one for each caregiver. What the caregivers do, according to these empirical studies, is to establish a number of ways to keep the child's state of mind in their own mind". In chains of care, a new way of conceptualising the developing child is needed to take account of how different carers establish routines and create practices of care in everyday life that contribute to the child's development. New conceptualisations of child development and pedagogy are needed for the new societal multiple care arrangements that now dominate many countries.

Tudge et al. (Chap. 78, this volume) suggest that we can no longer think about the developing child and family child-rearing practices as being thought about fitting along an independent vs interdependent continuum or framed individualistically or collectively – as has been evident in the literature. Rather, they recommend that cultures be considered "as differing along two orthogonal dimensions (autonomy-conformity and relatedness-separation)". Cultures of learning framed in these new ways make visible different kinds of family pedagogy, which in turn allow researchers to notice the differing conditions for children's development.

What has also been missing from traditional individualistic views of child development has been how everyday life contributes to a child's development. For example, cultural learning at the dinner table is exemplified by Hedegaard (Chap. 79, this volume) through a case study of a family where the learning of manners and healthy eating habits were shown. Reciprocity between children and parents is discussed as "The learning goes both from parent to children but also from children to parent, that have to learn to handle children's opposition, so a good tone is kept at the table". Everyday life affords different cultural practices that are valued by families, communities and society as a whole. The pedagogy of the family and the pedagogy of the preschool and school create different conditions, which researchers have shown to introduce new demands for children as they move from the institution of the family to the institution of the preschool, thus affording opportunities for development. This has also been noted at the level of the parents, who too, must engage in new practices as the child enters into schooling. For example, Donner (Chap. 80, this volume) has found in her research in India that "the importance given to educational games and knowledge about child development is of very recent origin and ties in with ideas about 'all-round', 'wholistic' and 'pedagogically' useful pastimes" that mothers are expected to do with their children after school. The expectation is that the mothers will play language games in English with the children and that "child-reading is seen by mothers themselves as status production work" that they are expected to perform.

Research from a cultural-historical perspective has also shown how the institutions a child attends influence the practices of the family home (Hedegaard and Fleer 2013). Arriving at school on time places demands upon families to prepare their children for school on time. Similarly, homework expectations place demands upon families in the evenings. Donner (Chap. 80, this volume) makes the claim that in India, "an insertion of the state into home lives" is evident each day, as families are expected to practice school English activities, if they wish their child to succeed in schooling and later life. Donner argues that these practices sit outside traditional Indian culture, "Bengali middle-class mothers compare their own parenting practices with supposedly 'Western' ways. This opposition dates back to the colonial period, when nationalist discourses and regional variations on the theme of motherhood produced a distinct modernist version of 'traditional motherhood' in Bengal" (Donner, Chap. 80, this volume).

When taken together, what these studies point to is how the traditional conception of child development is no longer helpful for understanding children's development because societies now engage multiple care arrangements as the norm, because children attend a broader range of institutions than in the past, and finally families as key sites for children's development have traditionally been invisible in studies of child development. The different developmental trajectories now afforded through differing family, community and institutional practices demand a new conception of child development. These differing developmental trajectories change the nature of what has traditionally been the idealised developing child, following a single developmental trajectory, with a singular pedagogical approach, usually mirroring Western child participating in Western schooling practice. New conceptualisations of child development do not create the idealised child and therefore do not engage in pathologizing children when they do not mirror the idealised developmental trajectory that dominant child development theories have claimed as the truth of development. Diversity and the developing contexts in which a child participates broadened the lens on child development and potentially supported local communities to push against the dominant child development discourses that appear to be colonising some communities in the global South.

49.6 Conclusion

In this second volume of the handbook can be found a global picture of complexity in terms of innovative and long-standing early childhood programs, curriculum and assessment practices, pedagogy and diverse conceptualisations of child, family and communities. What emerged through our analysis of the chapters in this second volume of the handbook was the ongoing dominance of European heritage early childhood education models and pedagogical practices, due in part to the use of these programs in countries in the global South. However, what was also noted was a strong push against the individualised conceptions of child development that have traditionally underpinned dominant models of early childhood education. What has

emerged is a trend towards re-conceptualising child development dialectically to include family and community who are also in a process of development, rather than to attribute child development to just the child or as the result of an early childhood program. This view of child development leaves room for more localised models and practices from the global South. It is through this new conception of child development that it becomes possible to speak differently to what and how early childhood practice are conceptualised and promoted. This new view of child development has emerged through both the theoretical lenses of cultural-historical and poststructuralist theories, and together these critiques give new insights and contribute to the scholarly literature in new ways. What has emerged gives hope for the valuing of different trajectories of child development, more localised models of pedagogy, curriculum and assessment and the halting of the colonising effect of dominant models into the global South.

References

Dai, Y., & Qiu, X. (2016). Rational thoughts on AnjiPlay [Dui AnjiPlay de li xing si kao]. *Research on Early Childhood Education, 1*, 50–52.

Hedegaard, M. (2009). Children's development from a cultural-historical approach: children's activity in everyday local settings as foundation for their development. *Mind, Culture, and Activity, 16*, 64–81.

Hedegaard, M. (2012). Analyzing children's learning and development in everyday settings from a cultural-historical wholeness approach. *Mind, Culture, and Activity, 19*, 9–27.

Hedegaard, M. (2014). The significance of demands and motives across practices in children's learning and development: An analysis of learning in home and school. *Learning, Culture and Social Interaction, 3*, 188–194.

Hedegaard, M., & Fleer, M. (2013). *Play, leaning and children's development: Everyday life in families and transition to school*. New York: Cambridge University Press.

Lindqvist, G. (2003). The dramatic and narrative patterns of play. *European Early Childhood Education Research Journal, 11*(1), 69–78.

van Oers, B. (Ed.). (2012). *Developmental education for young children*, *Concepts, Practice and Implementation*. Dordrecht: Springer.

Part IV
Innovative and Longstanding Programs

Bert van Oers

Chapter 50
Long-Standing and Innovative Programs in Early Childhood Education: An Introduction

Bert van Oers

How one conceives of education, we have finally come to recognize, is a function of how one conceives of culture and its aims, professed and otherwise. (Bruner 1996: ix–x)

Abstract For several decades, practitioners and researchers are investing time and creativity in the development of new approaches for the education of children in early childhood education (0–8 years old), on the assumption that the developmental potential of young children can be raised by involving them in innovated programs, which do justice to both the children's perspectives and to the teachers' pedagogical responsibility to introduce children into the culture of their community. The following chapter introduces a collection of seven long-standing and innovated programs from different countries all over the world, based on a variety of theoretical foundations. The chapter begins with a historical and theoretical analysis of the notion of 'program' and suggests a number of criteria on which different programs can be compared. On this basis the seven programs are summarised and analytically compared. Even though the discussed programs may not give a complete overview of all innovative programs, it can be concluded from the program analyses that future constructions and innovations of early childhood approaches should concentrate on topics like properly balancing the relationship between play and learning, the notion of play itself, the choice and ordering of cultural contents and how to hand these out to children and the ways of assessing children in ways that help promote their development as autonomous, responsible and critical moral and intellectual identities. The bottom line of the author's argument in this chapter boils down to the claim that (future) educational programs should involve young children in activities (practices) that help children to learn how they can gradually become co-regulators of their own cultural development.

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50.1 Organising the Future

Deliberately predicting and envisioning future activities has become a characteristic feature of the modern human being, as a consequence of the growing complexity of society and the increasing risks of not being properly prepared for future exigencies. Sometimes it is necessary to anticipate future events in order to prevent undesirable or even harmful outcomes; sometimes this is necessary in order to bring about outcomes or circumstances that are expected to be essential for future well-being or survival. One way of getting to grips of the near future is to decide which activities are needed and purposefully plan them in advance to make them happen in due time. Since antiquity, the word *programma* is used for this way of envisioning the future. For the old Greek people, a *programma* was a public, written announcement of future events.

Nowadays, not only artists make programs to announce and organise their upcoming performances, but also economists develop programs for saving endangered economies or industries, scholars develop research programs to organise their future research in a consistent way (see Lakatos 1970), computer experts make programs to organise the future processing of a piece of hardware so that it brings about specified results, educators make programs to organise future activities of teachers and children, etc. Programming is basically a process in which available images of goals and understandings of processes are purposively *projected* into the (near) future and materialised in specific activities. Hence, 'programming' always has some aim and mostly follows some rationalised sequence (is longitudinally organised).

This section presents a number of programs for early childhood education. As an introduction to this topic, this chapter addresses the notion of educational programs and the different versions that can be constructed depending on currently available knowledge about human culture, development and learning and imaginations of the ideal characteristics of future human beings. The next section addresses the notion of 'program' itself and how it is worked out in educational practices. This will be followed by an exploration of different features of educational programs that need permanent reflection if we want to contribute optimally to children's development. Finally, a number of long-standing innovative programs will be discussed from a comparative point of view.

50.2 What Is an Educational Program?

The history of thinking about how to raise children from birth to adulthood shows that there exists a clear need in adults to engage children in activities that can be expected to form these children into self-dependent and loyal members of their

community. At the same time, it is obvious that ideas about the proper ways of doing this are diverse and changing, depending on economic circumstances, dominating beliefs about the nature of child development and new insights into the dynamics of cultural learning and development.

In prehistoric cultures it is most probably so that children were educated by just being involved in the everyday cultural practices without much planning of activities for the following days. People followed the exigencies of the moments in everyday life. Taking care of children was mainly a matter of protecting them, feeding them and helping them to master the basic skills for survival. A case was made for this way of educating children by Gray (2013) in an analysis of hunter-gatherer cultures and primitive agricultural societies. Characteristically, this way of educating is an intuitive, expedient process, based on habits and contingent upon circumstances given and demands that emerge from those circumstances.

The need for planning and sequencing is typically a result of (industrial) cultures that invented educational institutions (like schools or day-care centres) to take care of the education of offspring. A hallmark of educational programs is their relatedness to special institutions for preparing children for participating in actual or future cultural practices.

A widely accepted view on the notion of 'program' is described by Slavin:

> A program is defined here as any set of replicable procedures, materials, professional development, or service configurations that educators could choose to implement to improve student outcomes. (Slavin 2008, p. 6)

It is worth noting in this description that a program is obviously seen as a tool (distinct and replicable) that serves a certain educational purpose and concentrates on both cultural content and the child's personal development. Some authors tend to use the term 'curriculum' (rather than program) for such educational provisions. There is a fuzzy demarcation line between the meanings of 'curriculum' and 'program', but for the sake of clarity in this introduction, I will use them as separate (though closely related) notions. Curriculum developers tend to take a starting point in the conventional school subject matters and try to design ways to transfer these to the pupils to master. In the curriculum approaches, there is most of the time a close connection made with assessment instruments to measure the learning outcomes of the curriculum [see section on Curriculum and Assessment in this volume]. Moreover and maybe even more remarkable is the tacit assumption in this approach that students are subjected to the curriculum as recipients who don't seem to play a role in the construction and implementation of the program. This is a widely held assumption in educational science that is related to one of the basic tenets of the industrial revolution and natural sciences that proclaim that human beings can change the outside world (including other people) by exerting specific influences on them. The choice of the specific influence is based on assumptions about lawful relationships between cause (curriculum) and effects (student outcomes). This is in contrast to recent approaches (see, e.g. Daniels 2008) which see the relationship between psychological tools and changes in peoples' state of mind or actions as primarily semiotic. In modern discussions about educational programs, this controversy needs further consideration.

On the other side of the spectrum of educational approaches, there are approaches that are basically driven by a distinct and well-developed philosophy about children's personal development (see, e.g. Fröbel, Steiner, Montessori, Reggio Emilia). These approaches highlight the quality of the interactions among educators and children's peers in a certain situation and suggest ways (principles) of how to interact with children to their benefit. There is very rarely an attempt to project a future path of development, but future educational situations are always assumed to emerge from current situations and the interactions going on in these situations. A number of such approaches are discussed in the section on *Pedagogies* (this volume). The reluctance to envision and project future developmental paths is the main point that makes this approach different from the programs approach as discussed in this section. It should be noted here, however, that the intention to design future developmental paths and directions is not automatically to be interpreted as a mechanistic imposition of a developmental route onto children, as will be explained below.

In order to break away from the self-evident assumptions about curricula and understand the nature and intentions of educational approaches for the broad cultural development of pupils as future responsible citizens, it is informative to look at some illustrative historical examples to see how pedagogues tried to achieve their educational purposes.

One of the first published manifests of how to organise young children's development in the context of educational institutions can be found in the works of the Czech pedagogue Jan Amos Comenius (1592–1679). In his book called *School of Infancy*, originally published in 1632 (see Comenius 1956), he argues that educators should guide young children into a future life in ways that closely harmonise with the child's nature, i.e. create opportunities for them to be active, experience a rich environment (including well-selected toys, picture books) and have opportunities for (outdoor) play and opportunities to appropriate rules of moral conduct (e.g. obedience to parents and to God). Comenius propagated the idea of lifelong education and recommended a principled educational program in the strict sense of the word. He definitely emphasised the importance of *longitudinal coherence* promoted by adult interventions. Educating young children in what he called the 'mother-school' should prepare them for the development of later stages of development, including participation in school life and labour. Comenius' way of 'programming' young children's upbringing was based on a specific goal (educating pious, God-fearing citizens), a stage theory of young children's development, a clear conception of the cultural contents that are important for developing children and the presence of a sensitive, guiding educator (Čapková 1970).

Almost 300 years later, it was John Dewey (1902) who also philosophised about children's continuous development over their lifetime. In his view, the formation of a democratic person was an important goal of education (see Dewey 1916), and like Comenius, he emphasised the relevance of cultural contents for children's development. Dewey, however, rejected the idea of transmission of cultural contents directly to children in order to promote their enculturation. For him, continuity in children's development was essential, but this continuity was not to be found in the logically organised subject matter, but in the permanent reconstruction of children's experi-

ences drawn from problems from their everyday lives. 'Not knowledge, but self-realization' is the goal' (Dewey 1902/1990, p. 187). For Dewey this was not meant to be a lonely process of the individual, but a process in social interaction under guidance of educators who enrich the child's environment with new experiences that are anchored in the child's earlier experiences:

> It is also essential that the new objects and events be related intellectually to those of earlier experiences, and this means that there be some advance made in conscious articulation of facts and ideas. (Dewey 1938, p. 75)

At the end of his essay on *The Child and the Curriculum* (1902), Dewey is clear about how to guide children's cultural development. He accepts that subject matter curricula are important resources for children to interpret and reorganise their experiences, but implementing a curriculum should never be 'external imposition' of cultural contents (p. 195), taking account of the child's actual abilities. It is 'freeing the life-process for its most adequate fulfilment' (p. 195), that is to say going beyond the things a child can do according to some developmental theory and guiding them to see and hear the new potentials he/she can do and wants to do in the reconstruction of life experiences to make him/her better fit for the exigencies of tomorrow. Here Dewey is in stark contrast with Comenius, and if we want to apply the term programming to Dewey's educational philosophy, it is actually an activity based on the interactions between the child and the (social) environment and rooted in his conviction that development should be a continuous process of reconstructing everyday experiences. 'Programming' for Dewey is a an emergent process for which both the educator ánd the child are held responsible.

Dewey's ideas about organising the course of children's lives with the help of clear aims and cultural contents also echo in Bruner's ideas about the 'spiral curriculum', especially as exemplified in the course 'Man: A Course of Study' that was developed in the 1970s in America as a humanities teaching program. According to Bruner, continuity in the appropriation of cultural subject matter should be achieved by repeating former curriculum contents in future stages of the curriculum at higher and more developed (detailed and deepened) levels. For Bruner the well-informed citizen who can make sense of his life as a participant of cultural practices is an important aim of education (Bruner 1996). Like Comenius and Dewey, making sense of the world one lives in is also an important principle for Bruner in his advice on how to organise children's near future: children's evolving capacities to construct their worlds do not depend upon constantly reinventing the wheel, but upon the capacity to integrate needs and strategies and interpretations with those of significant others (see Bruner and Haste 1987, p. 5). Bruner's way of 'framing' ('programming') child development (especially in his later theory) is based on collaborations among children, peers and adults and on his theory about the formation of new forms of symbolic representations out of enactive and iconic representations that emerge earlier in life. Like Dewey, Bruner emphasises the importance of going beyond the actual minds into possible worlds with the help of communication with significant others (Bruner 1986).

Many educational programs, nowadays, are rooted in or inspired by conceptions of continuity, sense making, purposive guidance and providing cultural content, as we can find in the above-described approaches. The interpretations of these elements can be different, however, depending on the theoretical frameworks and normative belief systems of the program builders and users. Epistemological conceptions about knowledge and knowing are involved here, as well as anthropological assumptions about children and human beings, theories of development and ideals about a future society and its citizens. As a result, it is not easy to say, in general and absolute terms, which program is 'best' for children's development. In the first place, they are different. Predilections for one program or another are mostly based on personal theoretical and normative belief systems. Nevertheless, it may be worthwhile to maintain an attitude of critical reflection on educational programs, to see if improvements can be made by deconstructing basic notions (see, e.g. Taylor 2011) or adding new elements to complement for existing blind spots or mistakes. Educational programs are grounded in basic notions (regarding aims, knowledge, child, identity, meaning/sense, relevant contents, etc.) that are *essentially contested concepts* (see Gallie 1968), emerging and rephrased in the contradictory, value-laden and contingent process of historical evolution. Such concepts need to be justified and critically evaluated.

On the other hand, even a conceptually consistent educational program must also be evaluated on its concrete developmental effects in children and teachers/caretakers. Hence, it is important to think about the way the program is assessed in terms of outcomes. This is a very delicate issue that needs ample discussion. To begin with, it is not obvious which type of evidence for the program's effectiveness should be taken as valid and reliable. Should we evaluate educational programs on their efficiency to produce specific (cognitive) results in specified domains, or should we focus on the program's capacity to foster the child's whole development? And if we choose for the latter, which (reliable and valid) assessment instruments should we use or develop? Are these sufficient? Most educational programs take the importance of a good evidence base serious and make their choices for one way of assessing or another but rarely discuss their choices in the broader framework of valid assessment and child development.

Even a conceptually well-founded educational program with a fair evidence base also needs to keep an eye on its effect on the well-being of children and teachers/caretakers. It is plausible to assume that the way the program works out on teachers/caretakers and pupils strongly depends on the teachers' (caretakers') engagement with the program and its underlying assumptions. Nowadays it is good practice to commit teachers and other caretakers to an educational program by involving them (as professionals) in the development of the program and particularly as individual teachers in the implementation of the program in new practices. Hence, a complete evaluation of educational programs needs to pay attention to the proclaimed status of this program as a tool for the teachers/caretakers. As will be discussed later, different options are open here.

50.3 Points for Comparison

50.3.1 Finality

Finality refers to the ultimate aims an educational program is heading for in the formation of the human subject. All educational programs implicitly or explicitly aim at the formation of a particular type of human being. What kind of person do we want to see developing as a result of our educational interventions? We have seen above different choices that educationalists (like Comenius, Dewey and Bruner) made when making decisions about their educational programs. Modern programs still face this challenge. For a long time, schools have been seen as places where pupils have to be instructed to master the fundamental cultural knowledge and skills to participate successfully in future work settings. The ideal aim of education here is, though often implicit, the well-informed and well-equipped citizen or, for short, *the skilled identity* who has mastered the required abilities as something he/she owns and wants to be taken responsible for in the technical sense of the word. The recent inclusion of more general twenty-first-century skills (Trilling and Fadel 2009) in educational programs for schools is a step away indeed from strictly subject matter-based skills, but still takes the necessary future abilities and skills as its basic orientation, almost exclusively prompted by supposed future economic needs and the knowledge society.

Recently, this one-sided approach has been criticised by many educationalist and educational philosophers (e.g. Nussbaum 2010). According to Hargreaves (2003), Western society has come in an ‘age of insecurity’ where knowledge transmission alone will not be an answer to all problems people encounter. In his view, especially teachers (or, more general, educators) must learn to resist the seductions of the knowledge society:

> Teaching today must include dedication to building character, community, humanitarianism, and democracy in young people; to help them think and act above and beyond the seductions and demands of the knowledge economy. (Hargreaves 2003, p. 60)

The proposal of Hargreaves focuses on a different type of general aim for education. Adoption of this approach implies the formation of a broadly developed and integrated kind of identity, that combines both the ideals of the well-informed citizen, and the concept of moral identity (a personality type that is able to evaluate and justify his/her own and others’ behaviour in terms of right and wrong). We can dub this type of identity (in contrast to the skilled identity) the ‘*moral identity*’, referring to broad, integrated development, i.e. integrating critical and moral agency and the ability to combine technical mastery with moral evaluations, balancing personal interests with interpersonal and extrapersonal interests (see, e.g. Sternberg 2007, pp. 152–173). Educational programs aiming at broad and integrated development of cultural agents (‘moral identity’) as an outcome need to create special provisions where pupils and teachers can practice this balancing of different interests when using cultural skills and abilities. Moral identity, however, is generally taken to

develop in adolescence, but there are plausible reasons and valid observations that precursors of moral reasoning (especially when accomplished with peers and responsible caretakers) start out much earlier (see, e.g. Hardy and Carlo 2012). Taking part in social activities in which moral questions are collectively addressed is the beginning of moral identity. Young children can be involved in such activities and demonstrate a collective version of moral identity.

Early years programs unavoidably have implicit or explicit assumptions about the type of person they want to see emerging. In order to get a deep grip on the project of an early years program, it is necessary also to pay attention to this dimension.

50.3.2 Theoretical Tenets

Modern educational programs are organised on the basis of theoretical principles of human learning, play, teaching, curriculum and development. Every theory proposes its own categories, assumptions and definitions about the process of learning and development. Hence, we can expect that a start from different theories, finally, may result in different educational programs. Evidently, a theory that starts out from the epistemological assumption that 'knowledge' is fixed and eternally given is more likely to propose an educational program that propagates knowledge transmission (to a receptive pupil) than a theory that adheres to an epistemological assumption of knowledge as a pragmatic process of producing relevant understandings for the solution of current problems. The same goes for different theories of development, meaningful learning, play and curriculum/instruction.

For a long time, the *curriculum* approach of Tyler has been a dominant way of rationalising decisions in program construction. In the 1950s, Tyler proposed a rationale that was summarised in four principles:

> What educational purposes should the school seek to attain? (see the previous point on 'Finality').
>
> How can learning experiences be selected which are likely to be useful in attaining these objectives?
>
> How can learning experiences be organized for effective instruction?
>
> How can the effectiveness of learning experiences be evaluated? (Tyler 1949, p 1)

Through answering these four questions, educators could construct educational settings that were coherent with respect to goals, learning experience, instruction and assessment in specific settings. However, Tyler provides no theory of learning experiences and sequences of learning experiences. Hence, his approach turns out to be inappropriate for designing longer sequences of consecutive learning experiences as is typically the case in educational programs (which often cover a number of consecutive years). Tyler's approach lacks a developmental dimension that can support decisions about longer sequences of learning that lead to distant purposes of the program. Tyler has been very influential in curriculum instruction,

Table 50.1 Schematic summary of Piaget's stage theory (Stages in cognitive development according to Piaget)

Age range	Stage description	Selection of remarkable developmental phenomena
Birth–2	Sensorimotor achievements: experiencing the world through sense and actions	Object permanence
2–6 years	Achievements with symbols (language, images)	Pretend play
		Egocentrism
		Language development
7–11 years	Concrete operations: thinking logically about concrete objects and events	Conservation
		Elementary mathematical operations
12–adulthood	Formal operations: ability to think about hypothetical scenarios, using operations as reversible processes.	Abstract thinking
		Logical thinking

but this influence is mostly concealed nowadays in taken-for-granted principles for the construction of early years programs.

In reaction to these approaches based on learning and instruction theory, educationalists started using *developmental theories* as a resource of their work on program construction. Since the work of Piaget, educationalists are more aware of the dynamics of developmental stages that may underpin their programs and may help them to construe coherent developmental trajectories over many years. Developmental theories provide program developers with characteristic descriptions of subsequent periods of life and with justifications for their way of organising the program along this line of development.

Developmental theories that are most influential since the 1970s in the development of early years programs are the theories of Jean Piaget and Lev Vygotskij/El'konin.[1] For *Piaget* the stages are defined by the type of cognitive achievements that are accessible for a child at a certain age. So when we want to build an educational program for 3-year-olds, we always have to take the specific characteristics of these children (as defined in Piaget's theory) into account (e.g. Piaget and Inhelder 1969). Piaget used to be quite strict in the age demarcations of the stages, but later neo-Piagetians realised that the ages had to be interpreted more liberal, as approximate indications of when a stage can be expected in normal circumstances. A summary of the main characteristics of Piaget's developmental theory is above (Table 50.1).

For the periodization of children's development, *Vygotskij* (1978, p. 103) suggested the concept of *leading activity*, which was conceived by Vygotskij as a period in which the child's orientation to reality was dominated by one specific motive. According to Vygotskij, through this connection with this dominant motive, the

[1] I will not dwell too long here on details of these theories. This can be found in every handbook. I restrict myself to mentioning the aspects that are relevant for my argument regarding the construction of programs.

child's learning was most productive and meaningful. Vygotskij's colleagues Leont'ev and particularly Elkonin (1972) elaborated this point of view by proposing a theory of child development as a sequence of leading activities that were alternatingly driven by either a social orientation or an object-oriented motive (see Mahn 2003; Smirnova 1997). Hence, children's development starts out (in the first year of life[2]) with activities that can be characterised as looking for social contact with caregivers. Then the next leading activity shifts to an object-oriented motive, as is manifested in manipulative play (second and third years of life). After such manipulative play follows a leading activity called 'role playing', in which again the social motive (orientation at roles in play) dominates (3–6-year-olds). Next a transition takes place to 'learning activity' (leading activity in middle childhood), in which the focus is again on objects and especially acquiring knowledge about objects. In the next leading activity, a transition is made again to a focus on social relationship, especially with peers (ages 13 and following). Like the stages of Piaget, the leading activities can also be taken as a pattern to organise children's development over the years by being sensitive of a child's dominant motive and the related 'leading activity' (see van Oers 2012, p. 948).

Children's play is also a core issue in the theoretical tenets of most early years programs. As was already stated in the introduction chapter to the first volume of this Handbook: 'The predominant topic of research in early childhood education can be conceptualised as an interest in studying the relations between play and learning'. Especially in the comparison of early years programs, it is informative to figure out how the notion of play is conceived and how it relates to learning or (in the practical context of a program) to the way goal-oriented learning is promoted. A screening of modern early education programs shows that an explicit definition of play is very rare and is often delegated to the developmental theory behind the program. For example, a program based mainly on Piagetian tenets takes play as a spontaneous orientation to reality of children, in which assimilative processes dominate over accommodative processes. Playing children adapt to their environment through assimilating it to their own cognitive structures and expressing themselves in idiosyncratic constructions and fantasies (Piaget 1962). Scholars and practitioners, who start out from Vygotskij's developmental theory, see play as an activity that follows from an imaginary situation, created by the child, and which suggests the rules that lead its play activity. It is important to note here that fantasy and imagination is a very important drive in play, but according to Vygotskij, they don't precede play but always emerge in the context of activities (Vygotsky 1978, p. 93 ff).

All early education programs emphasise the importance of play in young children's development. However, recognising themselves as 'educational', these programs also adhere to assumptions about learning (see, e.g. Hirsh-Pasek et al. 2009). However, as Hirsh-Pasek et al. point out, a clear definition of play and playful learn-

[2]The ages mentioned here and below are only rough indicators, which may change over time depending on different cultural-historical practices in which children are engaged in different cultural periods.

ing is not available, as yet. A clear operational definition of playful learning and its underlying mechanisms is needed for a better understanding of how and when play yields specific learning outcomes (Hirsh-Pasek et al. 2009, pp. 54–55). Although the authors don't provide an answer to the question raised, they reject narrowly defined conceptions of learning, mainly driven by the demand of high-stakes testing and accountability (p. 55).

Looking more specifically at early childhood education programs, we can identify some general approaches to the problem of integrating learning in play-based programs. Sometimes learning is expected to be an unintentional result of playing which may vary across children or situations. In other programs moments of play and learning, alternate and separate moments are created for guided learning and free play. Finally, programs based on cultural-historical activity theory try to integrate learning in play by conceiving of learning as an aspect of activity, including play activity.

In addition to such general conceptions about young children's developmental course, play and learning, there are more issues on which early childhood education programs differentiate and which I will discuss here only briefly.

50.3.3 Content

Educational programs in early childhood use a variety of resources for the selection of contents in the classroom. On the one hand, it is possible to find programs which draw content from conventional sources like a taxonomy of educational goals. These goals are taken to be valid for children's further school career and cultural life beyond the educational institute. On the other hand, there are programs which draw contents from everyday experiences and current events in children's lives. These are elaborated in the interactions among children and teacher to achieve outcomes that are supposed to contribute to cultural developments of children.

50.3.4 Evidence Base

Educational programs have different views on how to evaluate the outcomes of the program and show the accountability of the program. The answer to this question is closely related to a view on what counts as evidence in the evaluation of early years programs. This is currently a highly debated issue in which different positions are taken. Many program developers and policymakers prefer quantitative evidence of children's performances on specific operations (e.g. in the domains of vocabulary, reading, number, etc.) that can be reliably measured by standardised tests, especially from the age of 4. Actually this position often puts most emphasis on the reliability of the measurements and sometimes accepts the diminished internal validity of the testing situation. On the other hand, a growing number of researchers

and workers in early childhood education highly value qualitative descriptions of children's actual activity, actions, motives, emotions, voices and so on, as evaluative indicators of the quality and outcomes of early years programs. These people take qualitative data as good evidence in program evaluations, noting that special provisions have to be made to reduce the subjectivity of the observer (like standardised coding of qualitative categories, inter-rater comparisons, repeated measuring).

Many evaluators nowadays accept both types of evidence but still have different opinions about which type counts most.

Over the past decades, many researchers and practitioners have attempted to design educational programs for early childhood education in order to optimise children's developmental process and create concrete opportunities to foster children's developmental potentials. Each program makes different decisions as to theory, purpose, choice of content and ways of evaluation. It is important to compare different programs in order to learn from each other and constantly improve an individual program. In this section we brought together seven outstanding examples of innovative educational programs to inform the communities of researchers, early years practitioners, academic researchers and policymakers. Hopefully close study and comparison of these programs will be helpful in future improvements of existing programs or in the development of new programs.

50.4 A Rainbow of Long-Standing Innovative Programs: Some Exemplary Programs

There is much going on in the world of early childhood education all over the world. Governments and their policymakers begin to realise that the future well-being and success in the future society of the youngest citizens strongly depend on the quality of early childhood education. New programs are commissioned and established ones evaluated.

The collection of programs that will be presented below is definitely not complete, and we can be sure that other promising initiatives are currently undertaken in schools. We, however, had to make choices which ended up with the collection of seven programs. In order to trace the possible candidates for our collection, we used advice from peers all over the world. Moreover, we browsed the Internet with the help of Google (scholar). In our search we used the following refined criteria:

– The program must be *innovative*, that is to say it should break away from traditional approaches that either exclusively focus on transmission of cultural contents (skills, knowledge, abilities) or focus exclusively on the well-being of the individual child (as in the older progressive movement programs). On the one hand, this implies that an innovative program accepts at the same time the *leading role of the teacher* but on the other hand takes the *perspective of the child* as a serious influential factor as well, which has to be integrated in the final choice for a developmental trajectory.

- The program must be *long-standing*, that is to say it survived at least one decade, which can be seen as a criterion of sustainability, which means that it has resisted academic critique as well as critiques from practitioners and policymakers but also turned out to be feasible for a growing number of practitioners.
- The program *envisions children's future cultural development* on the long run, without imposing a fixed trajectory onto children; the designed program must be flexible and sensitive for intermediate changes in children's habitus and interests. Actually the implementation of proximal developmental steps should accept children's contributions and emerge from the interactions among children and teachers (parents, pedagogues). Designing a program is essentially an activity *of projecting* with the help of different sources (children, educational demands, teachers, parents, educational materials). In practice we see, however, that there are significant differences among programs and their willingness to allow children a voice in designing the program's proximal course. Nevertheless, programs should always create some space for the contribution of children.
- The program is *documented*, i.e. it describes tools for teachers to author the program in the classroom. These documents can include booklets, videos, mini-instructions to overcome difficulties in the implementation, courses and suggestions for (peer) coaching.

The following programs satisfied our criteria. For the sake of comparison, they will be briefly discussed below. The summaries could be used as an advance organiser before reading the chapters on the programs later on in this section.

Piramide is an approach to early childhood education and development for children from birth to 7 years old. It is an approach that is meant to give assistance to teachers and parents to create safe and challenging learning environments, in order to promote the optimal development of children's physical, emotional and cognitive intelligence. The approach draws its basic concepts from Piaget and Vygotskij, but other theoretical points of view are applied as well (multiple intelligence theory, attachment theory, dynamic systems theory, distancing theory). From these theoretical paradigms, the four cornerstones of the approach are derived (initiative of the child, teacher initiative, nearness and distance) which teachers are supposed to employ when implementing the program in their classrooms. Concretely, these cornerstones show up in the classroom as teachers stimulating children's own play and initiative learning, and by the teachers' presentation of a series of projects within a sequential framework.

The leading role of the teacher is central in the Piramide program. The teacher is expected to give support to individual children at different levels of their activities but also to leave open slots and spaces for children to play and learn from their own initiatives.

Obviously, the Piramide approach should be seen as a program as described above, although the teacher guidance in the approach is stricter and more demanding than in most of the other innovative programs presented in this section. The opportunities for the children to act as co-developers for the program course and content are more restricted than in the other programs.

Piramide is originally developed in the Netherlands but is now widely disseminated over the world. The program is amply supported by valid empirical evidence and evaluations with standardised tests.

The **Golden Key** program is developed for early childhood education, based on Vygotskij's cultural-historical approach to human development and learning. The program is introduced as a product of a projective method, i.e. as a method that designs new activities with educational purposes in mind. Following Vygotskij, the authors of the program maintain a strictly anti-naturalistic point of view and reject the idea that education is a process of transforming a natural, biological being into a socialised one. A basic Vygotskian assumption of the program is that human development is a cultural process rooted in education. All children are born in a social community, and as a member of such community, they are social beings *from the beginning* of their lives. However, according to the authors of the program, cultural-historical evolution has moved communities into new (modern) forms that provide poorer contexts for development which don't support the development of children in their broadest sense. Therefore, the Golden Key program restores a community type in the classrooms that simulates the main characteristics of the primordial community with a strong sense of collectivity, mutual responsiblity and reciprocal help. Such a community is by definition multiaged (including at least two educators), abides by family principles, gets young children involved in everyday *events* of labour activities, schooling, caretaking, etc. It is important to keep in mind that there is no intention to replicate the old peasant community in modern circumstances. The main purpose of taking the primordial society as a guiding metaphor is to create educational contexts that encompass all relevant dimensions of humanity and conviviality that support to 'create opportunities for the child to unfold the individual developmental potential and to promote the full and harmonious development of the child's whole personality' (quote from the chapter). From these starting points, the Golden Key program for young children is developed as a sequence of steps in the early years in which children are involved in the social and moral life of their surrounding (classroom) community and appropriates basic orientations of human cultural life (space, time, materials, self-reflection).

The intention to promote general child development in the transition to school learning is also prominent in the approach of **Narrative Play Pedagogy**, developed in Finland by Pentti Hakkarainen and Milda Bredikyte. The approach is based on the cultural-historical psychology of human development, especially young children's development in the age of 4–8 years old. Following Vygotskij's point of view that the analysis of development should focus primarily on personality development (rather than separate mental functions or growth of specific knowledge and skills), the authors of this approach developed a program for early childhood education that predominantly focuses on the development of the child as a playing person. As such the approach supports children's development of playing to mature role play, taking initiatives, problem solving, working skills, self-evaluation and so on. Maximising the developmental potentials of play which dominate in the activities of young children is the main purpose of the approach.

A core issue for development in the age of 4–8 years is helping children to get ready to participate in school learning in the sense of Davydov/El'konin. This is conceived as a transition from play to school learning and is taken as an important stage in the promotion of children's development. In everyday practice, this way of interacting with children mostly originates in narratives that children find interesting and that are followed up by creative activities to make the props, costumes, constructions and tools of the narrative and subsequently by an activity of sociodramatic play in which the children enact and develop the narrative in their own ways. The adults guide the children in these activities and support them in complying with the demands of the new activities (creative activity, role playing). Direct instruction is avoided.

In the whole process, this Narrative Play Pedagogy advocates careful monitoring of the children, in order to foster their play development towards advanced forms of narrative role play and guide their development of learning readiness (rather than school readiness). For the 7–8 years old, the assessments are complemented with observations that follow the child's development in subject content, working skills, self-evaluation ability, etc.

Implementing the Narrative Play Pedagogy requires special abilities and attitudes of the teachers. The appropriation of the abilities to apply this pedagogy is guaranteed by the fact that the mastery of this approach in Finland is part of the teacher education program in early childhood education and is often supported by local community experiments. Similar to monitoring children in their development towards specific goals, the adults are monitored as well on specific goals (like being able to participate in children's play, being able to broaden and deepen play activities, planning, etc).

Although the Narrative Play Pedagogy is a very open framework for organising daily educative interactions among children and adults, the approach is based on a specific purpose of children's education (personality development), development towards distinct and stable intermediate goals for both children and teachers that serve as landmarks to project future steps for children. The children have maximal opportunities to co-organise their future (as to content and sequence), but it is not completely arbitrary and open. Narrative Play Pedagogy shows all main guiding characteristics of educational programs.

Another approach to early childhood education that draws its basic concepts and perspective from cultural-historical theory is the British-Russian program **Key to Learning**. Particularly, three fundamental tenets of Vygotskij are elaborated in the program: (1) the presence of an adult (or more knowledgeable peer) is essential for promoting cultural development, (2) the appropriation of a system of cultural tools is necessary and (3) the structure of the preschool children's mind is dominated by perception. In the elaboration of these tenets, the authors follow the ideas of Zaporožec (often also spelled as Zaporozhets) and Venger. A fundamental starting point for Zaporožec was the conviction that the basic point for promoting child development was not 'acceleration' of the developmental process (in order to advance developmental stages), but *amplification* of the children's development. 'Generally the amplification of a child's development involves the appropriation of

both the [perceptual] tools ensuring the development of cognitive abilities, and the tools aimed at the development of communicative abilities and self-regulative abilities'(quote from chapter). Hence, from this point of view, a major task for developers of programs for young children is to identify which tools fit in best with the psychological characteristics of young children.

According to the authors of the program, the line of amplification of children's development is basically dependent on the development of *abilities* related to the different (perceptual) tools. The authors of the Key to Learning program have elaborated a neat system of tools and associated abilities that underlies their program, consisting of 12 curriculum units that comprise in total 60 sessions systematically ordered over time. Moreover, it is important to emphasise here that the units are not formally sequenced in time according to a logical order, but they should be implemented in practice in a way that stimulates integration of the general abilities. To achieve this, the program is organised as a sequence of *project activities* that integrate different abilities in ways that make sense for the pupils and their activities. In this way, project activities define the direction of the amplification process. Project activities have the following necessary characteristics: (1) they consist of a problematic situation that cannot be solved by young children directly, (2) a project activity encourages pupils to explore the space of possibilities that may help solve the problem and (3) project activities must be chosen or constructed so that they motivate the participants to get involved in the project.

No doubt, we can conceive of Key to Learning as a program, because it projects quite a strict route of development and learning for children into the future. The opportunities for pupils to co-organise the program are limited but definitely not reduced to zero. The organisation of the project activities gives children space for playing and organising their current activities in their own ways. This program is codified and offered to teachers who must be trained to implement the program properly into classroom practices. The empirical evidence supporting the program is yet small, and often casuistic, but positive research outcomes have been reported.

A unique example of long-standing and innovative programs is the **Te Whāriki** program developed in New Zealand since the 1990s. The purpose of the program is to develop an approach that can help schools to educate the younger generation with due respect and acknowledgement of the aboriginal heritage of the Maori and to assist children 'to grow up as competent and confident learners and communicators, healthy in mind, body and spirit, secure of their sense of belonging, and in the knowledge that they make a valued contribution to society' (quote from chapter).

Te Whāriki is a heuristic framework for building an open and non-prescriptive educational program for 0–5-year-old children. Future relevant educational activities are described on the basis of a consistent combination of four key principles (empowerment, holistic development, family and community, relationships) and five strands of learning (well-being, belonging, contribution, communication, exploration), which are weaved together (as warp and woof) into a mat (in Maori 'Te Whāriki' means 'woven mat'). This metaphor of the mat characterises the essence of the program aptly, as it symbolises the openness of the program, its holism and internal relationships. It gives young children many opportunities to co-

determine the course and content of the program. Te Whāriki provides a number of resources to support the professional development of the teachers who chose to work with the program. Basically, the program 'places responsibility on teachers to integrate content knowledge as they follow children's interests and interact with them during play' (quote from chapter). With regard to children's developmental progress, Te Whāriki focuses on children's dispositions (rather than specific knowledge and skills) and tries to assess and promote these with the help of learning stories (Carr) that are analysed by the teacher with the help of specific indicators.

Although Te Whāriki is an open program that carefully avoids imposing directions and instructions by the teachers, it cannot be denied that over the long run, the approach projects future trajectories for the children by taking care that al knots of the mat will be encountered as a moment for development of the children. As such, adults have a leading role at some moments in creating specific situations and opportunities for learning over the years. For this reason, it can be considered a program with many opportunities for children to organise their own learning and with mainly facilitating roles for educators (teachers).

The widely known early childhood education program **Tools of the Mind** is a comprehensive early years curriculum, based on the principles of cultural-historical psychology of development and learning. Like the previously discussed programs following the cultural-historical point of view, the authors of the Tools of the Mind program build on the works of Vygotskij and many of his followers. Zaporožec's idea of *amplification* of children's development (rather than acceleration) is also taken as a leading tenet for this program. Tools of the Mind aims at promoting mature make-believe play in preschool and kindergarten children (2–5-year-olds), on the basis of activities accessible for young children that provide opportunities to strengthen and broaden children's socio-emotional and cognitive skills (especially self-regulation). The Tools of the Mind program follows El'konin in his belief that mature play is the major source of development in young children. It can be recognised in play activities that (1) include the use of object-substitutes (like symbolic props); (2) include particular roles that require specific role-related actions, speech and interactions; and (3) consist of highly elaborated play scenarios that integrate different scripts and role-related tools.

In the evolution of children's play towards the mature stage, adults play a crucial role, especially in providing assistance to children in developing self-regulation, the proper use of multifunctional and unstructured play props, the accomplishments of roles and the organisation of complex interactions within the activities the children are engaged in. As an educational program for early years children, 'Tools of the Mind' accounts carefully for differences between preschool and kindergarten children, especially when it comes to play (for that reason, kindergarten play is called dramatisation, to distinguish it from preschool children's play which is not yet as strongly role bound). In fostering the development to mature role play, and consequently the development of tool use, self-regulation and communication, the program distinguishes different ways of getting children involved in play activities that serve as contexts for children's learning and development. Preschool children's play links up with children's experiences that are grounded in their everyday lives and

communities (like playing birthday party, going to the doctor, etc.). When children grow older (in kindergarten), their play is connected to stories and fairy tales that serve as dramatisation scenario's for children's learning about the world, the use of cultural tools, emotions and relationships. In this stage children are more intensively involved in the act of planning the play activity together, using language arts and writing activities when useful. In a further advanced stage, children go into centres where they enact the stories and especially imagine how it could go on. Each centre has different props and tools and (consequently) raises different problems. The role of the teacher is important here in order to scaffold children's learning towards mastery and understanding. It is necessary to note that the teachers' scaffolding of children's learning is not based on making the tasks easier, but on providing appropriate temporary help to the children for correctly accomplishing the tasks. After mastery of this performance, children gradually are encouraged to accomplish the task more independently later on.

Like in many cultural historically based approaches, 'Tools of the Mind' focuses first of all on the development of general cognitive abilities that are developed step by step as children grow older. The structure of this way of working is based on a theory of development of mature play and justifies to call this approach a program in the way meant in this chapter. But as a program, it doesn't completely fix the course of children's development and contents of their activities. As a play approach, the program allows the children regular moments of freedom in their play. In several studies (with RCT methodology), the program turned out to be quite successful especially with regard to self-regulation.

Like all other programs based on cultural-historical theory of development and learning, **Basic Development** concentrates its efforts on the *broad* development of young children and aims at the development of integrated (moral) identities, covering cognitive, motivational, affective, social and attitudinal elements. Basic Development refers to an elaboration of an encompassing educational approach (usually known as developmental education) specifically for the ages 2–8 years old. With regard to cognitive learning, it is noteworthy to mention that the objectives of Basic Development include both general abilities like self-regulation, dialogic conversation, symbolic representation, planning, etc. and also the appropriation of cultural content knowledge and skills in particular disciplinary domains, like reading, writing and mathematics. It is essential in this perspective that all learning is meaningful in two ways, i.e. culturally relevant and making sense to a pupil. This is an essential part of the approach for children at all ages. Children (even the youngest) are systematically introduced in cultural life (which requires both general abilities and abilities like counting, reading, writing and oral communication and knowledge about the world too). Like the encompassing concept 'developmental education', Basic Development assists teachers in helping young children to improve their abilities to participate as autonomous and responsible persons in cultural practices of their community.

Although there are specific objectives at several levels defined for Basic Development, the curriculum is not fixed but constructed in the classroom as personalised learning and developmental trajectories, which emerge in the interactions

among teacher and pupils, taking both pupils' personal interests and abilities into account and the teachers' cultural (educational) agenda.

The Basic Development curriculum is essentially a play-based curriculum, meaning that all activity contexts for children's learning are set up as play activities that allow children as much degrees of freedom in their actions as possible, acknowledges and clarifies the rules underlying the activity and engages children by inviting them to participate on the basis of their own interests.

A core issue of Basic Development is the promotion of communicative abilities (both oral and graphic) through the use of language and symbolic representations (like drawings and schemes) while participating in real-life cultural practices. Of course, there is differentiation in the program between the youngest children (engaged in manipulative play) and the older children (engaged in thematic role-play), but in all cases, the promotion of communicative abilities (oral communication, communication with the help of drawings and graphics, communication with the help of written language) is a major purpose.

For the optimal development of children's broad cultural moral identity, the assistance of the teacher is vital, and the program supports teachers to appropriate different tools in order to benefit from the teaching opportunities in play, taking care that the meaningfulness of children's activities is never impaired. To achieve this complex task, several teacher training programs are developed (both in some initial teacher education institutions and in in-service teacher education with schools) in particular for learning to plan activities with children and to employ qualitative ways of assessment.

Basic Development is a program in the true sense of the word, as it projects future-oriented developmental trajectories for children, but always in ways that do not destroy children's well-being nor the play character of children's activities. So the concrete activity of teachers and children in the classroom is always (and deliberately) an interactional product of both children's personal interests and abilities and the teachers' educational and cultural duties. The feasibility of the program in early childhood education settings is empirically supported by several positive research outcomes.

50.5 Conclusions

The growing interest worldwide in the past decades to optimise ways to introduce young children into the cultural of their community has resulted in many programs that are intended to support early years teachers in realising their personal and professional pedagogical ambitions. The traditional conviction that transmitting culture is the major task of the teacher has now been replaced by the belief that we must take children's own interests into account as well. All programs described in this section (and summarised above) share this ambition and try to find a meaningful balance between cultural values (meaning) and personal (children's and teachers') values (sense). Moreover, and probably as a consequence of this new pedagogical

ambition, all programs take a position with respect to the relationship between play and learning. All programs described in this section have taken a stance on this issue by taking play seriously as a context for playful learning or as a complement to academic (content) learning.

Is it possible to learn something from these programs with regard to the major issues that should be addressed to in the comparison and further development of new innovative approaches in early childhood education?

A first and basic point for explanation is related to the choice of the here presented programs. Programs based on a cultural-historical perspective (Vygotskij and his followers) are overrepresented in this collection and so may be the suggestions for the evaluation of early years educational programs. How to interpret this bias? In the worldwide search for programs for this section of the handbook, criteria were used (see above) that were general (not specifically Vygotskian). Nevertheless, this resulted unexpectedly in the selection as presented in this section. How come? An explanation of this can be found in the acknowledgement of the assumption that there is an intrinsic relationship between learning and development. For a long time in Western psychology, both psychological dimensions (learning and development) have been treated separately, both in research (see Piaget), practice and in handbooks for students. It was Vygotskij (see Vygotsky 1978, pp. 79–91) who argued for a theory that adopted the idea of an intrinsic dialectical relationship between learning and development. This issue was first seriously applied in research on educational practices for (young) children in Russia. Probably it is not accidental that most of the programs (except Tē Whariki) come from countries that were in contact since the 1960s with researchers of what was then referred to as the Soviet Union (the UK, the USA, Eastern Germany, Finland and the Netherlands). Much of the Russian research literature was translated by that time in German (due to the political situation in Europe in those days), a language that most academics from many of the Northern European countries could read. In special cases (like the USA and UK), the availability of the ideas of scholars form the cultural-historical school in the Soviet Union depended on a few scholars who could read Russian (like Brian Simon (in the UK) and Mike Cole (USA) and later Jim Wertsch) and who were willing to translate, summarise and disseminate these ideas in English. Consequently, many academics from these countries could (and did!) experiment with these cultural-historical views in their own countries from the late 1960s. Although the elaborations of the cultural-historical concepts were quite diverse in the beginning, there were always some scholars who probed these ideas for the education of young children as well. As a result, scholars from these countries had longer traditions of discussing and elaborating these ideas in early years practices. No wonder that long-lasting programs mostly come from these countries. Evidently, this fact by itself doesn't say anything about the credibility or value of these programs, but it is beyond dispute that these programs had to prove their sustainability during many years in contexts of academic critique and critical evaluations by practitioners who didn't share the opinions of these 'revisionists'. The bias that appears in the selection of the programs has to be taken with care, but it must be emphasised that it has a primarily historical basis (not a subjective one).

When comparing the presented programs, we can see a number of communalities and differences.

The programs share a stance against 'schoolification' (see Whitebread, Vol. II, section on West European countries and the UK) and organise their activities with children in such a way that children always have space to act from their own perspectives (mostly by providing opportunities for playing in the classroom). Another communality in the programs is their attempt to link children's learning with their everyday experiences in order to promote personal sense as a result of their learning. Although Leont'ev's terminology (meaning and sense) is not used by all authors, all programs seem to make this distinction implicitly, and although all these programs have different views on how this should be done (see below), they definitely share the opinion that early childhood education should not be restricted to spontaneous development (exclusively emphasising sense) nor to systematic transmission of cultural knowledge and skills (emphasising the absolute value of cultural meaning). Both meaning and sense should be accounted for in educational programs for young children.

Within or in addition to these communalities, it is also interesting to reflect on the different ways these programs try to promote young children's development by following their respective programs. Main differences can be found in the following areas:

50.5.1 Play

Like what was stated before, all programs integrate play somehow in their ways of working with young children. There are significant differences, though, in the ways each program attempts to realise this. Grossly we can say that some programs (see, e.g. 'Piramide') take play serious by reserving time in the program for free play of the children, in addition to their task-based content learning. Others (like 'Key to Learning' and 'Tools of the Mind') start out from developmental task and organise these tasks in playful ways (especially when children grow older/kindergarteners). Other programs (like 'Play Pedagogy', 'Golden Key', 'Tē Whariki' and 'Basic Development') take the child's contextualised play itself as a starting point and try to find ways to help children appropriate cultural contents within that play context.

There is another significant difference between the programs with respect to the concept of play. Not all programs are explicit about their concept of play. Reading the programs, one may have the impression that the traditional concept of play (as a spontaneous, pleasurable, voluntary activity driven by children's imagination) is taken as play by most of them. 'Golden Key', 'Play Pedagogy' and 'Tools of the Mind' explicitly follow El'konin's idea that mature play is a basic purpose for early years programs, as mature play optimally stimulates development. 'Basic Development', however, doesn't use the notion of 'mature play' but has elaborated activity theory to explain play as a special mode of human activities (satisfying some basic parameters of cultural activities, like rule-based, degrees of freedom and

involvement). This notion of play offers conceptual possibilities to understand playful learning as an intrinsic aspect of all activities (including play) and opens a window on children's play when they grow older (see van Oers 2013). These aspects are missing in the other programs for young children's education. Remarkably, none of these play conceptions take pleasure or fun as a defining characteristic of play (although none of these programs would resent children's fun while playing!).

50.5.2 Choice of Contexts

As was already passingly mentioned above, some programs take *developmental task* as contexts for children's learning. Developmental task are tasks developed by the teacher or curriculum developers, which are supposed to arouse fundamental activities and learning outcomes in pupils. The value of such tasks is mainly determined by the supposed theoretical significance of these tasks for promoting children's development (e.g. ordering quantities or alphabetisation); the personal sense of such tasks for the children is often not considered or put on a second plane (for the time being).

Next to these assumptions about contexts for learning, most of the programs discussed in this section take children's *everyday life situations and experiences* as fruitful context for meaningful learning in young children. The strategy to start out from children's experiences and everyday events is often taken as a basic context (and stepping stone) for young children's later learning and development. The role of narratives is accepted in all programs as a productive context for learning about life, roles and rules. The centrality of narratives is, however, different in these programs. 'Play Pedagogy' in principle starts out from narratives and stories and helps children from there to appropriate new dimensions of life. At the other side of the continuum is 'Basic Development' that prefers to take familiar everyday practices as a starting point for children's play and uses narratives just to provide children with background knowledge or new information, intriguing events, etc. of the enacted practice. Of course, for the very young children narratives can also be taken as a starting point for children's imagination and activity, but in general these narratives are soon linked to well-known everyday practices and embedded activities as well. In this aspect 'Golden Key' differs from 'Basic Development' as well. 'Golden Key' also starts out from familiar everyday practices but evaluates these practices first of all on the extent to which they exhibit basic qualities of human life (as were present in the old peasant society). 'Basic Development' evaluates the practices primarily on the extent to which they can be seen as real and valid representations of current adult culture. Both young and older children can participate in their own ways in these practices. Through learning they move from being peripheral participants in the activities to more central and autonomous participants (see for the notion of peripheral participant and its position in cultural activities: Lave and Wenger 1991).

50.5.3 Content Matter Learning

The relevance of cultural content matter learning is somehow acknowledge by all programs, but their view on the prominence of this learning in young children varies widely. In 'Piramide' and 'Basic Development', it is an explicit and basic dimension of the children's early learning, although the programs are different in the ways they practice this in the classroom. In 'Piramide', cultural contents are embodied in developmental tasks, and in 'Basic Development', the learning of cultural content is functionally embedded in children's playful participation in a cultural practice (like restaurant, supermarket, hospital, pet shop), as this content should always make sense to the children as a useful element of the practice they are emulating together. The teacher, however, is not just waiting for such learning opportunities to happen but deliberately introduces these contents if they seem useful for the children and their evolving ability to take part in cultural practices (using her observation and planning manual HOREB). Children's sense should never be sacrificed to the transmission of cultural learning.

In most of the other programs, the appropriation of cultural contents is more in the background and highlighted when the program asks for it (to be practised in special sections of the room) or when the need pops up in children. Handing out cultural content (either knowledge or skills) is seen as important in these programs but is considered as a secondary outcome.

50.5.4 Ways of Assessment

A final difference to be discussed here is the way children's activities and learning outcomes are assessed. All types of assessment tools are employed in the programs (ranging from observation, interview, tests, dynamic assessment). Most of the time, they are used in combination, but the different assessment methods are often differently weighted. 'Piramide', for example, mainly (and successfully) uses standardised tests to assess the outcomes of the program, while most of the other programs strongly rely on learning stories, systematic observations, portfolio and dynamic assessment. In all cases, the assessments are used for justification of the program for colleague teachers, policymakers, parents and inspectorate. But, more importantly, the outcomes of the assessments are also used for planning future steps in children's development and, therefore, for the concrete elaboration of a (tailor-made) program for the children involved. Deeper reflection on the possibilities of assessment methods is still needed, especially when we seriously mean to take children's perspectives into account to act as co-directors of their own program. More comparison and reflection is needed.

All in all, we can say that promising progress is made in the elaboration of programs for early childhood education in the past decades. If we demand that such programs keep on contributing significantly to children's development, especially

as (future) citizens, then it is plausible that teachers and program makers stick to the ambition to find a balance between the cultural learning goals and the personal interests and abilities of the children. The different solutions of this task, as described in the different programs, may be helpful in finding new steps. As we have seen, there are still remarkable differences between the programs, which ask for further critical reflection and innovative solutions. Following Bruner's motto (see beginning of this chapter), we must assume that critical reflection and discussion on deep cultural assumptions regarding humanity, knowledge and ability, the child, values and future citizenship may help us to better understand the differences described above. But most definitely, such reflections and discussions are essential for further justifying the finality of each program and create innovations in the ways we educate young children, which help them to become *moral identities* and co-designers of their own developmental programs and future.

References

Bruner, J. S. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Bruner, J. S. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

Bruner, J., & Haste, H. (1987). Introduction. In J. S. Bruner & H. Haste (Eds.), *Making sense: The child's construction of the world* (pp. 1–25). London: Methuen.

Čapková, J. A. (1970). Pre-school education in the work of J.A. Comenius (Komenský). *International Journal of early childhood, 2*(1), 1–17.

Comenius, J. A. (1956). In E. M. N. Eller (Ed.), *The school of infancy*. Chapel Hill: University of North Carolina Press. Originally published 1632.

Daniels, H. (2008). *Vygotsky and research*. New York: Routledge.

Dewey, J. (1902). *The child and the curriculum*. Chicago: University of Chicago Press Reprint 1990.

Dewey, J. (1916). *Democracy and education*. Toronto: MacMillan Company Here quoted from the Free Press reprint (New York: Free Press, 1966).

Dewey, J. (1938). *Experience and education*. New York: Kappa Delta Pi.

Elkonin, D. B. (1972). Toward the problem of stages in the mental development of the child. *Soviet Psychology, 10*, 225–251.

Gallie, W. B. (1968). *Philosophy & the historical understanding* (2nd ed.). New York: Schocken Books.

Gray, P. (2013). *Free to learn*. New York: Basic books.

Hardy, S. A., & Carlo, G. (2011). Moral identity. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research*, *Domains and categories* (Vol. 2, pp. 495–513). New York: Springer. doi:10.1007/978-1-4419-7988-9_19.

Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York: Teachers College Press.

Hirsh-Pasek, K., Golinkoff, R. M., Berk, L. E., & Singer, D. G. (2009). *A mandate for playful learning in preschool*. New York: Oxford University Press.

Lakatos, I. (1970). Falsification and the methodology of scientific research programmes. In I. Lakatos & A. Musgrave (Eds.), *Criticism and the growth of knowledge* (pp. 91–196). Cambridge: Cambridge University Press.

Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Mahn, H. (2003). Periods in child development. Vygotsky's perspective. In A. Kozulin, B. Gindis, V. S. Ageyev, & S. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 119–137). Cambridge: Cambridge University Press.

Nussbaum, M. C. (2010). *Not for the profit. Why democracy needs the humanities*. Princeton: Princeton University Press.

Piaget, J. (1962). *Play, dreams and imitation in childhood*. New York: Norton.

Piaget, P., & Inhelder, B. (1969). *The psychology of the child*. New York: Basic Books.

Slavin, R. E. (2008). Perspectives on evidence-based research. What works? Issues in synthesizing educational program evaluations. *Educational researcher, 37*(1), 5–14. doi:10.3102/0013189X08314117.

Smirnova, E. O. (1997). *Psichologija rebënka [Psychology of the child]*. Moscow: Škola Press.

Sternberg, R. J. (2007). *Wisdom, intelligence, and creativity synthesized*. Cambridge: Cambridge University Press.

Taylor, A. (2011). Reconceptualizing the 'nature' of childhood. *Childhood, 18*(4), 420–433.

Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. San Francisco: Jossey-Bass.

Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. Chicago: The University of Chicago Press.

van Oers, B. (2012). Culture in play. In J. Valsiner (Ed.), *The Oxford handbook of culture and psychology* (pp. 936–956). New York: Oxford University Press.

van Oers, B. (2013). Is it play? Towards a reconceptualisation of role-play from an activity theory perspective. *European Early Childhood Education Research Journal, 21*(2), 185–198 http://dx.doi.org/10.1080/1350293X.2013.789199.

Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Chapter 51
Piramide

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Abstract Piramide is an early development and education program originally developed in the Netherlands by Cito. Piramide is a guided approach for teachers and parents to create a safe and challenging learning environment for young children from birth to 7 years of age.

Its four cornerstones, *initiative of the child* versus *initiative of the teacher* and *nearness* versus *distance*, are based on Piagetian and Vygotskyan ideas, attachment theory, distancing theory and dynamic systems theory. These four concepts come together in the two major components of Piramide, the relational and the educational component. The objective of Piramide is the optimal and balanced development of the child's physical, emotional and cognitive intelligence, which is supported and promoted by stimulating its own play and initiative learning and by presenting a series of projects within a sequential framework.

The role of the teacher is elaborated into three levels of support and intervention: a low level where children play, explore and learn independently; a middle level where children play, explore and learn together with the teacher; and a high level where the teacher of tutor intensively plays or teaches with the child with special needs or gives high-level feedback to bright children.

Jef. J. van Kuyk and his team composed a balanced Piramide approach. How does it work? We will answer that question by outlining our strategies of implementation and by presenting supporting outcomes of intervention studies.

Times are changing and Piramide is changing too. So we conclude this chapter by discussing some new and promising developments. They involve updates of

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materials to meet new developments over time and the way in which we see profesionalizing as an ongoing process.

Keywords Cultural-historical psychology • Preschool education • Child development • Play • Event-based education • Pair pedagogy • Family principle in education • Zone of proximal development • Projective method

51.1 Introduction

Piramide is an approach to early childhood development and education founded on established theories and supported by research. Piramide was originally developed in the Netherlands by Dr. Jef van Kuyk and his colleagues at Cito (Institute for Test Development) and has been implemented on a large scale in classrooms in the Netherlands and in Belgium, Germany, Japan and the USA. See for detailed information op den Kamp and van Kuyk 2011 and van Kuyk 2003.

Piramide is a guided approach for teachers and parents to create a safe and challenging play and learning environment for young children from 6 months to 7 years of age. Piramide is a holistic approach based on a hierarchical framework. The framework contains hierarchies in several developmental areas. Piramide has a number of special features for children who need extra support. These features include extra language stimulation, interactive storytelling, rich play, initiative learning activities, as well as activities for bright children and tutoring (van Kuyk 2003, 2006, 2013).

In the first section, we describe the four basic concepts Piramide is based on. These basic concepts of Piramide are initiative of the child, initiative of the teacher, nearness and distance. These basic concepts are based on the work of Piaget and Vygotsky as well as attachment theory, distancing theory and dynamic systems theory. The objective of Piramide is to promote the optimal and balanced development of the child's physical, emotional and cognitive intelligence, which is supported and promoted by stimulating its own play and initiative learning and by presenting a series of projects within a hierarchical framework. These basic tenets will be elaborated in the next section. After this section, the role of the teachers and the parents to optimize everyday life experiences is addressed. Their principle is every child has growing power. The section that follows next is about evaluation. Every child has its own style and character. Piramide professionals closely evaluate each child regarding its needs. In the sections that follow, a description of Piramide classrooms can be found as well as explanations of the way in which the Piramide approach professionalizes teachers so they can support children in their growth. After this a description is given of the international approach of Piramide. The Piramide way is universally deployable and flexible to fit in different areas. Research findings on the effectiveness of Piramide are discussed in the following section. Times are changing and Piramide is changing too. So we conclude this chapter by discussing some future developments. By putting Piramide in a quality cycle, the approach stays up to date, the ambition and drive of all concerned remain high and the benefits on and joy of children are to an optimum.

51.2 Description of Pedagogical Tenets of Piramide

51.2.1 Relational and Educational Component

Piramide is set up in a relational component and an educational component (van Kuyk 2013).

51.2.1.1 Relational Component

The relational component refers to the way in which the teacher treats the children and is derived from the attachment theory (Bowlby 1969; Ainsworth et al. 1978; Erickson et al. 1985; Riksen-Walraven 2008). A positive attachment between child and teacher is important because it allows the child to feel safe, secure and confident enough to go forward and explore the world. Feeling secure is essential for exploring the world and, consequently, for learning.

51.2.1.2 Educational Component

The educational component emphasizes the way in which the teacher stimulates the development of children, provides learning opportunities, challenges their curiosity and understands what motivates them internally and externally. This component is derived from dynamic systems theory (Fischer and Bidell 2006, Fischer and Rose 1998; van Geert 1998, 2006; see also Steenbeek and van Geert, Chap. 66, this volume) and distancing theory (Sigel 1993, 2006).

The dynamic systems theory builds on the theories of Piaget and Vygotsky. This theory consists of a series of dynamic long-term and short-term growth cycles from before birth to adulthood. According to the dynamic systems theory, development begins simple and becomes increasingly complex. During these growth cycles, the child learns and relearns new skills through self-regulation and through scaffolding by adults. Scaffolding assists the child on an as-needed basis, and assistance fades out as the child's competence increases (Pressley et al. 1996). There is a great difference between development through self-regulation and development through scaffolding. Through self-regulation, the child reaches a typical (lower) level of development; with the teacher's scaffolding assistance, the child can reach an optimal (higher) level of development (Fischer and Bidell 2006). The dynamic systems theory offers perspectives for the education of young children (van Kuyk 2006). Under the hierarchical framework, we distinguish three intelligences that mirror the integration of the mind and body and that are important to learning: physical intelligence, emotional intelligence and cognitive intelligence (Gardner 1993; van Kuyk 2003, 2006). The three intelligences are further organized for practice into eight developmental areas. The relationship of the three intelligences and the eight developmental areas is illustrated in Fig. 51.1.

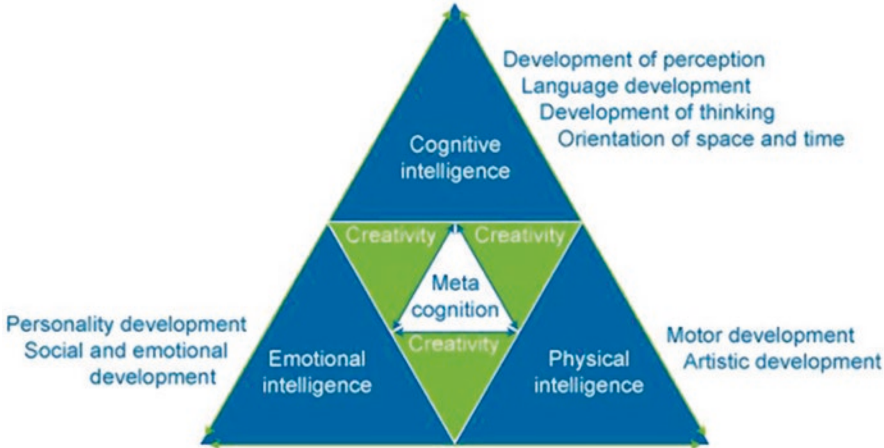

Fig. 51.1 Three intelligences in Piramide

In addition, within the intelligences, we further distinguish three levels of action and thought. The basic level reflects the child's basic knowledge and skills. The second level is a creative level, which is the child's capacity to create or think of something that is new and meaningful. The third level is a metacognitive level. This level is attained when children are aware of their knowledge and skills and consciously change their own behaviour. As their cognitive intelligence develops, children become conscious of their physical, emotional and cognitive actions and work with them in flexible and creative ways. During their reflections on play and initiative learning, children are encouraged to learn and think at the metacognitive level.

51.2.2 Four Basic Concepts of Piramide

In addition to the relational and educational component, Piramide is built on four basic concepts: initiative of the child, initiative of the teacher, nearness and distance. These concepts represent the cornerstones of Piramide and each is discussed in detail below (van Kuyk 2012, 2013).

51.2.2.1 The Child's Initiative

The concept of the child's initiative emphasizes the extent to which a child can and should optimize his or her own development. According to the theory of Piaget (1970), children possess enough cognitive power to direct their own development. This is done through confrontation with objects from their physical and social

environment. The child's initiative is the beginning and end of the educational process. The human being is naturally oriented towards initiative learning (Fischer and Bidell 2006; van Geert 1998, 2006). As soon as a child is born, we see that he or she wants to discover the world.

An important objective of Piramide is to support and optimize the child's capacity to take initiative. The teacher provides physical and psychological space for the child to take initiative, e.g. making his or her own choices. She encourages the child to experiment and doesn't intervene too soon. She enables the child to learn to control his or her own behaviour. Ultimately the child must be able to manage his or her everyday life; therefore, the child's own initiative is essential.

51.2.2.2 The Teacher's Initiative

The initiative of the teacher is also essential to the education process (Bruner 1985; Vygotsky 1962; Fischer and Bidell 2006; van Geert 1998, 2006). The role of the teacher is to scaffold the child's learning experiences to promote their development. It is the teacher's role to advance the child's learning in areas that cannot be reached without support. During play and child initiated learning, the teacher supports the child by providing stimulating opportunities for him or her to take the initiative. However, the teacher also takes initiative to encourage optimal development. The teacher does this during group activities and when children are carrying out tasks on their own. The teacher must have a broad spectrum of educational skills. The teacher creates possibilities, offers support, motivates, sets a good example, gives instructions and guides children in learning to think about and solve problems.

51.2.2.3 Nearness

The concept of nearness is derived from attachment theory. It is important that the child knows that the teacher is close by. This allows the child to feel safe, secure and free enough to go forward and explore the world. The teacher gives the child this freedom but, at the same time, creates a clear structure and establishes rules. Piramide starts after the summer and Christmas holidays with the welcome program for the 3-year-olds or the 4- and 5-year-olds. This program contains activities and songs to provide children with a clear understanding of the all-day program and the rituals and rules in the group. These rules are not to restrict the child, but to indicate where there is space for playing and learning. Structure and rules also give the child a sense of safety. In a safe environment, children take the initiative and explore the world. The task of the educator is to be aware of the signals from the child and allow the child to be him or herself. The educator gives emotional support when needed and respects the autonomy and competence of the child (Riksen-Walraven 2004).

Picture 51.1 Caretaker in day-care centre talking with children about a picture book

51.2.2.4 Distance

The teacher must also help the child take more and more distance (Cocking and Renninger 1993; Sigel 1993, 2006). After establishing a nearness connection with the child, the teacher helps the child take distance from the here and now. He or she must begin close to the child's familiar, here and now experiences, present things that can be directly observed with the senses and use concrete materials. The teacher asks here and now questions, but also asks questions and talks about subjects that are not in the here and now by using imagination, representations and questions, making the non-present present. They learn to think about places that they have never seen before and things that have happened long ago or that have not yet happened (Picture 51.1).

These basic concepts interact with one another in a transactional framework and are illustrated in Fig. 51.2. The initiative of the child and the teacher are complimentary. The relational component is conditional to the educational component. There has to be enough nearness (feeling safe) in order to be able to explore (distancing).

51.3 Role of Teachers and Parents

51.3.1 Relational Role

To establish a positive attachment with the children and a solid basis for the relational component, the teacher must have a sensitive and responsive attitude towards children and their parents. He or she observes, listens and shows in her reaction that he or she really hears them. She creates a positive social climate (Fischer and Bidell 2006).

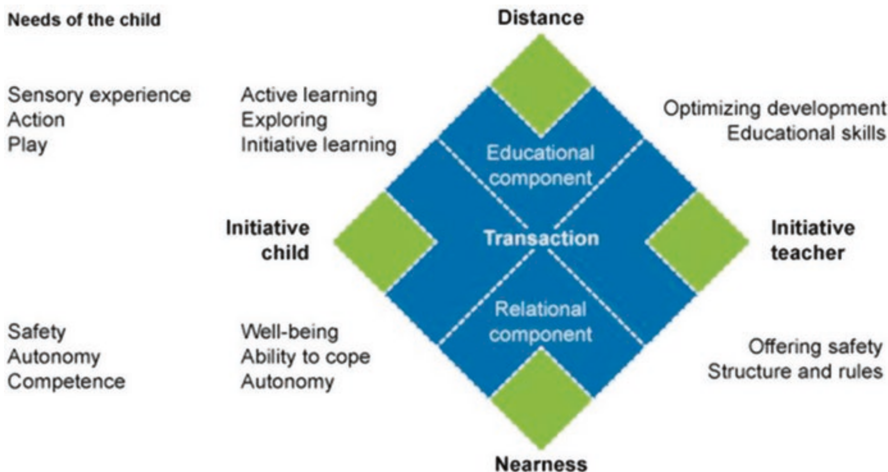

Fig. 51.2 Four basic concepts

51.3.2 Educational Role

The co-construction process (Goldstein 1999) of children and teachers is differentiated into three levels of teacher intervention: a low level, a middle level and a high level. We explain the three levels in the context of play, initiative learning and projects.

51.3.3 Play and Initiative Learning

Play is an activity initiated by the child, in which the child can experiment and interact with the environment in a stress-free and open manner. In initiative learning, children are motivated to understand the world around them to find out how things work. They set goals for themselves. During Piramide teacher training, substantial attention is given to how teachers scaffold children's play experiences and their initiative learning. The amount of help offered depends on the level of development and the degree of independence the children display.

51.3.3.1 Low Level

Piramide teachers offer children a rich and structured environment in which the children can find for themselves new social opportunities and challenges for play and learning that enhance the development of self-regulation. Materials are stored

in various play and learning centres (e.g. the discovery centre, the art centre and the dramatic play centre) and in cupboards and support the child's development in the eight developmental areas (Fig. 51.1). Children can find materials and opportunities that match their interests and their level of development and that challenge them to attain higher level skills.

Because the environment is well organized with familiar play areas and materials, children have the opportunity to make their own choices and decisions. A variety of interesting opportunities inspire children to creative play and independent learning. The teacher observes the child's play and the initiative learning. When the children are playing and learning richly and deeply, the teacher provides a low level of intervention. He or she doesn't interfere but provides some support when necessary.

51.3.3.2 Middle Level

When the teacher observes that the play and learning are not rich and deep (e.g. lack of persistence or stereotyped), she provides mid-level intervention. Through scaffolding he or she brings children to a higher level. She joins in the play, aligning herself with the children's play that is in progress. He or she introduces a new idea, a new material or technique or a new role to broaden and deepen the play. The teacher then slowly hands over activities, bit by bit, to the children and he or she withdraws. To allow initiative learning, the teacher helps children to develop executive functions (Smidts and Huizinga 2011), such as self-regulation and in-depth knowledge of their own behaviour. The teacher inspires children, provides new examples and scaffolds new ideas onto the child's interests and activities. In doing so he or she supports the child in reaching his or her self-chosen goal.

51.3.3.3 High Level

Sometimes there are children in a group who do not play or do not show interest or make an effort to explore and learn. If children are not able to engage in play, the teacher plans a high level of intervention by demonstrating the activity. He or she plays a role together with a cuddly toy or shows how interesting it is to discover that some materials float and others sink. As the children show interest, he or she encourages them to join the activity and finally withdraws herself slowly so that the children can take over, allowing the children to play and learn as independent as possible with the support of the teacher when relevant (van Kuyk 2003) (Picture 51.2).

Picture 51.2 Caretaker talking with children about sickness and health

51.3.4 Projects

Piramide projects are well-balanced series of activities built around a particular theme and designed to match the experiences and interest of the children. Teachers jointly prepare the series of projects each year, such as 'Home', 'Celebrations' and 'Summertime'. Each project lasts for about 3 weeks. A hierarchical framework (Breebaart 2009–2011; van Kuyk 2006) is used to organize projects for each developmental area, e.g. development of language, development of thinking and motor development from easy to difficult. Within a project, all the developmental areas are ordered around the project themes so children can learn on a holistic way. The children explore the same theme on a higher level each year. Consistent with the long-term learning cycles (Fischer and Rose 1998), the children revisit concepts that were learned in the previous year, and they broaden and deepen their knowledge in each subsequent year (Fig. 51.3).

51.3.4.1 Low Level

To enrich Piramide projects, the teacher, children and their parents add new thematic materials to the play and learning environment to add new impulses to play and initiative learning. Some learning centres change completely and new centres are added, for example, a farm, a specific shop, a hospital or a restaurant. When the children show rich and deep thematic play and self-initiative learning activities, the teacher uses a low level of intervention. He or she eventually inspires the children to thematic play and learning and gives just enough support when necessary.

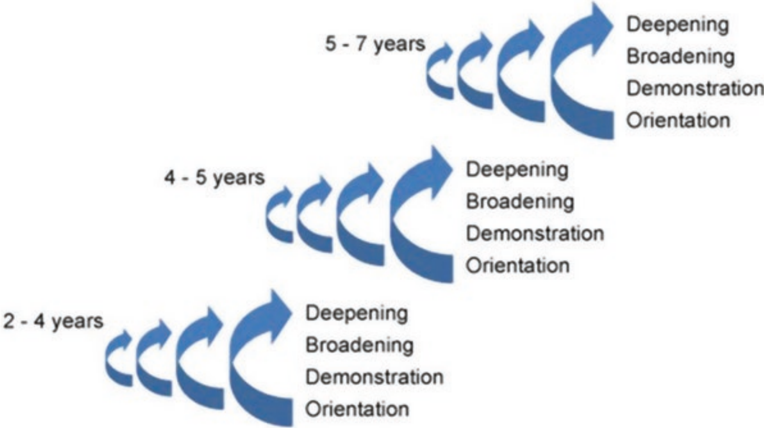

Fig. 51.3 Short- and long-term cycles in the Piramide projects

51.3.4.2 Middle Level

Middle-level support is given either in large or small groups. Children play, explore and learn together with the teacher. Based on their needs, developmental levels and interests, the teacher chooses from among the Piramide activities. The teacher carefully prepares group activities to stimulate the development of children. Activities are presented in an interactive manner that engages the children as active learners. After the group exploration has completed, the children can experience the skills learned again during individual and small-group play in learning centres. Based on distancing theory (Sigel 1993, 2006), four steps are used to increase the difficulty and the level of thinking during a project. Projects are organized in four steps: orientation, demonstration, broadening and deepening (van Kuyk 2003). Across the four steps, the children learn to go from near (i.e. familiar and concrete) to distant (i.e. unfamiliar and abstract), from simple to complex and from perception to problem-solving.

Orientation

Orientation is the first step and is intended to introduce children to the context of the project theme. Orientation connects the project theme with children's familiar experiences and what they already know about the subject. The teacher creates interest and excitement. Moreover orientation gives children a sense of safety and encourages them to participate in the upcoming project activities with confidence. For example, during the project 'Home', the 4- and 5-year-olds begin with discovering pictures of their own houses and then play a game where they furnish a dollhouse. During the orientation step, the children rehearse the concepts they learned the previous year in the project 'Home' of the 3-year-olds.

Picture 51.3 Children watching houses in the neighbourhood

Demonstration

Demonstration begins with the familiar world as the children experience it. In this step, a great deal of work is done with the senses. The teacher uses concrete activities and materials so that children participate in sensory experiences as the teacher verbalizes what he or she is doing and names the objects. The teacher provides clear examples to help children understand. During this step of the project 'Home', the children take a walk through the neighbourhood to look at houses. Pictures inspire them to discover details like mailboxes, numbers and material of the walls, masonry and front doors (Picture 51.3).

Broadening

Broadening refers to the expansion of concepts. Relevant characteristics are sought in various examples, comparisons are made and more difficult examples are introduced. Language plays an important role in comparison. The teacher draws heavily on children's own experiences in comparisons and helps them take more and more distance from here and now. The teacher begins to introduce 'distancing' experiences. He or she reminds them about things that have happened previously and refers to things that are not currently present or have not yet happened. During this step of the project 'Home', the children learn, for example, with a storybook about a house the differences between living in the city and living in rural areas. Through play they learn what it is to move to a new home.

Deepening

This last step encourages the child to flexibly use ideas and experiences that were learned through the demonstration and broadening steps, in new and often more difficult situations. They learn to switch between different senses and between different types of representations. Children learn to solve problems by themselves. The teacher encourages children to anticipate new situations. He or she invites them to reflect on what they have learned and to draw conclusions from what they have experienced (metacognition). During this step of the project 'Home', for example, the children watch a film about a strange house. The teacher asks deepening questions such as 'Can you live in this house? Would you build it differently? Why and how?' They also learn about the sequence of building a house.

51.3.4.3 High Level

A special teacher (in Piramide called 'tutor') offers considerable support to a child or small group of children who require extra help. Slavin et al. (1994) have shown that tutoring is effective and that the best tutoring is directly related to the daily activities as a preventive measure. That's why the tutor teaches children prior to group exploration, to create a positive spiral so that children feel more involved in the group activities and have a better level of participation. They receive extra and more intensive learning time.

A child will only reach his or her potential when challenged from an early age (van Gerven 2009). For gifted children who need more challenge, Piramide offers more challenging activities. In presenting these activities, the teacher shows a high level of intervention to encourage a research attitude, reflection and anticipation, advanced and creative thinking, collaboration and experimenting.

51.3.5 Involving Parents

Teachers involve the parents through a parent program. This includes walk-in playtime when they play together with their children, during the projects and at end-of-day closure. Every project has brochures for parents with tips, songs, books and home activities about the project theme. There are special parent moments when parents experience a project.

The teacher needs to distribute his or her energy and time to meet the needs and interests of every child in his or her classroom. He or she creates a program for the children that balances familiarity and newness, tension and relaxation. Piramide believes in the growing power and competence of children. The role of the adult is to provide active facilitation and support.

51.4 Program-Specific Ways of Assessment

Early education is most effective when the behaviour and approach of the teacher are based on the educational needs of the child. Therefore, it is important to look closely to the individual educational needs of each child. Piramide teachers use a variety of evaluation formats to gather a complete picture of these needs.

51.4.1 Purpose of Evaluation

Piramide regularly uses evaluation to:

1. Assess children's development
2. Improve the educational experiences for the individual child and the whole group
3. Identify children who need extra support
4. Identify children who need more challenging activities
5. Determine whether the play and learning environment is suitable for the children
6. Monitor and evaluate the education at the group level
7. Follow and evaluate education at the institutional level

Evaluation data are also used to provide parents with insight into the development of their child and their role when transitioning a child to a new group or location.

51.4.2 Instruments

Piramide teachers use a variety of child assessment tools and strategies, and each has a specific purpose. The assessment tools are selected for reliability (i.e. consistency) and validity (i.e. the instrument measures what you want to measure). In addition, Piramide makes a distinction between authentic, systematic and diagnostic evaluation.

51.4.2.1 Authentic Evaluation

Authentic evaluation provides specific information and examples of the child's natural inclinations as he or she is involved with the environment.

51.4.2.2 Daily Observation

In order to determine the best way to support the child's learning, the teacher observes the child daily. The learning activities can be adapted in response to these observations of the child's behaviour. The teacher makes note of the richness of the activities, the child's self-initiated behaviours, preferences, involvement and level of development. Striking characteristics from the observations are noted in the child's individual portfolio. The teacher also records the activities that children participated in during the day.

51.4.2.3 Portfolio

In addition, the teacher assesses and collects a variety of materials that provide authentic information about the child's work and play. Children have their own container in which they collect drawings and other works. This container represents important characteristic and personal expressions of the child. Photos of three-dimensional work or of the child conducting experiments are also added. Several times a year, the teacher and the child review the contents of the container together. The teacher selects a few items to include in the child's portfolio. The portfolio is evaluated twice a year. During conversations with parents, the portfolio is used to provide concrete examples of their child's development.

51.4.2.4 Systematic Evaluation

Systematic evaluation provides a more objective picture of the development of a child than authentic evaluation. Systematic evaluation information is based on standardized norms and is collected for all children. Every year, the teacher completes an evaluation of the child's motor and socio-emotional development. Beginning at the age of 3 years, children's literacy and numeracy development is evaluated twice a year. Piramide recommends the use of a nationally standardized monitoring system based on item response theory (Eggen and Sanders 1993). This measurement technique makes it possible to compare the scores of children across different tests, conducted at different times, and the development of the children can be followed across years.

51.4.2.5 Diagnostic Evaluation

Generally authentic evaluation, along with systematic evaluation, provides sufficient information to determine the developmental level of a child. However, diagnostic tools are also available if further analyses are needed to identify bright

children or children with developmental delays. A teacher can use these diagnostics tools to determine how best to work with these children. Based on the information obtained, an IEP (Individual Education Plan) can be tailored for the children.

51.4.3 Adjusting the Educational Plan

By combining the authentic, systematic and, in some cases, diagnostic evaluation, the teacher creates a complete picture of a child's development. As a result, the educational and pedagogical experience can be evaluated at an individual, a group and an institutional level. The teacher can adjust learning experiences as necessary. For example, the teacher can provide help or adapt an activity to match the observed level or the interests of children. The teacher also uses the assessment data to determine which children need tutoring and which children are bright and need more stimulating activities. The project books contain special activities for these children.

51.4.4 Cycle

To assess the developmental progress of the children and to make the appropriate decisions that will stimulate the development of the children to an optimal level, we follow the 'plan-do-check-act' cycle:

1. *Plan:* Determine learning goals, and collect authentic, systematic and possibly diagnostic information about the children.
2. *Do:* Analyse the child assessment data and identify their educational needs. What are the factors that stimulate or restrict the child's development? Cluster children with similar educational needs, including children who need more support or more challenge.
3. *Check:* Create a targeted group plan in which differentiated instruction is planned for groups of children with similar needs, such as tutoring or activities for gifted children.
4. *Act:* Implement the group plan.

Piramide works in a cyclical, targeted way with groups of children based on their developmental level. The teachers formulate goals and plan learning activities so that they can respond with flexibility as the learning experience requires. The cycle of identifying, analysing and acting is incorporated into the Piramide approach.

51.5 Description of Piramide Classrooms

Piramide is conducted in day-care centres, preschools and schools. According to the Dutch law, the younger children (0–4) are in care of two teachers (10 through 15 children, depending of the age and group formation) and attend minimum four half days a week. The older children are in care of one teacher (through 25 children) and attend 5 days a week. For the 3–7-year-old children is an extra teacher, called tutor, available for four times a week. He or she gives pre-teaching to the children who need extra support.

Piramide gives suggestions for a variety of daily activities with plenty of room for the teachers' own input. How does it work in practice? The following description gives an example of a day in a Piramide-inspired classroom. A group of 4- and 5-year-old children explores the 'Summertime' project. Entering the Piramide classroom, you can immediately see which project is being conducted. On the parent information table in the hall, parents find materials related to the summer holidays, such as a picnic basket or a suitcase. There are photos that the children brought from home, photos of them eating ice cream, playing with water or camping. A laptop screen shows parents pictures of their child's group project activities. The songs, rhymes and picture books of the project and a brochure with activity ideas for home are also on the table for parents to take home. As children enter the classroom with their parents, they get personal attention from the teacher. She takes a moment to exchange information about what the child has experienced at home. On some mornings there is time for parents to play together with their child during the walk-in playtime. All this ensures a smooth transition between home and the classroom and collaboration between parents and teachers.

The children choose the place where they want to play and gather the materials independently. This is possible because the learning centres and materials are well organized in a familiar manner and accessible so that the children can independently reach them. Children also discover something new each time they enter the play learning environment. Today, there is a container with water and materials with which they can repeat the experiments that they conducted during yesterday's group exploration. There are also several containers (boats) to transport something over water. In the quiet language centre, children can see picture books or encounter new props to play out the central story of the project.

After the parents leave, the teacher observes the children at play. If necessary, she gives a few tips on how children can continue independently. In this project, the dramatic play centre is divided into two parts. One side is set up as an ocean and beach, and a bag with beach supplies is available. The other side is set up as a mountain area with a tent and camping gear. Three children play on the beach. They jump on the blue cloth and 'swim' in the water. Then they dry off in the sun. They do this several times and don't appear to advance the imaginary play episode. The teacher decides to bring a new impulse in play. First she joins in the play of the children following their lead and repeating their play behaviour. Then she picks up the binoculars and looks into the distance. What does she see now? Someone fell off the

boat and has to be rescued! Immediately, the children get into action. The towel is the lifeboat and they quickly paddle into the water. After rescuing the drowning person, the children decide to take a boat trip and begin to plan what they need to take. The teacher slowly pulls back from the play as the children gather their supplies and put a backpack full of camping gear in the boat and head to a deserted island.

The children are familiar with the 'cleaning up' song. So when it begins to play, the children sing along and independently start to sort and clean up the play materials. Then they sit together for the group exploration. The teacher has prepared an activity to broaden the concepts of the Summertime project. She enters the group cheerful, wearing large hiking shoes and carrying a heavy backpack on her back. She exclaims, 'This big backpack is so heavy! The small backpack is much lighter'. The teacher talks with the children about the concepts of 'heavy' and 'light', and then they will measure the weight of items from the backpacks. In pairs the children look for two materials that belong together, such as a large and a small bottle each filled with water and a full and an empty lunchbox. The children weigh the materials with their hands and discuss in pairs which material is heavier and which is lighter. Then they use a balance scale to accurately compare the weight of the items. After the children have weighed a number of materials, the teacher talks with the children about the similarities among the materials. What materials are equally heavy? Finally, the children arrange the materials in groups from light to heavy.

There may be children for whom this group activity is too difficult. The tutor worked with these children in advance, to prepare them for the group activity. Together they discovered heavy and light items from a great beach bag. So they had become familiar with and practiced the terms 'heavy' and 'light'. Therefore, these children are able to successfully participate with the other children during the group exploration.

After snack time, the children play and explore again. This time the teacher determines where the children will play to ensure that they get a balanced variety of experiences. The children check a planning board to find their nametag and the activity to which they are assigned. Then they can independently begin playing and learning. The teacher observes and, as needed, gives children a few tips to solve possible problems. Then she joins a group in the art centre, where it is a bit dark. There is a lamp and a variety of materials with which to discover the special effects of light and shadow. To inspire wonder and discovery, the teacher shines the lamp light through a glass of water, through transparent film/foil, through coloured tissue paper and through paper with holes in it. The children marvel about the particular reflections on the wall. Then the children are invited to experiment themselves with a piece of translucent film and to make a beautiful light composition. Meanwhile, the teacher observes the play and work of the other children. Are they actively involved in their activities? In the meantime, the children who are ready for extra challenge are experimenting with the backpack materials from the group exploration and a bathroom scale. By weighing the backpacks, they already discovered which is the heaviest. The teacher writes the measured weights on a note and attaches it to the backpacks. Then she writes a note with a different weight (5 kg)

and invites the children to fill the backpack until it matches the weight of 5 kg. Then the children choose different weights and fill the small and large backpack until they reach the specific weight. In a follow-up discussion, the teacher asks the children, 'What would you do when you go on vacation and your backpack is too heavy?' The children come up with all kinds of creative solutions: take less, bring smaller or lighter inflatable things, bring a stronger person with you to carry the backpack or share the things so that you only need one.

The children play in the gymnasium where they pretend to go hiking in the mountains. Then after lunch, the children sit together for another group exploration in the afternoon. The teacher shares vacation photos of the children on an interactive whiteboard. The children spontaneously respond to the pictures, telling what they see. In this process, the teacher invites the children to talk about their own holiday experiences, asking questions such as 'What do you do when you go on holiday? How do you go on vacation? Is vacation always fun?'

Then the teacher reads the picture book *Balotje op vakantie* [Balotje goes on holiday]. She poses questions about the story that help the children discover connections: 'Why is it that Balotje suddenly doesn't like to go on vacation anymore? Why is she afraid? Do the children have a solution?' Then the teacher suggests that they go on a trip, 'Let's go outside!'

Together the children carry materials outside. Some children play and experiment with materials that float and sink in containers with water. A path has been drawn on the square with sidewalk chalk, and the children follow the path on their way to a holiday destination. They dance over the twisting lines, jump over the vertical stripes and turn around in circles. Additional chalk is available with which the children can draw new routes themselves. A few children are carrying a suitcase, backpack and beach bag around in the square. They take a trip around the square again and again and stop at different places to relax or to build their camp. On the jungle gym and tumble frame, the children build a tent. On a carpet, there is a box of creativity materials with which the children can make new light compositions and experiment with geometric shapes and with shadows. The children walk around with their works of art in the sunlight to see what special reflections and shadows they can create outside on the ground, wall or trees. The teacher observes, offers new impulses and occasionally takes photos when she sees that the children are enjoying their play or making interesting discoveries. At the end of the day, using the icons from the daily rhythm package, the children and the teacher look back together to their activities.

The teacher concludes with showing photos of the day's activities on the interactive whiteboard. Parents are also invited into the classroom so that they will be inspired by the theme and will be able to support their child's discoveries at home using sunlight, water and the concepts of heavy and light.

51.6 Piramide Teacher Preparation

51.6.1 Training and Certification

Qualified teachers receive training and coaching in Piramide through Cito's 'train-the-trainer' model. These trainers teach Piramide users to implement Piramide. During training, teachers receive booklets with information regarding the important principles of Piramide. The training in the Netherlands is organized in three modules of 6 days: basic, creative and metacognitive and takes place in a period of 1–3 years. At the end of the Piramide training, teachers receive a Piramide certificate. There is also a Piramide quality mark for centres that reach the Piramide standards for the whole centre (van Kuyk 2013).

51.6.2 Training Components

Joyce and Showers (1980) examined more than 200 studies of training methods and concluded that training methods are most effective when they include presentation of the theory, learning through observation and demonstration, practice and application in emotionally safe situations, structured and unstructured feedback and coaching. These components form the basis of the Piramide training. When the four basic concepts are incorporated into the training, there is a balance between theory (*distance*) and practice (*nearness*) and between the trainer's theoretical and practical knowledge and experience (*initiative of the trainer*) and the teacher's knowledge and experience (*initiative of the teacher*). These basic concepts form the framework of the training components.

The training sessions are organized according to the four project steps of Piramide. The teachers begin with orientation before the training begins. This involves reading assignments and creating an inventory of their own beliefs and experiences (orientation). The trainer gives more information about the subject (demonstration). Teachers expand upon their experiences to broaden their understanding (broadening) and then begin to apply their new knowledge to solve problems and apply what they have learned in their own situation (deepening) (van Kuyk 2012).

51.6.3 Coaching

Teacher training includes a number of moments of classroom-based coaching. In addition, the teachers execute specific practical assignments with supervision that include analysis of video recordings of classroom practices. The teachers also keep a portfolio of their assignments and assessments of their classroom practices using

the Piramide Implementation Assessment (PIA) (Breebaart and van Kuyk 2011). The PIA instrument covers all the objectives of Piramide and is presented in an easily recognizable way. The trainer observes the teacher's behaviour and how it influences child behaviour. Together, the trainer and teacher decide how they will optimize the teacher's observable skills (van Kuyk 2013). This process ensures that theory and practice are fully integrated.

51.6.4 Continuous Improvement

After the training has been completed, it is important to continue to strengthen the Piramide skills. Therefore, refresher course sessions are available on a regular basis so that teachers can increase their knowledge and improve their skills. In addition, teachers use the PIA for self-evaluation (van Kuyk 2013). Self-evaluation ensures that Piramide is adapted appropriately and implemented with flexibility and integrity.

51.6.5 Piramide Online Training for Teachers (USA)

Piramide USA has develop online courses. These Piramide courses provide a new and innovative approach to teacher training and continuous renewal. Piramide online courses invite the teacher to 'lean into the learning', to physically, intellectually and emotionally interact with the content. The Piramide online training courses use technologies with innovation and purpose and mirror the four cornerstones of the Piramide approach.

51.6.5.1 Initiative of the Online Instructor

The theoretical foundations, the four cornerstones and the four-step distancing process of the Piramide-inspired approach to learning are presented in a variety of formats using the online technologies to ignite curiosity and compel exploration. These technology formats include videos that add real-life animation to the Piramide concepts,; flip books that present rich content in a self-paced, interactive format; and hand-outs that present key concepts in easy-to-download PDF files for teachers' continuous reference.

51.6.5.2 Initiative of the Teacher as Online Learner

All learners, children and adults, construct their knowledge through interactions with physical and social environments and are capable of self-directed learning. Piramide online courses support the initiative of the teacher through innovative use of technology. These technologies include interactive learning boards that allow teachers to be self-directed and self-paced as they discover compelling content, unfold new information about the Piramide four cornerstones and scaffold ideas. Teachers participate in virtual discussion boards that stimulate dialogue among other teachers as, together, they discover the principles and elements of the Piramide approach to learning and share their ideas about concepts and practices. Online resources are embedded in the courses to expand teachers' investigative choices and access to additional relevant information.

51.7 International Approach

Since 1999, Piramide has been widely accepted in Dutch early childhood education. The Ministry of Education facilitated the implementation of Piramide as a pedagogical concept. Continuous training and technical assistance of teachers plays an important role. Over the years, almost 9,000 teachers participated in one or more Piramide training courses conducted by one of more than 300 Piramide trainers, and thousands of early childhood centres implement Piramide to early learning.

Based on this development, the Piramide approach has been adapted and is now used in Germany, the USA and Japan.

51.7.1 Germany

Since 2004, the city of Wiesbaden played an important role in the adaptation and localization of Piramide in the German context. A project team of German and Dutch early childhood specialists translated and adapted the majority of Piramide resources in the German language. In 2005, the city of Wiesbaden decided to implement Piramide in 12 of their 40 public kindergartens. Today, all these kindergartens still use Piramide as their pedagogical approach. The city of Wiesbaden continues to play a role as development partner of Piramide. In 2013, the first German Piramide train-the-trainer course was held in Wiesbaden, and the first 12 trainers were certified. Today, there is an increasing interest in Piramide, and the approach is implemented in centres all across Germany.

51.7.2 The USA

The initiative to introduce Piramide to the USA began in New Jersey in 2004, and the central US office was relocated to Atlanta, Georgia, in 2008. Between 2008 and 2012, 36 Piramide project books were developed, and three pilot centres were established in three different settings including university, childcare and Head Start classrooms. In 2013, to increase access to and affordability of Piramide professional development, Quality Assist, Inc. began offering Piramide online courses. US interest in Piramide is growing. Teachers are beginning to register for the online Piramide courses, and in July 2013, NAYEC published an extensive article about Piramide in its Young Children publication.

51.7.3 Japan

Since 2006, a Piramide training centre has been based in Osaka. Piramide has been translated into a Japanese version, and hundreds of Japanese teachers have participated in training courses. There is a growing interest in Piramide, especially in private kindergartens and nurseries. Piramide centres are operational in many regions and cities.

51.8 Research on the Effectiveness of Piramide

This section focuses on the effectiveness of *Piramide*. First, we discuss the outcomes of a study with Dutch children, conducted by the developers of *Piramide* during the experimental phase of the program. Next, we present the results of two broad external evaluation studies in the Netherlands. We conclude by summarizing the evaluation research on the USA implementation of Piramide. Of course the results can only be achieved when the program is implemented in an authentic way.

By implementing a 'train-the-trainer' model, by certifying teachers and centres and by using PIA (Piramide Implementation Assessment) as an evaluation and self-evaluation instrument, Cito tries to accomplish that in real-life conditions, Piramide is implemented in a way it is meant to be used. Research (Reezigt 1999) demonstrated that the experimental implementation of Piramide in the 1990s was successful: Piramide centres stood out favourably from a control group in their conditions for playing and learning, their procedures and their interactions. Teachers were positive about the program and its effects. Tutoring and play enrichment, however, needed improvement (Reezigt 1999). In another implementation study, covering the years 2000–2005, Veen et al. (2007) found that Piramide was scoring well on facilities and materials, stimulation of language development, monitoring children's

development and contacts between child centre and elementary school. Main problems concerned double staffing and tutoring in groups.

In the van Kuyk study, 49 children began experiencing *Piramide* at the average age of 3 years, 231 children at the age of 4.5 years and 301 at the age of 5 years and 8 months. The children were tested every 6 months until the program ended in the second year of elementary school. The use of standardized and norm-referenced tests on language and early mathematics (ordering, orientation of time and space) made it possible to compare the children's development with national norms. For all three experimental groups, developmental progress was more advanced than was displayed by children in the comparison groups. The language test revealed the strongest results and particularly for the youngest children who had the longest Piramide experience and seemed to benefit the most from the program. Children at risk (i.e. scoring lower than the tenth percentile on the language test) have been partially tutored for 6 months and partially not in a pretest-posttest control group design.

The percentage of children at risk in this experimental group, for example, were reduced from 46% at first assessment cycle to 14% at the seventh assessment cycle. On the other hand, the number of successful children who scored above the median increased from 34 to 64%. In addition, tutoring proved to be effective. Between 1997 and 2000, independent researchers from Amsterdam and Groningen University conducted an evaluation study of *Piramide* and *Kaleidoscoop* (an adaptation of the American High Scope method). The study involved preschool classrooms (children age 3–4), prekindergarten classrooms (children age 4–5) and kindergarten classrooms (children age 5–6) serving a high proportion of disadvantaged, migrant children. The results were compared with a control group of children without preschool experience. Intervention groups and control group were comparable in terms of background characteristics. For both the *Piramide* and the *Kaleidoscoop* groups, effects for language and reading development were weak to moderate (*Piramide* Cohen's d varied from 0.21 to 0.30 at the third assessment). For thought and numeracy development, effects were moderate to strong (*Piramide* Cohen's[1] d varied from 0.36 to 0.88 at the third assessment). There were no effects in terms of social emotional development (Veen et al. 2000). In a follow-up study 1 year later (Veen et al. 2002), the results were moderate and inconsistent, primarily due to the low number of children in the analyses as a consequence of drop out from the study, making correct interpretations statistically tricky.

A number of major improvements were incorporated in the *Piramide* methods, and another independent study, the Amsterdam Experiment, examined the effects of *Piramide* and *Kaleidoscoop* in Amsterdam classrooms. Among other changes, a new language approach was incorporated with a specific focus on vocabulary development. The design of this 2-year study was comparable to the previous national study. The strongest effects were found for the *Piramide* preschool classrooms

[1] Cohen's *d* is defined as the difference between two means, divided by the (pooled) standard deviation. Usually, 0.20 is considered to be a 'small' effect for an intervention and 0.50 a 'medium' effect, with values of 0.80 or higher indicating a 'large' effect (Cohen 1988).

when compared with the kindergarten classrooms (Cohen's $d = 1.08$ for language development, 0.72 for ordering and 0.33 for thinking processes; de Goede and Reezigt 2001). Researchers concluded that the effect of *Piramide* was significant despite the fact that the *Piramide* tutoring had not been implemented as intended. *Piramide* appeared to be a robust method showing positive effects even in less favourable circumstances. In addition, based on their study of the 'best practices' in this project, Veen et al. (2005) reported that five out of six high-functioning preschools were implementing *Piramide*.

Based on these studies, it appears that *Piramide*, as it is applied in Dutch preschool and kindergarten settings, has positive effects on language as well as cognitive development. Effects seem to be strongest for preschool children who were enrolled in the program as early as possible. Effects are stronger for children who have longer participation in the program, and *Piramide* seems to be effective in favourable and less favourable circumstances. *Piramide* seems to be strongest in stimulating language development and for disadvantaged children who receive extra tutoring.

In addition to the Dutch studies, empirical findings are emerging from projects in the USA and Germany. In the USA, an independent evaluation team from George State University and University of Alabama, Tuscaloosa, conducted a study with an initial sample of 121 children, 38% of whom participated in *Piramide* pilot classrooms, and the remaining 62% were from comparison classrooms. Classroom and child assessment data were gathered for 46 teachers and 108 children in six early childhood education programs in Georgia and Alabama in four assessment cycles across 2 school years. Teachers in the *Piramide* classrooms, who implemented the *Piramide* approach consistent with the training, systematically exhibited higher scores on the CLASS (Pianta et al. 2008) measure than comparison classrooms, demonstrating higher quality learning experiences and stronger language modelling. The researchers assumed that the *Piramide* training and ongoing coaching support contributed to these differences. These differences, however, translated into few differences in children's language, cognitive or social emotional developmental trajectories. Children in all classrooms appeared to learn, regardless of the research condition. However, by the end of the second year, children in *Piramide* classrooms had significantly higher story comprehension skills than children in comparison classrooms and demonstrated more complex oral syntax production.

In trying to offer an explanation for why these effects were found and other effects were not, the researchers point in the first place at the limited statistical power and the quasi-experimental design of the study. In addition, they indicate that it is hard to understand the nature of these *Piramide* findings, because of the complexity of how (changing) the quality of teacher practices, and fidelity to program implementation is exactly related to significantly altering children's developmental outcomes (Bingham et al. 2012).

In Germany, researchers of the University of Koblenz-Landau are studying the effects of *Piramide* on the acquisition of written language and mathematics in a 2-year project. After 1 year, *Piramide* children had better results, compared to the control group and two other interventions, in the acquisition of written language

(better in phonological awareness, better in knowing the alphabet and first reading), but not in vocabulary, and numerical-mathematical ability. In addition, Piramide children exhibited more learning joy in the mathematical domain. The researchers suppose that mainly nonspecific program qualities (such as pedagogical process quality, resulting in higher-quality educator-child interaction) can be held responsible for these effects (Kammermeyer et al. 2014). Maybe the results of the second phase will shed more light on these interpretations.

The findings presented above do have something to say about the effectiveness of Piramide but certainly have their limitations. Piramide obtained the qualification 'effective according tot first indications' by the Assessment Committee Interventions in 2016. Piramide is the only Dutch overall program tot early childhood development and education with this acknowledgement as yet (Nederlands Jeugd instituut, 2016). What is most needed are large-scale studies based on a strong (quasi) experimental design. It would be very helpful if trained and implemented teacher pedagogical quality and fidelity to program implementation could be included as moderator variables in these studies.

Piramide developers continuously strengthen the program using proven recent research and findings, such as the Kagan structural approach to cooperative learning (Dotson 2001; Murie 2004) and executive functions (Leseman 2010).

51.9 The Future of Piramide

The foundation of Piramide is strong and effective. We maintain the strong elements of the program, but despite of that updates are needed over time. In the latest update (2009–2013), for example:

- Activities for bright children are integrated, so they are getting enough challenging activities and stay involved.
- Interactive storytelling is integrated in the projects.
- The Kagan structural approach to cooperative learning is integrated in activities for children aged 3–7 years (Kagan 2003).
- Piramide is adapted for new target groups like day care in day-care centres and at home.
- Brochures with home activities for parents are available online, so they are easy to approach for parents.

51.9.1 Professionalizing as an Ongoing Process

An active subject is professionalizing by blended learning: a form of education that combines face-to-face classroom methods with *online learning*. Piramide USA already uses online training. In the future by using the Internet (e-learning,

webinars, website community, social media), trainers and users interact, and they benefit from each other. They can co-operate and learn from good practices. Developers, trainers, teachers, parents and even children can bring their experiences and competences. Through the Internet they cocreate, even international.

The foundation of Piramide is strong; the body of research evidence is accumulating and promising and international implementation is growing every year. The strength of Piramide comes from its intentional approach based on the four cornerstones: initiative of the child, initiative of the teacher, nearness and distance. The four-step distancing approach to learning (i.e. orientation, demonstration, broadening and deepening) is universally appropriate, adaptive and flexible; most importantly it is child-centred.

Passionate, inspired professionals are essential, and Piramide has developed a rich and dynamic approach to professional development that fosters inspired and intentional teaching. Piramide professional development integrates knowledge and practical application and provides tools (i.e. in-person and online training, assessments, projects, etc.) without resorting to prescriptive, structured activities and methods. Piramide professionals construct their own learning experiences inspired by Piramide. This combined with continuous improvement makes Piramide future-proof!

References

Ainsworth, M. D. S., Blehar, M. C., & Waters, E. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale: Lawrence Erlbaum Associates.

Bingham, G., Kwon K.A. & Barrett-Mynes, J. (2012). *Piramide approach evaluation project: Examining teacher and child effects. Two-year evaluation* (*fall 2010 – spring 2012*). Unpublished report. Atlanta: Georgia State University.

Bowlby, J. (1969). *Attachment and loss* (Vol. 1). London: Horgarth.

Breebaart, D. (red.) (2009–2011). *Piramide-projecten voor peuters en voor groep 1 en 2* [Piramide projects for toddlers and for kindergarten children]. Arnhem: Cito.

Breebaart, D., & van Kuyk, J. J., (2011). *Piramide Implementatie Assessment* [Piramide implementation assessment]. Arnhem: Cito.

Bruner, J. S. (1985). Vygotsky: A historical and conceptual perspective. In J. V. Wertsch (Ed.), *Culture, communication, and cognition: Vygotskian perspectives* (pp. 21–34). Cambridge: Cambridge University Press.

Cocking, R. R., & Renninger, K. A. (Eds.). (1993). *The development and meaning of psychological distance*. Hillsdale: Lawrence Erlbaum Associates.

de Goede, D., & Reezigt, G. J. (2001). *Implementatie en effecten van de Voorschool in Amsterdam* [Implementation and effects of the preschool in Amsterdam]. Groningen: University of Groningen.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale: Lawrence Erlbaum Associates

Dotson, J. M. (2001). *Cooperative learning structures can increase student achievement. Kagan Online Magazine*. San Clemente: Kagan Publishing Retrieved on October 6, 2007.

Eggen, T. J. H. M., & Sanders, P. F. (1993). *Psychometrie in de praktijk*. [Psychometrics in practice]. Arnhem: Cito.

Erickson, M. F., Sroufe, L. A., & Egeland, B. (1985). The relationship between quality of attachment and behavior problems in preschool in a high-risk sample. In I. Bretherton, & E. Waters (Eds.), *Growing points of attachment theory and research: Monographs of the society for research in child development* (Vol. 50, pp. 147–166).

Fischer, K.W. & Bidell, T.R., (2006*)*. Dynamic development in action and thought*.* In: W. Damon en R.M. Lerner (eds*.*), *Theoretical models of human development. Handbook of child psychology*. New York: Wiley, pp. 313–399.

Fischer, K. W., & Rose, S. P. (1998). Growth cycles of brain and mind. *Educational Leadership, 56*(3), 56–60.

Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.

Goldstein, L. S. (1999). The relational zone: The role of caring relationships in the co-construction of mind. *American Educational Research Journal, 38*(3), 647–673.

Joyce, B., & Showers, B. (1980). Improving in-service training: The messages of research. *Educational Leadership, 37*(5), 379–385.

Kagan, S. (2003). *Structureel Coöperatief Leren* [Structural cooperative learning]. Middelburg: Meulenberg.

Kammermeyer, G., Roux, S., & Stuck, A. (2014). *Projekt "Pyramide"; Förderung von Schriftspracherwerb und Mathematik in Kindergarten und Grundschule mit dem Pyramide-Ansatz.* [Project 'Piramide': Promotion of literacy learning and mathematics in kindergarten and primary school with the Piramide approach]. Landau, Universität Koblenz Landau, Campus Landau.

Leseman, P. (2010). Executieve functies als basis voor het leervermogen [Executive functions as a basis for learning]. In J. Aarssen, L. Van der Bolt, P. Leseman, N. J. Davidse, M. T. de Jong, A. G. Bus, & J. Mesman (Eds.), *Zelfsturing als basis voor de ontwikkeling van het kind [Self-regulation as a basis for the development of the child]*. Utrecht: Sardes Speciale Editie Nummer 9.

Murie, C. (2004). Effects of communication on student learning. *Kagan Online Magazine*. San Clemente: Kagan Publishing. Retrieved on October 6, 2007.

Nederlands Jeugd instituut. (2016). *Eindoordeel Erkenningscommissie Interventies* [Final assessment of the Assessment Committee Interventions]. Utrecht: NJi.

op den Kamp, M. & van Kuyk, J. J. (2011). *Piramide de methode voor jonge kinderen* [Piramide The Method For Young Children]. Arnhem: Cito.

Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). *Classroom Assessment Scoring System (CLASS). Manual PRE-K*. Baltimore: Brookes.

Piaget, J. (1970). *Genetic epistomology*. Norton: Columbia University Press.

Pressley, M., Hogan, K., Wharton-McDonald, R., & Mistretta, J. (1996). The challenge of instructional scaffolding: The challenge of instruction that supports student thinking. *Learning Disabilities Research and Practice, 11*, 138–146.

Reezigt, G. (1999). *De implementatie van Kaleidoscoop en Piramide*. [The implementation of Kaleidoscoop and Piramide]. Groningen: University of Groningen.

Riksen-Walraven, J. M. A. (2004). Pedagogische kwaliteit in de kinderopvang: doelstellingen en kwaliteitscriteria [Relational quality in child care: Objectives and quality]. In M. van IJzendoorn, L. Tavecchio, & J. Riksen-Walraven (Eds.), *De kwaliteit van de Nederlandse Kinderopvang [The quality of child care in the Netherlands]* (pp. 100–124). Amsterdam: Boom.

Riksen-Walraven, M. (2008). *Quality of day care centers in an international perspective. International conference*. Arnhem: Cito.

Sigel, I. E. (1993). The centrality of a distancing model for the development of representational competence. In R. R. Cocking & K. A. Renninger (Eds.), *The development and meaning of psychological distance* (pp. 141–158). Hillsdale: Lawrence Erlbaum Associates.

Sigel, I. (2006). The distancing theory. In J. J. van Kuyk (Ed.), *The quality of early childhood education* (pp. 131–136). Cito: Arnhem.

Slavin, R. E., Madden, N. A., & Karweit, N. L. (1994). Success for all; a comprehensive approach to prevention and early intervention. In R. E. Slavin, N. L. Karweit, & B. A. Wasik (Eds.), *Preventing early school failure. Research, policy and practice*. Boston: Allyn and Bacon.

Smidts, D., & Huizinga, M. (2011). *Gedrag in uitvoering* [Behaviour in progress]. Amsterdam: Uitgeverij Nieuwezijds.

van Geert, P. (1998). A dynamic systems model of basic developmental mechanisms: Piaget, Vygotsky, and beyond. *Psychological Review , 105*(4), 634–677.1998

van Geert, P. (2006). Dynamic systems theory and early childhood education. In J. J. van Kuyk (Ed.), *The quality of early childhood education* (pp. 33–43). Arnhem: Cito.

van Gerven (red), E. (2009). *Handboek hoogbegaafdheid [Handbook giftedness]*. Assen: Van Gorcum.

van Kuyk, J. J. (2003). *Pyramid: The method for young children*. Arnhem: Cito.

van Kuyk, J. J. (2006). Holistic or sequential approach to curriculum: What works best for young children? In J. J. van Kuyk (Ed.), *The quality of early childhood education* (pp. 137–152). Arnhem: Cito.

van Kuyk, J. J. (2012). *Piramide; Educatieve methode voor kinderen van nul tot zeven jaar; Wetenschappelijke verantwoording*. [Piramide; educational method for children from zero to seven years; scientific justification] Arnhem: Cito.

van Kuyk, J. J. (2013). *The Piramide method*. In J. L. Roopnarine & J. E. Johnson (Eds.), *Approaches to early childhood education* (pp. 137–151). Boston.

Veen, A., Roeleveld, J., & Leseman, P. (2000). *Evaluatie van Kaleidoscoop en Piramide Eindrapportage* [Evaluation of Kaleidoscoop and Piramide: Final report] (SCO-rapport 576). Amsterdam SCO-Kohnstamm Instituut.

Veen, A., Derriks, M. & Roeleveld, J. (2002). *Een jaar later. Vervolgonderzoek evaluatie van Kaleidoscoop en Piramide* [A year later. Follow up research evaluation of Kaleidoscoop and Piramide]. Amsterdam: SCO-Kohnstamm Instituut.

Veen, A., Roeleveld, J. & van Daalen, M. (2005). *Op zoek naar 'best practices': opbrengsten van Amsterdamse voorscholen*. [In search for 'best practices': Results of Amsterdam preschools and kindergartens]. Amsterdam: SCO-Kohnstamm Instituut.

Veen, A., van Daalen, M., & Roeleveld, J. (2007). *Voor- en Vroegschoolse Educatie in Rotterdam: de implementatie van Kaleidoscoop, Piramide, Basisgoed en Ko-totaal in de voorscholen*. [Preschool and Kindergarten education in Rotterdam: The implementation of Kaleidoscoop, Piramide, Basisgoed and Ko-totaal in the preschools]. Amsterdam: SCO-Kohnstamm Instituut.

Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: Massachusetts Institute of technology press.

Chapter 52
The 'Golden Key' Program and Its Cultural-Historical Basis

Gennady Kravtsov and Elena Kravtsova

Abstract This paper describes the cultural-historical methodology, which lie at the base of the innovative educational program 'Golden Key' for preschool and primary school age children.

The main principles are to be found in the words 'culture' and 'history'. People are dualistic beings, belonging both to the world of culture and nature, and they possess both a basic, natural psyche and cultural higher psychological functions.

Vygotsky considered the infant as a complete social being from the very beginning of life. This understanding consists in the realization that there is no socialization process, no transformation of a natural, biological being into a socialized one.

This new understanding sheds light upon the meaning of a particular type of consciousness, which is called 'Pra-we' (historical we), and, according to Vygotsky, this stage represents the main neo-formation of the earlier periods of infancy. And this understanding represents a direct unity of the individual with all of humanity. It is precisely this unit, which is able to nurture 'self-development' (self-regulation). There is a remarkable conclusion resulting from this understanding of the object of self-development (self-regulation) – a child can develop only because of the development of his/her 'close adult' (e.g. caregiver) with whom she/he communicates.

From this position, the entire system of communication with the children needs to be changed, because communication forms the basis of everything culturally. Culture, freedom and the human mind together are not handed down to us as it is, but *potentiality*, which can be realized through communication.

In the paper, we are speaking about various types and forms of communication – between children of different ages, between children and kindergarten/school staff and between children and their parents – and we show how each of these forms provide the holistic development of child's personality and learning as part of this development.

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52.1 The Foundations for the 'Golden Key' Program

This chapter describes a Vygotsky-based approach to the education of young children, called 'Golden Key', which was developed in Russia. The goals of the 'Golden Key' program are to create opportunities for the child to unfold the individual developmental potential and to promote the full and harmonious development of the child's whole personality.

When we started with the development of the 'Golden Key' program, we considered various early childhood models in search for an appropriate educational approach based on a theoretical framework and program philosophy. We were interested in studying Swedish kindergartens, the English nurturing system, Rudolf Steiner's anthroposophy, the Waldorf pedagogy, etc. (see also Part VI on 'Pedagogies', this volume). However, we soon realized that we did not need to travel very far to acquire the new approach we needed. Our own cultural-historical psychology was that very philosophical and theoretical foundation we were looking for. Vygotsky's psychology is now returning back to Russia, thanks in part to the fact that many foreign researchers/teachers have been very interested in his academic/scientific legacy.

The founders of the Golden Key schools (during the early 1990s) were themselves students of some of the actual followers of Vygotsky: A. V. Zaporozhets and Daniel El'konin. Our teachers were some of the most devoted students of Vygotsky, who were very proud of belonging to that academic/scientific school.

Our interpretation of Vygotsky's ideas stems from the specific accents our teachers made when they introduced us to the Vygotskian framework. We will try to formulate some of the basic principles of the Vygotskian school of thought and relate these ideas with the principles of the 'Golden Key' program.

52.2 Against Naturalism

The main principles are to be found in the words 'culture' and 'history'. People are dualistic beings, belonging both to the world of culture and to nature, and they possess both a basic, natural psyche and cultural higher psychological functions. The main Vygotskian criticism of traditional child psychology was that it did not study the history of a child's cultural development. Without this knowledge, as he wrote, psychologists could not pose the central problem of psychology – the problem of personality. Vygotsky's theory/methodology is a significant revolutionary step in the struggle with the naturalism in psychology. It is both ironic and sad to state that

Vygotsky was sometimes blamed for using naturalism himself, even by his closest colleagues. He was misunderstood even by his closest friends (see Vygodskaya and Lifanova 1996).

The natural, scientific method in psychology is characterized by considering a person, as the object of research, abstractly, i.e. as being an isolated object that is cut off from all of the important connections with reality, but even more importantly from the context of the relationships with other people. This ‘abstract person’ is matched with an ‘abstract society’. ‘Society’ is viewed as an abstract notion, as it is viewed as an association of individuals arranged by some random formal principle. In one of his works, Daniel El’konin quoted Karl Marx, who wrote that ‘We should not oppose an individual to an abstractly understood society. An individual is a complete social being’ (Marx 1959). An abstract society is always limited by space/time and has a short theoretical lifespan. A nonabstract (hence, real, concrete) society relates to the entire humanity (e.g. people, who lived before us, who live now and who will live after us); and, at the same time, it is a specific person. The notion of a person encompasses both the whole history of the human race, and a particular individual, who is intrinsically linked to the entire human society. That is why a person, according to Marx, is a potentially universal and unlimited being. Marx always described a person as a universal being and, therefore, without limitations. Vygotsky emphasized that such development is always self-development (Vygotsky 1997).

All that has been stated before is not only pure theorizing, or some type of philosophical exercise, but represents a viable reality rooted in scientific theory. Children brought up by animals never become human beings. This is an irreversible process. Now, even without these extreme cases, there are a lot of examples of children in social deprivation, such as in Russian orphanages, where children without families are being raised. Although we understand these problems and the consequences of this type of deprivation in these circumstances, rarely any action is taken to correct the situation. Such children differ greatly (and not in the best way) from other children. Nowadays, many researchers/teachers talk about deprivation even within a good social environment, where the child has almost everything necessary, such as a good family, educated parents, financial prosperity, etc. Nevertheless, the child’s development often becomes defective, lacking some ‘vitamins’ to help with the communication process. It is obvious that it is not just nature that is effective here.

52.3 Towards a New Development Promoting Community

From our point of view, the modern family, even the best, cannot offer a child all necessary conditions for his/her development. Nowadays, the family is of absolute importance because it gives the child the universality of social communication, but modern families are nuclear in most cases, consisting of two parents and one or two children, normally. Such a modern family cannot offer the child a full, substantial system of communication. The modern family differs greatly from the large Russian,

patriarchal (патриархальной) peasant family, where the child was raised by the whole community, by an entire village, where people did not know the words 'another child' and, often the majority of the peasants had the same last name, because they were all relatives to each other in one way or another. As a result, a 14- or 15-year-old teenager mastered all facets of a peasant's profession naturally, which was more than just a profession – it was a way of life. The teenager became the full subject of the peasant culture, built on the foundation of orthodoxy, which was very complex and high-spirited, although it did not have literacy as a necessary component.

This peasant culture was destroyed purposefully in Russia in 1929, the year that was later named the 'a turning point year'. This year was very important, because the 'spine' of the Russian peasant culture was destroyed. During that period, special soviet units, which had the support of the states/provinces, were killing every priest they could find. They were stealing everything from the peasants, from money and food to the seeds for the next crop. This period was a very scary time in history, and many frightening things happened.

Today we understand that the Russian peasant culture cannot be brought back, and that is not the goal we are setting. However, we can now understand and give meaning to what we lost by reproducing/recreating a figurative image of the Russian peasant culture within contemporary conditions. This is the goal of what we call *projective* (designing) *psychology*. It is one of the tenets in the design of the 'Golden Key' program.

52.4 Projective Method

The *projective method* further develops and elaborates the experimental-genetic method of Vygotsky, which was based on modelling the processes of the psychic-mental development in special experimental conditions. In other words, the goal is to create a new form of community, with a newly established sense of unity of the individual and society, using the Russian peasant model only in the metaphorical sense.

The cultural conditions of the developmental processes, within psychological research, are based on the fact that the object of research not only includes current aspects but also potentially new aspects. This type of understanding is totally impossible within the traditional scientific method, because that method deals only with something that is real, something that is given. Clearly, even today, the naturalistic method has not been abandoned and still prevails in psychology. This is a reason why Vygotsky's cultural-historical psychology is the 'tomorrow', not 'yesterday', of psychology. Within this theory, the words 'culture' and 'history' are correctly connected with a hyphen, as they are truly interconnected concepts. At this point, we need to consider the explanations Vygotsky gave when he was writing/discussing the principle of the historical method. Vygotsky's historical method/principle is equal to the category of development in psychological research. This principle does not require that we go back in the history of human race as historians would do. It

only means that if we would like to understand some of the objects of psychological research, then we must study the object (and subject) within its own history, origins, development and genesis.

This type of thinking was conceptualized in German classical philosophy, especially in Hegel’s dialectics which was the philosophical theory of development. In our contemporary life, as well as in our academic/scientific work, we often use the word ‘development’. If we want to praise something, then we say ‘It is developing’. However, only that system has the characteristic of development, which is self-sufficient (‘самодостаточный’), and has acquired an inner ‘impulse’, a direction of *self-motion* and *self-perfection*. In Hegel’s philosophy, this type of system is called totality (integrity), which contains both an entrance point and an exit within itself. Hegel named this the ‘Absolute Spirit’. Karl Marx used this concept too for his definition of a human individual, which is considered in intrinsic relationship with humanity. A human being is in essence understood as a social creature.

In this context, we can understand Vygotsky’s view on the infant as a complete social being from the very beginning of life. This understanding consists in the awareness and acknowledgement that there is no socialization process, no transformation of a natural, biological being into a socialized one.

This new understanding sheds light upon the meaning of a particular type of consciousness, which is called ‘Pra[1]-we’. According to Vygotsky, this initial stage of consciousness represents the main neo-formation of the earlier periods of infancy. And this understanding represents a direct unity of the individual with all of humanity. It is precisely this unit that can nurture ‘self-development’ (self-regulation). A remarkable conclusion can be drawn from this understanding of the object of self-development (self-regulation): a child can develop only because of the development of his/her ‘close adult’ (e.g. caregiver) with whom she/he communicates.

It is also interesting to note that students will not be able to grasp the basics of the cultural-historical approach in most modern pedagogical universities, pedagogical or psychological textbooks. Such understanding is only possible when we start out from the core principles of the Vygotsky’s theory/methodology. Only from these principles (and how they are implemented in reality), we can now understand the organizational principles which form the foundation of the ‘Golden Key’ program.

52.5 The Development of the ‘Golden Key’ Program

While creating the ‘Golden Key’ school program, we understood that we would need to change the entire system of communication with children, because communication forms the basis of everything cultural. It is important to stress that, in our view, ‘culture’ is not handed down to us as it is. El’konin (1971) pointed out that

[1] Editor’s note: the Russian word ‘pra’ refers to the ‘very first’, ‘primordial’, ‘proto’ or ‘original’ in the literal sense of this word. In German it is synonymous with ‘Ur’. Hence, ‘Pra-we’ refers to the historically primordial ‘we’.

material items contain no given, indelible signs of how they can be used. For example, a child can take a pencil and use it like a monkey or gnaw on it or put it in his ear. Culture, freedom and the human mind, for example, are not handed down to us as such but as a *potentiality*, which can be realized through communication.

In the same way, communication contains deep connections with development. We can say that the entire developmental process in ontogenesis (and phylogenesis) basically reflects the different forms of communication, which are subsequently transformed into new, higher forms of communication.

Our current level of ontogenetic development is determined by how we communicate. Here Vygotsky (1987, first chapter) used a mysterious phrase, which claims that *communication* and *generalization* are two sides of the same coin; in other words, they represent the same reality in a psychological sense. At first glance, this may not make much sense. Communication deals with the realization of social relationships, while generalization represents an intellectual, mental act of one particular individual. Together, however, they form an extremely deep insight, which explains the transformational mystery of the category of the inter-mental or social relationships into the category of intra-mental or the individual-internal, mental abilities and processes.

52.6 Features of the 'Golden Key' Program

The following list represents the fundamental, organizational features of the 'Golden Key' program.

52.6.1 Children's Communities of Mixed Ages

The traditional division of children into groups defined by age (in school and in kindergarten) comes from the adult's aspiration for comfort but does not originate from the perspective of the child's development. As an aside, within a Russian patriarchal, peasant family, there were a lot of children of different ages living and working together. In the Golden Key schools, children from ages 3 to 6 years old remain in groups of mixed ages. Starting at 7, the children have between 2 and 3 h of class instruction within their own age groups.

52.6.2 Family Principles in the Educational Process

The essence of this principle is to establish the role of the kindergarten as a means of continuing the child's own family, in other words, to create within the kindergarten a large 'community family'. This can be accomplished by establishing two conditions:

- The child's own family must be directly included and involved in the life and problems of the educational centre. When the child experiences the first day in the kindergarten, we ask his/her mother to take the day off from work and spend this day with the child. Later, it will be enough for the child to have a sample of the mother's clothing or a photo in the child's own locker. Also, the child will have the mother's image with him/her on the walls of the kindergarten and will stop viewing the walls as alien and hostile. We have a fundamental requirement for all kindergarten teachers: If we do not educate the children's parents, if we do not involve them in our work, then all of our efforts will be in vain. Without the involvement of each family, the teacher is helpless.
- The second condition is to use the principle of the general family organization of work and group relations within the kindergarten. There is a head of the family, but all family members have voting rights during discussions on various questions and problems. The child's upbringing is the work of every staff member (specialist, doctor, guard, cook, technical staff, etc.), and this process is not viewed as the teacher's responsibility only. At the same time, we have a rather paradoxical requirement for the teachers and educators: 'Stop teaching children!! Just live with them via a community life, which is interesting and substantial, most of all, to you, the teacher/assistant'. At the same time, teachers and the assistant should not forget about their own job descriptions, which include requirements from the higher authorities. To explain this principle, I would like to refer again to a Russian peasant family where there was no separate 'labour' education, but there were plenty of diligent people. Peasants didn't have special courses teaching them how to look after cattle, how to sit on a horse, how to cook borsch soup or how to sew a patch on clothes … the boys and girls learned all these things through interaction. They didn't have moral, patriotic, aesthetic educational lessons, because life (including education) happened naturally.

Generally, groups-families in the 'Golden Key' educational facilities have their own names (like surnames). These groups include children of various ages, their teachers and parents. They have their own emblems, traditions and even their own special object environment.

These features, on the one hand, are the products of joint discussion, but, on the other, they are deeply related to the hobbies of the adults. For example, if a teacher likes embroidery, he does not simply teach children and parents how to sew it but also decorates the group with his works.

To realize the specific features of their own family group, children and adults often visit other groups. After that children discuss what they liked in other groups and what features of other families they will use from now on.

The family principle is also greatly realized through special homework, which is translated by children to their parents. For example, the group plans a journey to the North, and children start to ask their parents if any of them have been to the North, have books about the North, are able to teach them to make a tent or teach them skiing, etc.

52.6.3 The 'Event' Is an Important Part of the Child's and Adult's Life

The Russian word 'sobitie' (event) contains some nuances that cannot be translated into other languages as one word. The direct meaning of this word is the following: something that takes place … that happens in the person's life and has a very deep meaning to him/her. If something happens and touches one to the very core of one's being, then it was really an 'event'. At the same time, this word can also be defined as 'coexistence' (in Russian 'bitie' = 'existence'). The 'event' is important for two reasons:

- The first principle we will be dealing with regarding the age-specific characteristics of the preschool child is the following: In asserting the integrity of a person, Vygotsky wrote/spoke about the principle of the dynamic unity of affect and intellect. He agreed with Kurt Lewin regarding the domination of emotions in the preschool age (Vygotsky 1984). If something does not touch the child emotionally at that stage, then it is not meaningful for the child, who is living, thinking and comprehending life through emotions.
- Second, the 'event' is connected with the psychological mechanism of acquiring meaningful knowledge, with an education that creates an environment conducive to a child's development. At this point, we should take notice that according to Marx, people have two main substantial 'forces', and these components are understood as the ability to *act* and the ability to *reflect*. Psychological development, according to Vygotsky's teaching, can be defined as a transformation of the natural psyche into the cultural, the highest human psyche. The fundamental nature of the highest mental (e.g. psychological) function is its voluntary nature. Volition (will) is conscious management. To activate this principle, according to Vygotsky, is to *master*. Therefore, *mastering* is a very important concept in Vygotsky's theory, which is connected to the ability of reflection. The training of reflection is extremely important, perhaps the most important aspect of a child's development. But in the preschool age, this cannot be done directly. The preschool child is not a thinker but a worker. That's why we need to assist the child with developing reflection throughout different 'types' of a child's activity. The fundamental difficulty here is that activity and reflection represent two different abilities of a human being, which cannot easily be brought together. Often they

> remain as alternatives to each other. When we are acting, we are not reflecting on our actions, and when we are reflecting, we cannot act. It reminds one of the centipede trying to reflect which leg should move next. Now, in the preschool child, the path to reflection lies within the child's own activity. The point here is that if you want to reflect on something, you should already possess it in an unreflected form. For example, to analyse the sound 'composition' of a word, you need to know how to use this word with its appropriate meaning. According to Teilhard de Chardin, within phylogenesis, reflection is what distinguishes a human being from the animal kingdom. It is simply the primary aspect. However, in ontogenesis, the basic principle is action. Only after action there can be reflection and comprehension. It is not coincidental that we have a Russian proverb: 'A Russian peasant is wise after the event'. At first the peasant is doing something, and only then does he realize what he has accomplished. And the important point here is not related to a 'Russian peasant', but to the commonality of all of mankind's innovations that are reconstructed in the forms of what can be recognized through reflection, all of which leads to development.

The 'event' is the gate which leads to the necessary form of activity. Literally, it is like wanting to swim … in order to learn how to swim, one must enter the water. This experience will be the 'event' for the child. After floundering in the water, we somehow need to hold out and swim. After that first step, we can start to learn various strokes, and only after that process can we begin to master different swimming styles, such as the breaststroke, crawl, backstroke, etc. This process is now reflected and built upon consciously, which can later become a cultural skill.

Events regulate children's life and give sense to their education. Besides, it is the events that help to organize spontaneous education (education through child's program). The example of such event is given below.

The teacher suddenly 'got ill'. She can't speak and can't even read to children. Another adult 'suggests' that she can be cured by the juice of a plant, which grows only in Africa. Children want to help their teacher, and that's why they decide to travel to Africa to get the juice. But before that, they need to know where Africa is located, how to get there, what animals live there and what is African climate, need to learn special African dances to communicate with locals, etc.

The last part of the event is the big 'journey' to Africa, during which the children meet animals, talk to locals, help good guys, etc., and of course in the end, they acquire the plant's juice, and their favourite teacher is able to speak again.

52.6.4 The Interaction/Interdependence of Education and Development

This feature of the 'Golden Key' program is based on Vygotsky's idea that development occurs as a form of education, and a complete education is what leads to development.

In preschool age, within our program, children aged 3–6 do not have organized classes. We understand that all unique and everyday moments in a child's life have educational meaning. For example, education can be understood as washing one's hands in the bathroom or using a knife and a fork during lunch, etc. We have classes with the understanding that children are educated by adults. Here we notice that the word 'lesson' (in Russian 'zanyatie') in the Russian language can be derived from the verb to 'occupy' (in Russian 'zanyat'), to be filled with some activity, and also from words 'interesting' and 'amusing' (Russ. 'zanyatniy', 'zanimatelniy'). Our lessons contain the second meaning. The work with mixed-aged groups has become possible due to another fundamental difference, which is reflected in the following principle.

52.6.5 Pair Educators

There are at least two teachers who work with each group of children with mixed ages. This is an original interpretation and practical realization of Vygotsky's idea regarding the zone of proximal development (ZPD). He wrote about the problem of the connectedness of education and development and criticized the concept of imitation as the basic mechanism within the learning abilities of the child. He came to the conclusion that imitation itself is in need of explanation and research. Imitation is the cornerstone of all traditional education in which an adult acts as a model. However, as different research studies (see, e.g. Vygotsky 1935) have shown, a child can imitate only that which resides within his/her zone of proximal development. The ZPD, according to Vygotsky, is located between the level of the child's actual development (on which he/she can act and solve tasks alone) and the level of his/her potential development (where the child can solve more complex and difficult tasks, but only with the help of adults). Of course, Vygotsky did not specify what must be done by the adult to help the child. This problem became the subject of one of our research studies, which were carried out in our department by our colleague Janna Shopina. She stated that it is the position the adult takes during the communication with the child which determines the help needed for the child.

In our lessons, one adult most often takes the position of the status quo, the traditional model. This teacher formulates the educational task and is responsible for the different types of actions and assessments within the educational process. This teacher is, in some way, opposing the child. At the same time, another adult takes the position of the child and identifies with that child, also learning with the child. Often the second teacher or assistant plays the role of a pupil, who does not know much. This teacher keeps asking the children for answers they already know, asking naïve questions, and also this teacher/assistant asks the children to help her/him with the task, etc. Sometimes the second teacher/assistant begins to help someone, acting with the child in a 'primordial (pra)-we' position. These two adults (the first and second teachers) construct a dialogue, and all of the children are drawn into it. The educational process is turned into a collective activity of children and adults.

These ‘pair teachers’ not only create the zone of proximal development but also widen the borders of the ZPD, transforming the potential level into the actual level of the child’s development. The child becomes the subject of her/his own abilities and the subject of his/her own activity. If the child is solving tasks alone, the second teacher/assistant works in an active relationship regarding the situation. In this way, the child is now the subject of activity, and within the zone of potential development, the child is trying to understand and comprehend what an adult teacher is talking about, which represents a reflective relation towards reality. But there are contradictory relationships here between reflection and activity too. Pair teachers help find children a synthesis of opposite solutions, which is both reflected and comprehended, as well as at the same time *being* a spontaneous activity of the child. This characterizes the genuine subjectivity of the child.

52.6.6 Lesson Plot

Sometimes our lessons in the primary school are called *complex lessons*, and this word often has a negative historical meaning for us. In the past 30 years in Russia, ‘complex lessons’ were very popular. In his novel, Kaverin (1902–1989) described such lessons. The teacher would bring a model of a duck to class and begin to tell everything about ducks. The teacher would explain the type, class, etc., where the duck belonged to, what it eats, its physiological features, etc.

However, in our program, the central semantic core of the lesson is the plot. Very often the plot is assigned within a special play situation, where the children are totally involved. For example, during the first year of primary school, the children spend a lot of time building a house from cardboard and paper for a certain character that is dear to them. They create an architectural plan, choosing objects for the interior of the house, marking out and drawing windows and doors, making a tile floor, creating and placing furniture and much more. They plan, measure, glue things together, and they do all of this carefully, with the feel of a carpenter. These real skills help the child to understand the process of educational reflection, as well as the concept of number – natural, rational and even real numbers.

Another example: The older students take part in imaginary travels with great pleasure, for example, to Australia, trying to get there by sea from Saint Petersburg. They are aware of the technical features of the ship – its average speed, petrol consumption, capacity of the petrol tanks, etc. They create the route with the help of a globe and maps. The pupils think about necessary points of refuelling and discuss the need for food and water supplies; they understand the weather conditions, and they make sure they have an adequate supply of everything needed; they also calculate the time needed for the trip. They subtract, divide, and multiply, and solve basic formulas, etc. Through this process, they also obtain considerable knowledge about geography, physics, mathematics, etc. In our program, we reject the traditional division of lessons by subject, such as pure mathematics, natural science, the Russian language as a subject, foreign languages, etc. In our opinion, the separation of sub-

ject lessons in primary school education puts the cart before the horse. In more traditional settings where reflection becomes the main focus, children obtain fragmented knowledge that does not have meaning or a personal sense. Children can learn and memorize mathematical formulas, but these facts will remain alien to the children if the information/answers are not truly needed and are not formulated by the children themselves. Fragmented ('alienated') knowledge is useful only for obtaining good grades in school, where pupils are asked to reproduce the information like a parrot or tape recorder.

At this point, we need to say that we differ a bit from our teachers – Davydov and El'konin – regarding the definition of the educational content in primary school. From Davydov's point of view, the subject of learning in primary school must focus on the basics within the field of science and the general methods of solving such tasks. Therefore, according to Davydov, at the end of primary school, a child must have fully developed skills in using the terms of scientific concepts. From our point of view (and we agree here with Piaget and Vygotsky), conceptual thinking is formed in the later 10 years. The primary school pupil does not possess a developed and 'self-dependent' sense of reflection. Primary school pupils and preschool children are capable of casual acts of reflection, but they don't control it, and this type of reflection remains situational for them. The primary school pupil usually becomes a 'theorist' (e.g. cannot use the information learned in practice). He/she learns the fundamentals of sign systems, but the scientific form of consciousness is still beyond his/her capabilities.

52.7 The Organization of the Golden Key Program

The results that were received from institutions, working by the 'Golden Key' program, have shown that children in the described conditions are learning the content of standard preschool educational program without any difficulties, as well as the content of primary school educational program and large amount of educational material provided by the 'Golden Key' program itself. Children with difficulties in behavior and psychic development have shown natural psycho-correction. In general, children from these institutions are notable for their greater openness, ability to get themselves busy, for skills of collective activity and abilities for creative work. An unexpected but logical fact is the much lesser level of children's illnesses without any additional or special health-improving work.

The first 4 years of working by the 'Golden Key' program has specific features, which are connected to the fact that children grow older. Senior preschool children do not graduate and stay in the comprehensive school for 3 years. First they should finish primary school in the kindergarten-primary school system. Because of that the character of children's multi-aged group as a united entity is changing too. Its perceptibility is improving, as well as the ability for collective working with educational material, discussion and understanding of problems and difficulties and the ability to cope with them. Thereafter, the educational material is becoming more

complex, deeper and diverse from year to year. The difficulty level is set by age features and the possibilities of older children. But at the same time, the common event or cause is offering a possibility for including younger children on every level, available to them. Thereby, the educational material that can be learned by a child of a particular age (e.g. age of 4) varies with years of particular multi-aged group's existence. The 'older' the group, the higher children's educational possibilities.

The introduction of general education material and the tracking of its assimilation is made by four main directions. All these directions form different hierarchies and are present at every moment of child's life, but in different phases and on different levels of mastering the educational material. These four directions (described below) can easily be found in the life activity of any person of any age:

- The opportunity to act in an ambient space; the ability to organize one's own space according to goals of current activity
- The orientation in time, the ability to create the action sequence and to plan one's own actions
- The ability to work with different materials and to use their characteristics and features in one's own activity
- The ability to analyse one's own activity, to reflect on it and to comprehend one's own self as a subject of this activity

During the first 4 years of working with the 'Golden Key' program, each year is devoted to one of the above-listed matters. For the first year of working, it is space orientation. Groups of children with adults and children individually are building their own space, opening up and mastering the group space, school space and area around. This task is resolving with the help of specially designed methodological tools. It is, firstly, different schemes, plans, models which are made by children and organically included into children group life content. To the end of the first school year, older children are perfectly orientating themselves in the space of school building, in school area and surrounding area. They are orienting in the familiar area by cardinal points (by sun); they know the signs of the south slope (building side, forest border) in comparison with the north one; they can figure a scheme of a room, a path in familiar area, create stage scenery; they know cardinal points on maps; they can use a map to show a way to north pole, to Africa, to Japan, to America.

The second school year is devoted to the 'time' component. The time measurement is made on various levels: from micro-spacing (how many times could you jump for half-a-minute, will you be able to stand on one foot for a minute, etc.) to large historical scales.

During the second year, the groups are introduced to the time scale, where they mark all points they have been at during their adventures with time machine. It is the world of troglodytes, and the future with space ships and, of course, the modern time. Special work is made with events of Russian history. For example, children and adults are often celebrating the anniversary of the battle at Borodino (1812, against Napoleon). Learning the basics of history starts already with the opening of the first year of education in school. The historical material is a fundamental one for studying mathematics. Besides the historical time, children in school are engaged in

a work that needs planning and unfolding actions in time. It is serious, days-long play in film studio, in the work script writers, cameramen, directors, actors, etc.

To the end of the second year working with the 'Golden Key' program, older children (including children studying in the first grade) have a general idea of historical time and basic landmarks in human history. All children, according to age, acquire the abilities to operate with their own time, to understand how slowly or fast they are doing their jobs, to do the work within particular time limits (the limit is visually set by the hourglass). Children have an idea about what is minute, 5 min, 10 min, half-hour and hour and what they can do within this time.

During the third year of working with the 'Golden Key' program the work with different materials is placed in the centre, as well as productive activity and concrete ways of working. All of this is taking place together with deepening and expanding abilities and skills of space and time orientation. As a result, at the end of the year, older children get a clear idea about different areas of art, including the folk art, and their first experience of working with different materials – wood, straw, clay, bast, pieces of smalt, etc.

The fourth year of institution life is the last one of the introductory period. During this year, teachers focus on the development of children' abilities to analyse their actions, to reflect on them and to correct them if necessary. This goal is achieved with the methods, which are helping a child to learn how to single out himself and his activity in the general flow of life activity, how to separate himself from others, how to take various personal positions towards others. The formation of these abilities would not be possible without the forms and types of activity children have acquired during previous 3 years on the basis of the contents of previous education, for example, reflection of one's own actions in a particular space and time, the analysis of one's own actions during productive activity, etc. At the same time, children get acquainted with the explored cultures – the culture of Ancient Egypt and the Russian culture of Peter the Great. Their geographical knowledge is also expanding because of more concrete knowledge of different countries and climatic zones.

The education of children in the system 'kindergarten-primary school' by the 'Golden Key' program has several features that distinguish it from common school. The essence of these distinctions is the creation of necessary conditions for full educational activity formation of every child. According to the conception of education that lies at the basis of 'Golden Key' program, the educational activity develops through several stages. Every stage is characterized by a specific form of working with children. And it is impossible to realize these working forms within only a 'school lesson' organization frame. The most important forms of working with primary school age children (which are at the same time the stages of educational activity development) are individual studies with them and the cultivation of serious (business-like) cooperation and partner relations with others. Without realization of these stages, it is impossible to get to such complex collectively distributed activity as educational activity.

The practice of teaching children by the 'Golden Key' program has shown that the sole path to the formation of qualitative, substantial educational activity, actual for children, lies in the cultivation of serious partner relationships in the process of studying. And the formation of such serious communication is only possible through partnership with a teaching adult, through individual education.

Besides of individual work with children, working with children micro-groups and giving lessons (complex ones, which are not dominated by the subject matter), teachers who are working with the 'Golden Key' program have another very important type of work. It is a work in groups where children of their classes live, along with younger children and kindergarten teachers. The scenarios of children's group life imply school children's participation in all causes and events. This participation always helps to continue education and to consolidate knowledge and skills which were received in school.

At the end of education in an educational-nurturing institution, children own fully formed educational activity, and it means:

- They can pick out and keep in mind the educational task.
- They are able to pick out and master general ways of solving tasks by themselves.
- They are able to appraise themselves adequately and to control themselves and their activity.
- They have mastered reflection and self-regulation of their activity.
- They use laws of logical thinking.
- They use theoretical generalizations.
- They have mastered various forms of substantial communication.
- They are able to take part in collectively distributed types of activity.
- They have high level of personal creative activity.

In the process of development and implementation of the 'Golden Key' program we managed to create several new methods and practices, which allow creating the conditions for psychic and personal development of children and adults. One of them, which was described earlier and called 'pair pedagogy', does not simply consist of taking a child's zone of proximal development into account but also to *purposefully create it* and develop when the need arises.

An example of another practice is the 'axis of time', which appears during the certain stage in every group. The axis of time allows children, at first with the help of adults, to mark the most important global historical events, which are interlaced with their lives in the kindergarten (Christmas, war with Napoleon, first spaceflight, etc.) and their own local historical events (own birthdays and birthdays of parents, the day they went hiking, etc.). This vivid time axis helps children to properly orient in time, correlate various events in time and, maybe most importantly, to get an integral image of historical time.

52.8 Results

The realization of the 'Golden Key' program in various regions helped to formulate several important results.

One of the main results of program's implementation is the consolidation and development of psychic and somatic health. For example, there is substantial data that children of poor health in the process of learning by the program become much more resistant to various infections, which can be explained by psychosomatic factor. Besides, children with various psychological problems – fears, high anxiety, diffidence, disinhibition, etc. – gradually recover of these ailments. Speaking of children health, we should mark out the special atmosphere in the 'Golden Key' educational facilities. Many adults (teachers and parents) and many guests who often visit 'Golden Key' kindergartens speak of high openness and extreme psychological comfort there.

The next result of the program's implementation is related to the children psychic and personal development. Herewith we'd like to offer three indicators. Firstly, children acquire skills and psychological means of self-organization and self-regulation. They don't need step-by-step supervision and are able (beginning from 3 to 4 years) to independently organize their individual activity, control its results, join various groups and constructively realize joint activity. In comparison with children, who study by other educational programs, their peers from the 'Golden Key' are more accurate, have higher concentration of attention and are more interested in various aspects of their lives.

The second indicator of psychic and personal development of children, who follow the 'Golden Key' program, is related to the development of their creative abilities. The observation of children in general schools after the 'Golden Key' program shows that they prefer to take leadership positions, solve tasks in nontrivial ways, have high level of imagination development and creativity, etc. Besides, all these characteristics take place both in their learning activity and common life.

The third indicator of the 'Golden Key' children development is the fully formed psychological readiness for school education of preschool age children and the fully formed learning activity (the child's ability to study) of primary school age children.

And, finally, the last of the most important results of the 'Golden Key' program implementation is the purposeful development of adults (teachers and parents), who work and live with the children. Scientists and practitioners, who study the implementation of the program, are often point to the high level of teachers' professional development and high intention of parents to take active part in the life activity of the 'Golden Key' educational centres. They are able to communicate and interact with children, including ones with various handicaps. Many adults, who start to work with the program, report substantial improvements in their relations with their relatives and colleagues.

In conclusion, we would like to state that the cultural-historical approach, which is connected to the nonclassical method of scientific observation (called the projective method), helps us to analyse and create a *developing* education.

References

El'konin, D. B. (1971). On the problem of periodization of mental development in child age. *Voprosy psikhologii*, 4, 6–20. Translation of: Эльконин Д.Б. К проблеме периодизации психического развития в детском возрасте. *Вопросы психологии*, 1971, № 4.

Marx, K. (1959). Economic and philosophic manuscripts of 1844. In K. Marx, & F. Engels, F. Collection of works (Vol. 42, 118–119). Moscow: Progress Publishers,

Vygodskaya, G. L., & Lifanova, T. M. (1996). *Lev Semenovich Vygotsky. Life. Work. Sketches of the portrait*. Moscow: Academia, Smysl.

Vygotsky, L. S. (1935). The mental development of the child in the process of instruction. *Collection of works* (pp. 83–84). Moscow: State Pedagogical Publishing House. Original work: Выготский Л.С. Умственное развитие детей в процессе обучения. *Сборник статей*. M/L: Государственное учебно-педагогическое издательство, 1935.

Vygotsky, L. S. (1984). Early childhood. In L. S. Vygotsky (Ed.), *Sobrannye sotchineniy* (pp. 340–367). (Collected works). Moscow: Pedagogika. Translated in: The collected works of L.S. Vygotsky, Vol. 5, Chapter 9. Editor: R.W. Rieber. New York: Plenum Press.

Vygotsky, L. S. (1987). In R. W. Rieber (Ed.), *Thinking and speech. The collected works of L.S. Vygotsky, Vol. 1: Problems of the theory and history of psychology* (pp. 39–285). New York: Plenum Press.

Vygotsky, L. S. (1997). The history of the development of higher mental functions. In R. W. Rieber (Ed.), *Collected works of L.S. Vygotsky* (Vol. 4). New York: Springer.

Chapter 53
The Program of Developmental (Narrative) Play Pedagogy

Pentti Hakkarainen and Milda Bredikyte

Abstract The importance of early learning and development is growing with new evidence from life sciences. But specific character of early learning and development often is understood from the point of view of rational adult logic and assessment criteria. This has limited the possibilities of fully exploiting the developmental potential of joint play in preschool age. Adult participation has been limited to guiding rational learning processes, and in the Scandinavian 'free' play, ideal children choose the play contents. Our aim is to construct joint narrative play environments of adults and children in order to introduce and study together basic human values and themes, to create dramatic collisions and make sense by participating in play events. Narrative learning environments have been implemented in two types of classrooms: (1) *value-oriented before school clubs* and (2) goal-oriented vertically integrated classrooms. Narrative play environment in clubs is constructed without explicit learning tasks. Themes introduce ideal forms of behaviour for children, teachers and parents. Children have a free choice to participate in activities derived from the themes. In goal-oriented classrooms, assignments are intertwined with the thematic storylines, and the story cannot continue before children have solved the tasks. Often children cross the boundary from narrative play world to their classroom in order to solve the task using rational logic. We suppose, based on our results, that our approach effectively utilises developmental potential of advanced play forms (role-, directors-, and rule-play) and promotes elaboration of the zones of proximal development.

Keywords Narrative play pedagogy • Narrative learning environment • Play world • Vertically integrated classroom

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53.1 Introduction

Starting point of the program is a joint research proposal written with professor Vasili Davydov in 1997. The original proposal was not effectuated, but its main ideas are elaborated in the present program in more or less transformed form. The program was elaborated first in Finland as a part of teacher education program in early childhood education and local communal experiments. Cooperation based on the program has started with LCHC at UCSD in 2009, with Lithuanian University of Educational Sciences and Moscow State University of Psychology and Education in 2010 and with Bydgoszcz Kazimierz Wielki University, Poland, in 2012.

The main theme of discussions with Vasili Davydov was the developmental potential of children's play and how it would be possible to capitalise the potential to its upper limits. Davydov's idea was that if we succeed in this enterprise, we have created the most appropriate need for learning activity aiming at theoretical generalisations in all school subjects (this was the goal of El'konin–Davydov system of developmental education). In the program, the problem of developmental potential has been divided into two subtasks: (1) How to develop the quality of preschool play from simple elementary forms to most advanced ones? (2) How to use play (play world) as a tool of overcoming the crisis of children's development at this age and constructing a transitory activity system between play and school learning?

What does a transitory activity system mean? In cultural–historical psychology, child development is described with a stage model, in which each stage is characterised with the help of one activity type (leading activity of the stage). At each stage, this activity mediates the effects on development (El'konin 1999). Each stage is divided into two periods, motivational and technical (latent), but transitions between stages are poorly depicted. We suppose that a transitory activity system should be between children's play and school learning as the zone of proximal development. In this zone, the motivational power of play is utilised in realistic problem-solving (Hakkarainen 2008).

In play interventions, the elaboration of narrative tools has been the central method. Transitory activity systems are constructed from imaginative play-world frames and realistic problem-solving situations intertwined with storylines. Thus, a transitory activity is a mixture of elements from old and new activity system (play and school learning).

In the ideal case, our program should prepare children to move more easily to study according to El'konin–Davydov system (Davydov 1996, 1998) and be prepared to theoretical thinking. Unfortunately the Scandinavian school systems are not yet ready for independent learners and theoretical thinkers. Teachers receiving our pupils on third grade sometimes complain about their independence and activeness.

A transitory activity system is a mixture of 'as if' and 'real' elements. The task is found in a play world, but children cross the boundary to solve it in their classroom, and they often 'help' the characters of the story. Problems and the problem-solving process have a new form. The solution is 'realistic', and it works in the adult

world. This new type of task is based on a new type of goal and meaning making, in which it is important whether 'the solution is really correct'. In the story world, a miracle happens, and the problem is solved as a result of magic powers.

53.2 Child Development as the Focus of the Program

Most early education programs aim at child development, but the concept of development is understood differently. Quite often any change or combination of changes in children is called development. Cultural–historical psychology emphasised cultural development and broader developing units. At the end of his career, Vygotsky (1997) proposed that we should analyse development on the level of psychological systems, personality or consciousness instead of higher mental functions, which were his first candidate for the unit.

We have adopted the stage model of development El'konin (1999) proposed. In this model, two crisis periods of development interest us. First the 'crisis of third year' preparing the beginning of pretend play and second the 'crisis of seventh year'. In 80 years, the speed of Western childhood development has accelerated, and crises happen earlier, but for us, changes in motivational dynamics of play are important. The program should help children to elaborate joint play motivation and need state for realistic learning at school.

Crisis periods are psychologically interesting phenomena during which the significance of the motivation of previous activity type is disappearing (emotional bond with the mother at three and symbolic function and imagination at six), but the motivation of the next activity type is not yet established (pretend play at three and adult-guided learning at six). We should perhaps talk about 'need states' and search for appropriate objects in play and school learning. Joint construction of play motivation is a challenging task because most play theories do not explain the origin of motivation. 'Intrinsic motivation of play' is just mentioned as one of the criteria of play without any explanation.

Cultural–historical psychology forms the framework of our pedagogical approach – *developmental/narrative play pedagogy*. The main ideas about the cultural development of the child and the role of the social environment as the source of development are applied by constructing the curriculum and organising the activities and forms of adult participation in experimental settings.

53.3 Adult Creativity and Child Development

The program of developmental (narrative) play pedagogy was at the first-stage part of university-level master's degree program in ECEC and city level in-service education. In-service education is connected to reorganisation of district services so that each district of the city has one *vertically integrated* unit of 4–8-year-olds

classroom, in which a team of three adults (classroom and kindergarten teacher and a nurse) works with 30 children. Adults participating in the program were Finnish pre-service and in-service teachers.

The basic idea of our master's degree program was to develop new ECE courses and practices. In our program, we integrate teaching practice, research studies and theoretical in-depth studies of early education and development. We organised practice and play pedagogy courses on campus in the form of play club for voluntary children's group meeting once a week during two to three semesters. Our students were responsible for planning and organising children's day, enhancing the quality of joint play and collecting research data during the day. Student's role was not only to observe children's play but also to intervene, actively play and construct play together with children. Such a decision is based on the theoretical assumption of play as a 'cultural activity' (El'konin 1978), which means that the ability to play is not ingrained in our biological nature but 'learned' from the social environment (especially higher, developed forms). El'konin (1989) and the developers of the theory of learning activity, Davydov and Kudryavtsev (1997), expressed the idea that transition to school is easier if adults promote the development of pretend play. Polivanova (2000) claimed that pretend play produces new psychological functions ('neo-formations') in participants, which are internalised ('subjectivised') by individual children during the 'crisis of age seven'.

We try to avoid direct guidance and instruction about how the child has to behave. We want the child to be as free as possible in their choices and responsible for the consequences. We try to promote *developmental type of interactions* between the adult and the child. Kudryavtsev (1999) described this kind of interaction as genuine cooperation that presupposes the process of creative development and self-development in the participants, both children and adults.

Zuckerman (2007) described very precisely an adult position supporting self-development of a child. She emphasised the difficulty of adult help in children's play. For her, helping is a creative task. She wrote:

> *For the adult the task of constructing a meeting with the child on the territory of play, learning activity, or directly emotional or intimate-personal communication is always a new task, however experienced the adult may be in solving similar tasks. The task is new for the adult because he is seeking for the first time a method of adjusting his action to the action of this specific child in such a way that something new should arise at the place where the two actions meet (and that as far as possible nothing should be destroyed). Jumping ahead, I confess: this new should be the child's initiative.* (Zuckerman 2007, 51)

In our environments, adults take an active part in children's activities, and their roles are constantly changing from active organising and guiding to observing, helping and supporting children's ideas. We defined adult roles and forms of interaction in the following way:

- Adults are organisers, creators and mediators of cultural environments and model higher forms of behaviour for children.
- Adults actively play with children. Children and adults are seen as cocreators of joint activities, co-players.

- Interactions between adults and children are dialogic and are of an improvisational character.

53.4 Narrative Learning Environments

53.4.1 Play Club on the University Campus

The research laboratory of play 'Silmu' was constructed at Kajaani campus, University of Oulu, in 2002 as our setting for *advanced narrative role-play* development. The laboratory was established bearing in mind three main functions: (1) a creative play club for children and families, (2) a learning and research site for students and (3) an experimental site for university researchers. Creative club activities for children were organised as a part of the obligatory university courses for teacher education students (future kindergarten and classroom teachers).

The laboratory/club was located in a small, cosy house on campus (originally a gardener's house with a glass nursery for seedlings). One room was reserved for researchers and the rest for children's activity corners and play, including a kitchen and a space in the basement that can be used for creative activities. Eight corners are available for children: (1) blocks and building play area, (2) home play area, (3) story reading and storytelling and music area, (4) an area for board games, (5) meeting and art area, (6) handicraft area, (7) creative drama area, and (8) the kitchen. All the areas were 'open' to the children, and students were available to provide necessary support.

Approximately 62 children (0–6 years) from 30 families attended the play club over the 6 years (2002–2008).[1] Once a week, a group of 13–17 children (between the ages of 6 weeks to 6 years) participated in specific activities with the university students. Children come with one of their parents and stay from 3 to 4 h. Most children would come with their mothers, but fathers, grandmothers and grandfathers were participating as well.

During 6 years, about 160 students from the department of teacher education participated in the activities with children. Pedagogy of Play and Guiding Learning in Early Childhood courses were organised around play club activities. Most of the students spent three semesters on the site.

53.4.1.1 Schedule of the Activities in the Play Club

Students come to the site at 8:00 and have 1 h for planning and preparation. Children come at 9:00 o'clock. The following timetable was used (Table 53.1):

[1] The new Finnish university law made it possible to eliminate small research units of the university. As a result of this law, our activity was stopped. Now we continue play development at Lithuanian University of Educational Sciences with younger children.

Table 53.1 Timetable of the play club

Activity	Time
Free choice	9.00–9.30
Morning circle	9.30–10.00
Story presentation[a]	10.00–10.30
Playtime[b]	10.30–11.15
Lunch[c]	11.15–11.45
Free playtime[b]	11.45–12.45
Farewell circle	12.45–13.00

[a]Music and movement for small children might be organised in parallel
[b]Play worlds or some other projects for elder children might be organised
[c]Lunch is not fixed, adults bring some snacks to the children and they eat only when they feel hungry; sometimes elder children don't eat at all if they become involved in some motivating activity

In general, the time frames are rather free and just indicative. The natural rhythm of the activities determines the time when to stop or move to a new activity.

53.4.2 Organisation of the Activities

The activities can be divided into three major types:

- Organised and guided activities of all children
- Initiated and supported activities in small groups or individually
- Independent play activities in small groups or individually

Only group activities for all and some projects are planned in detail, other activities are improvised.

53.4.2.1 Organised and Guided Activities of All Children

Organised and guided activities include a daily morning and farewell circle and story enactment. The theme of the story is discussed and decided by the adults, but it is based on the topics coming from children's play and discussions.

Every week a short (7–10 min) puppet show using dialogical drama with puppets is performed right after the morning circle. Usually we start with a traditional folk tale and develop it further, adding new events and adventures that 'borrow' the themes and ideas from the children's play during the previous sessions. Often children make comments, or students directly ask them to give advice in critical situations. Sometimes puppet presentations have a direct impact on children, and they develop the ideas in their play. Some children use only puppets in their play and create their own story. Sometimes they elaborate the adventures further. Mothers

told us that some children make their own version of the puppet story for their family members. In some cases, they make their own puppets at home.

53.4.2.2 Initiated and Supported Activities in Small Groups or Individually

Initiated and supported activities start after the story presentation. They include activities in all eight activity centres, thematic projects for elder (4–5-year-olds) children, etc. All the activities in the activity centres are planned and prepared by adults, but children can always decide what to do and when, since each centre has a variety of activities to choose from.

An Example of Student-Initiated Painting Activity Based on Puppet Presentation

The activity started in a handcraft centre where students put a big piece of white paper (118 × 100 cm), prepared finger paint and invited children to paint. A girl started finger painting first and supported her painting with storytelling.

For about 10 min, there were four children and three students involved in the activity, but only one student was painting and having a conversation with a girl (5.5).

They both started painting separate characters from the story presentation. Pööpöti the centipede was the first character. The student painted on the left corner of the paper and the girl on the right corner. The girl was talking with the student and from time to time observed her painting. The student is painting, looking at girl's painting, asking questions and slowly moving the activity forward. The girl is not very much concentrating on the activity: she often interrupts her painting, observing what the student is doing, washing her hands, talking to her small sister, to the student, and laughing. At the same time, she is consistent with both painting and creating a story. At the beginning, the girl is imitating the student and painting the same characters one by one, but then suddenly when she tried to paint a mouse, 'Lisa', she halted. She watched a brown wet stain on the paper for a while and then tried to draw a tail to it, but did not succeed and made a curve and then one more curve and said: oh this is a fly 'Lisa'! A mouse 'Lisa' has eaten a poisonous mushroom and turned into a fly! The girl is laughing and painting more actively at the same time telling new and new events of the story. It can be clearly seen from the video that the girl is having pleasure and is quite consciously painting new events of the story. The whole activity took about an hour.

The student wrote down the following narrative after watching video record of their joint activity.

> *'Matia's the mole, 'Pööpöti' the centipede and 'Lisa' the mouse live in the turnip. One day 'Matias' the mole bumps into a tree, which falls on 'Pööpöti'. 'Matias' looses consciousness and was taken to the hospital with the ambulance.*

> *'Pööpöti' lies under the tree and waits for a rescue. 'Lisa' – mouse came to help him. 'Lisa' was not like herself, because she had eaten magic mushroom and turned into a fly. 'Lisa' soared in the sky and found 'Pööpöti' lying under the tree. She took 'Pööpöti' with her and flew him to the hospital to 'Matias'. 'Lisa' did not feel good, and died and went to heaven. 'Lisa' was put in a wooden coffin and the burial ceremony was organized. 'Matias', 'Pööpöti', the 'Troll' and the 'Gnome participated in the ceremony, and the 'Gnome' acted as the priest. They all shed a lot of tears and 'Lisa' looked down at them from Heaven.*
>
> *During this time they got a new neighbour. A butterfly had built a house near the turnip house and was now living in it. This was a big surprise for them when they came back home, because they had now a new neighbour and the Troll came to live with them.*

The child did not tell the story intentionally. The story is constructed from the narrative, which was embedded in their joint interaction. Young children often construct narratives in the context of play or playful conversation collaboratively.

Engel makes this distinction between a narrative and story: 'unlike a story, which is told or communicated intentionally, a narrative can be embedded in conversation or interaction and need not be expressed as a story by the speakers' (Engel 1999, 19). The student shaped the story form, but a 5-year-old girl created the content and meaning of the story, which is conveyed by the events and characters.

From the point of view of authenticity, the girl was quite free and spontaneous, and the story is even more authentic then in case the child were intentionally telling a story.

In our opinion, the whole activity is an example of a really creative process, which Vygotsky comments as follows: 'The child draws and at the same time talks about what he is drawing' (Vygotsky 2004, 67). 'The primary form of creative works by children is syncretic (…) involving creation in which individual types of art are still not separated or specialized' (ibid, 67). 'A narrative is an account of experiences or events that are temporally sequenced and convey some meaning' (Engel 1999, 19). Children weave together real concerns, real experiences and fantasy to convey what is important to them.

Here Are Some Examples of More Typical Play Sessions in the Creative Drama Centre in Our Laboratory

Narrative role-play takes place in the two rooms on the ground floor of the house right after the students' puppet story presentation. Three to four students are assigned to support children's play in the centre. The students are assigned to promote joint narrative play in the group of children remaining in the creative drama centre after the puppet presentation. They are instructed to take an active role in children's play. They are encouraged to use the whole building and to connect narrative play activities with other creative activities. In practice, this means that the players might be using all rooms in the house to create such environments as a 'castle', 'forest', 'robber's hiding place', 'jail', 'far away land', etc. Activities such as making different props and costumes, drawing a map, painting a castle or constructing a ship or a house are also a part of the play.

This is a new social situation of development both for the children and the students: most of the children want to play with other children but lack sufficient skills and experiences. Age, play experiences and expectations of participants are very different and sometimes even opposite. For the students, this is a complicated task. The students have to be inside the activity, to act only when needed and do only what is really needed. The students' main task is to support the development of joint play activity. Besides that, the students have to give necessary individual support to participating children.

From two to eight children and three to six students were participating in joined play activities, and the age of 'main' participating players ranged from 3.4 to 5 years. Children were not used to play together; some of them had very little experience participating in role-play activities before. The girls were more experienced than boys. The main challenge for the students was to find an interesting *theme* and to construct an *exciting story* around the theme, which would keep all these different children together. That was a quite natural challenge because all children were coming to the creative drama centre, trying to implement some ideas of their own, not paying much attention to each other but demanding student's attention and participation in their individual play activities.

The First Play Session This was the first session after summer holiday; the main challenge was that students and children did not know each other. Play activity can be described as a typical sociodramatic play with quite simple sequence of everyday events: building a house, making food, shopping, having a party, sleeping, washing dishes, playing an amusement park and riding horses. Students used a child's (Eevi's) idea to build a cottage to start the activity, but later students had to rely on their own ideas to move the play forward. Students constructed a play script applying an *additive* story 'making' model (and, and, and), which is traditionally used in oral storytelling. No dramatic collision, no tension.

The Second Play Session Five participants were involved in play all the time: two children and three students. At certain episodes, up to five children and five students participated in play. Two sisters were active participants, other children were just followers and students were the leaders and constructors of play events. All play events were happening around or in the 'castle', but no royal characters appeared in the play script. Students did not take any roles except 'salesperson' in a short 'shopping' episode. The sisters took roles such as 'child' and 'mother' during play episodes. Other children were acting as themselves. Play activity lasted about 60–65 min. These play actions were more recollection of some previous real events rather than imagination. 'It is more memory in action than a novel imaginary situation' (Vygotsky 1978, 103). *Reproductive* aspect of imagination is stronger than *productive*.

The Third Play Session Four children and four students were involved. This time after the story presentation, students asked children what they should build. Ani (4.6) said she wants a princess ship, and students asked the girl to direct their

building activity. Ani guided them in how to build the ship and proposed one student to take the captain's role. The captain proposed that they should sail to the princess's country, and everybody was excited.

The play started with the search for props and costumes. Everybody is in a good mood. Ani guided the students in building, while assigning roles to them, bringing anchor and telescope to the ship. Her proposals are not very original because she is using students' previous ideas, but her role has changed greatly: a shy, silent and unsure observer became active organiser of the joint play.

The students did not introduce new exciting ideas this time. Main events were the same as a week before, but the children were constructing the events, and students only added some details. In spite of repetition, the play was full of spontaneous creative improvisations. For example, right after the crowns disappeared from the ship, Ani proposed to look for the clues that the robbers might have left. Lassi (3.4) said that maybe the infonauts he had made from plasticine in the handcraft centre might have stolen the crowns! When children were searching for the crowns, Ani saw a picture (some children did it), which looked like a map. She decided that this is a map of the place where troll (troll was on the picture) lives and that he must be involved in the robbery in the ship. They brought the map and with the help of it finally managed to find all their stolen things in the troll's cave.

Ani eagerly participated in this play activity and was involved all the time. She not only was following play events but also was herself constructing many of them. Other children were constantly developing new ideas and not following joint play. Students in roles had to 'keep' them in the play frame all the time. It seems like children more eagerly listen to adults and accept their ideas than to other children. Anyway, all of them stayed together for most of the time. Play activity lasted about 60 min.

53.4.2.3 Independent Play Activities in Small Groups or Individually

After organised activities, the children need to have enough time and space for their independent play activities. Students systematically observe children's play and use observations for the planning of further activities.

An Example of a Children's Self-Organised Puppet Presentation

After lunch, Lucas (5.8) organised his own puppet presentation. He collected all the decorations, puppets and props that the students had used in their presentations. He arranged everything on the floor: two houses, the puppet-characters, an apple tree, a pond (a piece of paper painted blue), snow (pieces of white paper), grass (green paper) and mushrooms. Lucas invited Noora (5.5) to play with him. He suggested they should discuss their plan and then invited all the mothers and other children. 'The presentation is starting!', he announced. When people arrived, he explained to them in detail where they should sit and how to behave.

Lucas played two role characters: a centipede, Pööpöti, and the clown. Noora was playing the fly. They were improvising their dialogues. Then suddenly Noora's younger sister Paula (3.3) came and started to interfere in their play. Lucas stopped and told her to go and sit down, but she tried to take a role in their play. Noora was not upset with Paula's behaviour and continued playing. Soon Lucas also calmed down and stopped seeing Paula as a threat to their show.

Noora sometimes responded to Paula's actions when her behaviour was too dangerous (Paula almost destroyed the decorations several times), and Lucas followed her example. From time to time, they negotiated between themselves what to do next.

Noora was concerned about their interactions, while Lucas sometimes became too involved in his own actions. Noora interacted with Paula as well. At a certain point, Lucas became so inspired that he started singing his words. He was no longer upset about Paula's behaviour. He even accepted Paula into their play. When Paula started ringing a bell, Lucas just took the bell from her and kept on playing. 'The title of the story is Pööpöti's winter nightmare', he announced at the end of the show.

The most dramatic event of the story was Pööpöti's dreadful nightmare. The centipede got frightened, ran outside the house shouting for help and fell into the pond, nearly drowning. Luckily the troll came to rescue. When they finished the story, Lucas announced: 'The end'(Bredikyte 2011, p. 170).

At the beginning of our work (in the autumn), time was divided equally between adult-guided and independent activities, but our goal is 1 h of adult-initiated activities and 2 h of child-initiated activities. In principle, we tried to keep this balance and provide enough space and time for children's self-initiated play activities.

The main goal of our activities is *to help children to develop play that in turn develops them*.

53.5 Vertically Integrated Transitory Classroom at School

The setting for the development of *learning readiness* was organised at school in the city of Hyvinkää. Usually school administrators in Scandinavia use the term *school readiness*, which is based on different measures of knowledge and skills needed in adult-led activities on the first grade of the school. In our opinion, the potential of advanced pretend play is much greater than just promoting school transition. Other researchers have also become aware of the short time perspective of school readiness and turned the term upside down and asked if our school is ready for children (Linnilä 2006). We claim that advanced play promotes learning readiness of a longer perspective and especially self-development of the child. As a matter of fact, more general abilities and psychological systems are aimed at in the development of learning readiness. An essential task is to wake up genuine internal learning motivation.

We will provide a brief description about a vertically integrated classroom where Narnia play world based on C. S. Lewis' book *The Lion, The Witch, and The Wardrobe* was constructed in 2004–2005. The classroom was composed of 14 school children (6 boys and 1 girl were second graders; 2 boys and 5 girls were first graders) and 15 preschool children (6 boys and 6 girls were kindergartners; 1 boy and 1 girl were 5-year-olds, and 1 boy was 4 years old). The class started in the middle of August with a new composition. This year a real problem was the composition of the class. Six second grade boys wanted to separate themselves from the small children and did not want to cooperate with the 'babies' (Hakkarainen 2008).

After the Christmas break, the play-world construction started from drawing the most interesting characters and events of the story. The play-world preparation continued by forming five voluntary groups, which each constructed a miniature world of their story character and imaginative group story about the events taking place in the world.

The joint adventure started from a letter from Lucy (a child in the story) during one morning circle. She wrote about a reliable source, which reported that the magic wardrobe of the Narnia story was seen at 'Puolimatka School'. Lucy asked the children to find the wardrobe and said she would arrive in May to fetch it. The children read the letter, made a search plan and divided the class into two subgroups. The search was without results, but when the children returned to their classroom, the wardrobe[2] was there. Everybody wanted to enter the imaginative 'Narnia' through it, but the back wall did not let children through. After a lively discussion, one of the boys proposed writing a letter to Lucy to ask for her help. Children wrote several letters asking Lucy to come as soon as possible or send instructions telling them how to use the wardrobe. All the letters were put in an envelope and sent to 'London'.

Adults playing the characters of the Narnia story created the narrative space of the play-world project. The whole school building, the yard and also the nearby forest were transformed into Narnia depending on the needs of play-world activities. The school basement was a central place because children could recharge their magic powers on the magic stump. Maugrim, the talking wolf, also met children there. The wardrobe was a symbolic boundary-crossing tool in the play-world adventure as it was in the original story. Any environment was transformed into an imaginative space if it was entered through the wardrobe. For example, the children realised that they had to go to the 'Narnia' forest and put on their winter clothes in order to visit the beavers' dam. Suddenly one boy realised that they were no longer in Narnia if they went directly out. So the children went through the wardrobe and then to the yard (and now the forest was also in Narnia).

[2]The wardrobe was a big cardboard box fixed to the doorframe between the two rooms of the children's group space. The front opened like a cupboard door, and there was an opening in the back wall, which could be sealed when access to "Narnia" was denied and left open when transition was allowed. The wardrobe appeared in its place on 2 days each week, and it was taken away after the adventure so that the second room could be used as working space. "Narnia" was staged in the second room with simple props.

The children of the Narnia project were divided into subgroups, and each group designed a badge as a sign of membership. But the evil power of The White Witch scared the children, and it was decided to transform the badges into amulets by magic powers to them.[3] The magic powers were divided between the groups in the following way: vigour, the giant; agility, Maugrim; cunningness, the bad trees; wit, the small kid; courage, Aslan; speed, the groke. The adults invented 'the magic stub', which recharged the amulets with new magic power between the adventures. Each adventure in Narnia consumed the magic power of amulets the children wore. For instance, the amulet might run out of power completely if it was used for counter spells, and then it had to be recharged on the magic stub, as a cell phone needs to be charged after use.

Children's cooperation was promoted through the rule that each child had to find a partner from another group as indicated in the instructions, e.g. giants had to find a pair from Maugrims in order to combine the magic powers of vigour and agility. The adults were worried about the pairing process, but even the small children were chosen in the formation of pairs.[4] The next day the children move to Narnia through the wardrobe. Everyone wore the amulet, and the same route was used to reach the hiding place of Maugrim. The wolf urged the children to hurry up with the tasks needed to free him. First vigour and agility had to be combined to take down five small bags hanging from the ceiling of the basement.[5] Five pairs of children (vigour + agility) solved the problem so that one child (vigour) stood on footprints on the floor and the second child (agility) sat on their neck and could reach the bag. The first child was not allowed to take the bag. If the pairs were uneven and vigour was not able to lift the other child, then Maugrim gave the advice to change the amulets and solve the task by having the bigger child represent power.

53.6 Assessment of Joint Development

The program of developmental (narrative) play pedagogy aims at two types of outcomes in different settings: (1) *advanced forms of narrative role-play* and (2) *learning readiness* (instead of school readiness) in transitional play-world activity of vertically integrated children. The main feature of mature narrative role-play is the ability of the players to construct a plot (narrative) together. The following criteria were used to define it. Mature narrative play is:

1. Social/collective in character (several participants)
2. Imaginative (based on productive imagination)
3. Creative (not stereotypical and repetitive)

[3] Each member of the groups wrote the name of the magic power of the group on the backside of the badge.

[4] In ordinary classroom situations, this would never happen.

[5] Children had to loosen several knots before the bag could be taken down.

4. Developing over time (lasting several months and developed by individual children, children's group or adults)
5. Challenging (demands action at the highest level of play skills)
6. Having a narrative structure (a storyline is constructed for play) (Bredikyte 2011, pp. 81–82)

All children's groups were heterogeneous, and traditional achievement measures were not relevant. Alternative forms of assessment were used.

In *advanced narrative role-play* group, each child was followed and observed by two students. A child's own portfolio with limited access was created online, where students could add their observations every week. On the basis of the observations and on video material, we were able to follow and document child's participation in the activities. At the end of the semester, responsible students would write a more specific summary on a child's progress – a child's play development profile. The criteria of narrative role-play were used to describe the development of child's play. Later the profile was discussed together with the child's parent(s).

Our focus was on how the child feels and how he is able to function independently in choosing his activities. Especially we tried to grasp a child's intentions, interests and ideas on which we usually build joint activities. These observations were used in planning group activities every week. Despite the fact that our main focus was the construction of collective play activities, in our group, activities were defined by the needs and abilities of individual children. We can say that our goals were always on two levels: for the development of each individual child and for the development of the whole group. In principle we would see the group development as a source for the individual development of children.

School children's (first and second graders, 7–8 years old) learning results[6] were evaluated, giving a verbal description for the parents about child's learning skills and what can be enhanced. Individual learning evaluation was carried out in the following domains: mastery of subject content (solving of learning tasks), working skills, general behavioural traits, and development of pupil's self-evaluation skills. In-service teams have special rhythm in their work. Each year a new child cohort starts in vertically integrated classroom in August. About three and half months is reserved for educational assessment of individual children and the whole classroom. Observations, videotapes and pedagogical documentation are used as the basis for defining educational goals of the whole classroom and individual children. 'Small city' play has been the most successful joint activity at this stage.

Before starting a new play-world project, participating adults defined educational goals for each child and the whole group. For example, whole-group goals of *Rumpelstiltskin* play world included 'empathy, putting oneself to the position of other people (through role characters), recognising and showing emotions in safe play-world environment (sorrow, desperation, happiness), imagination and think-

[6] Children are not graded until the fourth grade in Finland. The teacher carries out continuous assessment during the school year. Assessment is meant to guide and help children in their learning and development. The form of assessment is decided in negotiations between local authorities, school and parents.

ing, skills of working with others in different group combinations'. Individual goals are aimed at through joint play activity, e.g. by proposing roles, responsibilities and tasks for individual children (more detailed description in Hakkarainen 2008).

An appropriate play theme and a high-quality tale or story vitalising the theme is selected for the frame story of the next play world. The frame story is introduced in December, and after the Christmas break, a whole semester-long play-world adventure starts. Goals guide the activity of weekly adventures, and a special assessment task is to observe children's self-initiated play attempts. These initiatives should be assimilated into play-world adventures in elaborated form by aggravating dramatic collisions, intensifying role characters and emotional experiences.

Assessment serves primarily the construction of the zones of proximal development in play. This is why a simple plan of each play-world adventure is made, and afterwards participants reflect what happened and what may happen next week. Assessment mainly focuses on adult–child interaction, and adults assess also their own educational activity.

53.7 Program Outcomes

The main outcomes of our research project lasting over 10 years are (1) construction of the theoretical frame and curriculum of narrative play pedagogy in early childhood (1–5 years) and transitional activity between play and learning (5–8 years), which we named as narrative learning, and (2) elaboration of pedagogical strategies supporting a child's development and learning through play activity. Our main findings and results were discussed in detail elsewhere (Bredikyte et al. 2013; Bredikyte 2011, 2012; Hakkarainen 2008, 2010; Hakkarainen and Bredikyte 2008). In the following paragraphs, we would like to briefly mention only some of them.

We elaborated and clarified several theoretical concepts, such as main criteria of narrative role-play, the mechanism of how the ZPD in collaborative play activity is constructed, etc. In addition we elaborated the main criteria of effective and appropriate adult intervention into children's play and described the necessary conditions for the developmental acts in children and adults during their joint interactions in play (Bredikyte 2011).

The main goal of our pedagogical approach is to support child development and learning through developing shared play activity. We created a pedagogical method the essence of which is that adults actively participate in supporting children's play. Through their active participation, adults can flexibly extend the content and the forms of children's activities and change the character of the play. Play interventions are carried out for the sake of improvement, which in turn will move the activity and the children's level of performance and learning forward. Our goal of interventions is to initiate the construction of joint play activities, lasting for a period of time.

From our empirical material, we derived the seven main criteria of adult intervention that enhances children's play: (1) motivating shared theme, (2) active

'in-role' participation of students, (3) emotional involvement of students, (4) dialogic character of interactions, (5) dramatic tension in play script, (6) coherent and fascinating script, and (7) elaboration of the 'critical' turns in play. The same criteria were established in individual and group play activities even when the age of children ranged from 2 to 10 years.

We look at shared play as an activity that supports the development of new skills and competencies (including the whole variety of cultural/symbolic tools) in the participants. In shared play activity, a social system is cocreated, which is more complex than the selves of the participants. It creates the opportunity to acquire shared experiences and move to a new level of functioning (including new skills). The process is dynamic and dialogic; participants constantly 'push' each other to move forward, exploring new ideas and new possibilities. This is a perfect learning space in early age.

Analysis of children's play sessions revealed the process of gradual assimilation and accumulation of shared experiences that can be observed from one session to another or even from one episode to the next. Children are constantly assimilating and developing further the ideas, behavioural models, play building strategies, roles, even intonations and movements used by adults (students) and other children. In addition, children are assimilating the creative and improvisational character of the activities. We can conclude that shared play activities with adults or competent peers prepare critical turning points and qualitative changes in play activity and child self-development.

We do not consider play with adults and among children as identical activities. Zen'kovskii (2013) already in the 1920s reminded that adult play has a different function compared to children's play. Adult's play with children should not be seen as eliminating or substituting children's play with peers. They are different in principle, and from an educational point of view, both are necessary.

The program outcomes were not limited to children's learning results and changes in children's development. Two additional tasks were carried out in our play environment: (1) teach developmental play pedagogy to our students and (2) conduct play research in a new setting. This is why our success in constructing appropriate developmental environment is an important part of outcome evaluation.

53.8 Future Perspectives

The program of developmental (narrative) play pedagogy was developed for teacher education students in Finnish ECEC, and at the same time, the main ideas have been introduced to in-service training in early education. In the near future, the emphasis will be in Finnish in-service education.

Vantaa city (ring city around Helsinki) has launched a play development project in all preschool units (over 700 child groups), and international cooperation with Vilnius city in Lithuania supports it. International cooperation includes mutual

Table 53.2 Task force proposal of adding and enriching play in ECEC of the city

Aspects of play	Children's goals	Adults' goals
Play interaction	Skills of play interaction	Participation, activation
Understanding of play	Experience of different play types	Broader and deeper understanding
Play observations	Initiatives, thinking	Use in planning
Planning	Use of opportunities	Playfulness in activities
Prerequisites for play	Use of opportunities	Addition in practice

visits (job shadowing exchange program) and in-service education organised by the play laboratory of Lithuanian University of Educational Sciences. The laboratory carries out experimental research on the development of self-regulation in children's play. In Lithuania more than half of the kindergartens of four cities (Vilnius, Kaunas, Klaipėda and Druskininkai) implement the program.

Vantaa city has organised a special development unit leading the project. Ten early education units from different parts of the city and working with different age children are selected to be pilot units intensively further elaborating the program suitable for local needs. Experienced, dedicated play developers are working in pilot units. Their responsibility is to support program development in other units of their district.

The early education task force of the city has selected five content domains of play, and goals are defined in each domain for children and adults (Table 53.2):

The goals of enhancing play in five domains are intertwined in the table because goals depend from each other. If adults create opportunities for play, children's goal is to use these opportunities, but they cannot be used before adults have realised their plan.

Curriculum guidelines of developmental play pedagogy were accepted as one of the lines of promoting UNESCO's Education for All preschool program in 2011. Moscow State University of Psychology and Education has started a new master's degree program based on the guidelines.

The program will be elaborated further in international cooperation with Lithuanian, Russian and Polish universities. The play laboratory of Lithuanian University of Educational Sciences will study the development of children's self-regulation in play. The results will be implemented in the program and also applied in kindergartens of cooperating countries.

References

Bredikyte, M. (2011). The zones of proximal development in children's play. *Acta Universitatis Ouluensis*, *E119*. Oulu: University of Oulu.

Bredikyte, M. (2012). The act of cultural mediation in children's play. *The Educational Forum*, *47*(2), 81–100. Internet access: http://forumoswiatowe.pl/index.php/czasopismo/article/view/16

Bredikyte, M., Hakkarainen, P., Jakkula, K., & Munter, H. (2013). Adult play guidance and children's play development in a narrative play-world. *European Early Childhood Research Journal, 12*(2), 213–225. doi:10.1080/1350293X.2013.789189.

Davydov, V. V. (1996). *Teoriya razvivayuschego obuceniya* [Theory of development- generating teaching]. Moscow: Pedagogika.

Davydov, V. V. (1998). *Types of generalizations in education*. 2nd print. Reston.

Davydov, V. V., & Kudryavtsev, V. T. (1997). Razvivayuschee obrazovanie. Teoreticheskie osnovania preemstvennosti doshkol'noi i nachal'noi shkol'noi stupeni. [Developing education. Theoretical basis of continuity between preschool and elementary school]. *Voprosy Psikhologii, 43*(1), 3–18.

El'konin, D. B. (1978). *Psikhologiya igry* [Psychology of play]. Moscow: Pedagogika.

El'konin, D. B. (1989). *Izbrannye psikhologicheskie trudy, Tom 1* [Collected Psychological Works], Vol. 1. Moscow: Pedagogika.

El'konin, D. B. (1999). Toward the problem of stages in the mental development of children. *Journal of Russian and East European Psychology*, 37(6), 31–70.

Engel, S. (1999). *The stories children tell/making sense of the narratives of childhood*. New York: Freeman.

Hakkarainen, P. (2008). The challenges and possibilities of narrative learning approach in the Finnish early childhood educations system. *International Journal of Educational Research, 42*, 292–300.

Hakkarainen, P. (2010). Finland no kyuoikuseido niokeru kyoushi no nouryoku keisei heno chousen [The challenge of teacher competences in Finnish educational system] (K. Matsushita & M. Ito, Trans.). In K. Matsushita (Ed.), *Atarashii nouryoku ha kyouiku wo kaeruka: Gakuryoku, literacy, competency* [Does a new concept of ability change education?: Gakuryoku, literacy, and competence] (pp. 281–305). Kyoto: Minerva Shobo. (in Japanese)

Hakkarainen, P., & Bredikyte, M. (2008). The zone of proximal development in play. *Cultural-Historical Psychology, 4*(4), 2–11.

Kudryavtsev, V. T. (1999). *Psikhologiya razvitia cheloveka: osnovanija kul'turno- istoricheskogo podhoda*. [Psychology of the development of a man: Basics of the cultural-historical approach, part I]. Riga: Pedagogical center "Eksperiment".

Linnilä, M. -L.. (2006). Kouluvalmiudesta koulun valmiuteen. [From school readiness to the readiness of the school]. *Jyväskylä Studies in Education, Psychology and Social Research, 294*.

Polivanova, K. N. (2000). *Psikchologia vozrastnykh krizisov*. [The psychology of developmental age crises] Moscow: Izdatel'skiy tsentr "Academia".

Vygotsky, L. S. (1978). *Mind in society: The psychology of higher mental functions*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1997). In R. W. Rieber (Ed.), *The collected works* (Vol. 3). New York: Plenum Press.

Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology, 42*(1), 4–84.

Zen'kovskii, V. V. (2013). The psychology of childhood. *Journal of Russian and East European Psychology, 51*(1), 12–86.

Zuckerman, G. (2007). Child–adult interaction that creates a zone of proximal development. *Journal of Russian and East European Psychology, 45*(3), 31–58.

Chapter 54
The Key to Learning Curriculum

Nikolay Veraksa and Galina Dolya

Abstract The programme Key to Learning is based on the ideas of L. Vygotsky, A. Leontiev, A. Zaporozhets, L. Venger, O. Diachenko, N.Veraksa. Vygotsky (Mind in society: the development of higher mental processes. Harvard University, Cambridge, MA, 1978) proposed that cultural tools that determine cultural development of a child are the result of socially determined process. The child cannot acquire those tools by himself – he needs an adult who transfers cultural tools to a child. This interaction occurs in the zone of proximal development and makes possible appearance of higher mental functions. This process should be rich in content – determined by most important kinds of child's forms of activity (Zaporozhet AV. Izbrannye psikhologicheskiye trudy [Selected works in psychology]. Pedagogy, Moscow, 1986). The programme Key to Learning is aimed at development of general abilities: cognitive, regulative and communicative. Abilities are understood as actions of orientation through application of special imagery tools (Venger LA. Development of child cognitive abilities. Pedagogika, Moscow, 1991; Leontiev AN. Lekcii po obshchey psikhologii [The lectures of general psychology]. Smysl, Moscow, 2000; Diachenko OM. Development of imagination of a preschool child. International Psychological Educational College, Moscow, 1996; Veraksa AN. Int J Early Year Educ 1:89–102, 2011b). Education process is determined towards acquisitions of those mental actions, which are applied in different situations for the purpose of solving different problems. The programme has module organisation and thus makes it possible to develop abilities systematically.

Keywords Cultural tools • Abilities • Project activity • Activity • Cognitive development

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Today's reality is characterised with an increased attention to upbringing and education of primary school-aged children. A whole range of research shows that systematic education of preschool children essentially improves their abilities for cognitive and social growth. Thus, there is an international trend to develop preschool education programmes. It is noteworthy that the former Soviet Union was an established authority in this area. In the Soviet Union, this work was done on a wide scale by the Preschool Education Research Institute at the Teacher's Training Academy of Science of the Soviet Union. The experts of this research centre pursued the ideas of Lev Vygotsky. Their research and work were in many ways used to develop the Key to Learning (K2L) curriculum that will be described in this chapter.

The K2L curriculum is based on a whole range of ideas originated by Lev Vygotsky and his students, including Alexey Leontiev, Alexander Zaporozhets, Daniil Elkonin, Petr Galperin, Leonid Venger and their followers (Veraksa and van Oers 2011). The systematic approach to education built on the basis of the K2L curriculum can unquestionably be referred to as a variant of developmental teaching. A unique feature of the K2L curriculum is that teacher's work is in many ways performed in the child's zone of proximal development.

54.1 Establishing the Zone of Proximal Development: Two Stages of the K2L Curriculum

Lev Vygotsky defined the child's zone of proximal development as a difference between knowledge a child has already assimilated and knowledge in the process of assimilation with the help of adults or more knowledgeable peers. Such understanding of the zone of proximal development requires further interpretation in building developmental education. In fact, the term 'zone of proximal development', according to Vygotsky, assumes the presence of an adult who defines the content of education that should be completed by a child for the purposes of his/her development. Such content cannot be arbitrary, rather it should extend beyond the actual developmental level of a child, on the one hand, and be to a certain degree available for assimilation with the assistance of an adult. This gives rise to a major challenge to the scope of education that should be made available to a child and at the same time offer possibilities for a child to perform a developmental action (Vygotsky 1978).

According to Vygotsky's cultural-historical theory, the system of cultural tools enables a child to master his or her mind acts by appropriating contents which focus on the development of higher mental functions. Consequently, the tasks related to the assimilation of cultural tools which are included in the educational process may indicate that the teacher is working within the zone of proximal development. According to Vygotsky, such tools include different semiotic systems, such as the concept system. In his book *Thought and Language* (Vygotsky 1986), Vygotsky showed that a child assimilates the concept system at school. Thus, in order to com-

plete the process of education in the zone of proximal development, it is necessary to identify the tools typically essential for preschool children.

Alexander Zaporozhets' work shows that the tools assimilated by children at the early preschool age include various *sensory standards*. He defined 'sensory standards' as the cultural tools that enable children to streamline external sensory information in culturally accepted ways, by calibrating the sensory data flow in culturally accepted ways and identifying the sustained features in it. There are various types of sensory standards, most importantly, the standards of shape, size, colour, pitch of sounds, etc. (Zaporozhets 1986).

According to Zaporozhets' research, without using such tools, preschool children fail to tackle perceptive tasks related to differentiating attributes of different objects. Applying sensory standards makes a child's perception a culturally mediated one and enables a child to culturally perceive various objects and situations. It is, therefore, justified to presume that sensory standards define the zone of proximal development of preschool children. This conclusion complies with the fundamental idea of Vygotsky of the structure of preschool children's mind based on perception.

In the process of assimilation, such sensory standards are transferred from the zone of proximal development to the level of actual development during the early preschool age. There is a challenge of finding tools to ensure the further development of the child at a later age.

Venger's research showed that many visual models (like the system of colours, geometric forms, etc.) act as the tools typical of older schoolchildren. This is evidenced by the drawings of children, which, according to Venger, are a form of visual representation of reality. This means that teaching older schoolchildren in the zone of proximal development should be connected with the acquisition of visual models as means of the analysis of reality (Venger 1988).

Visual model assimilation results in the development of image representation, which also corresponds with Vygotsky's understanding of the systematic consciousness of older preschool age children (5-/6-year-olds). Thus, the educational process at the preschool age is divided into two stages: the first is related to assimilation of sensory standards (like learning the colours or musical scales), and the second is tied to appropriation of cultural visual models (like, e.g. conventional symbolic representations). In this case, teacher's work has the maximum developmental effect and is performed in the zone of proximal development.

Consequently, the K2L curriculum based on Vygotsky's, Zaporozhets' and Venger's ideas has two stages: an initial stage referred to as 'caterpillars' and the second one referred to as 'butterflies'.

54.2 Amplification as a Building Strategy for the K2L Curriculum

Zaporozhets identified two strategies for building educational programs: an 'acceleration strategy' and an 'amplification strategy'. He specifically emphasized that the main focus should be directed to a broad and maximally appropriate child development, rather than to the acceleration of children's development. Hence, Zaporozhets advocated the amplification strategy. This strategy promotes educational work based on activities that are consistent with the child's age. Therefore, according to Zaporozhets, in the preschool age, priority should be given to the use of images as a tool for promoting the psychological development of the child. In his view, the acceleration strategy, which is aimed mainly at the acquisition of logical forms (e.g. concepts), results in narrowing down the zone of proximal development, whereas optimal development may only be possible when the zone of proximal development is regularly extended.

This context gives rise to a specific challenge to understand the developmental trends in the zone of proximal development so as to ensure the developmental process of the child's mind to the fullest possible extent. Venger proposed the idea that meeting this challenge requires a focus on developing children's *abilities*.

Leonid Venger suggested that sensory abilities and visual modelling abilities are general abilities. Based on the works by Vygotsky, Leontiev, Zaporozhets and other psychologists, Venger proposed a description of the structure of abilities. He viewed the development of abilities as a process of mastering the system of tools and actions with such tools. In this sense, abilities are cultural methods to guide a child in various situations.

The development of sensory abilities and visual modelling abilities solves the important challenge of identification and standardisation of situations faced by a child in his or her cognitive activity. The research by Olga Diachenko (2011) and Nikolay Veraksa (2011a) showed that the tasks faced by a child in its cognitive activity are not limited to the application of these abilities. A preschool child often acts in an uncertain situation, such as when a child plays an adult role in a role play without any understanding of the actions relevant to such role. In such situations, the lack of necessary knowledge is compensated by the ability of symbolic mediation. This ability underlies children's imagination. The ability for symbolic mediation is most important for interactions with new objects, relations and situations. The important issue here is not only that mediation with the help of symbols is important for a child's play but that it can eliminate the gap between the assimilated and non-assimilated tools arising in the zone of proximal development. The developmental mechanism of abilities for symbolic mediation is related to building imagination as described in the works of Olga Diachenko. This allowed looking at the development of the ability for symbolic mediation as one of the amplification lines for children's development leading to the development of creative thinking in preschool children.

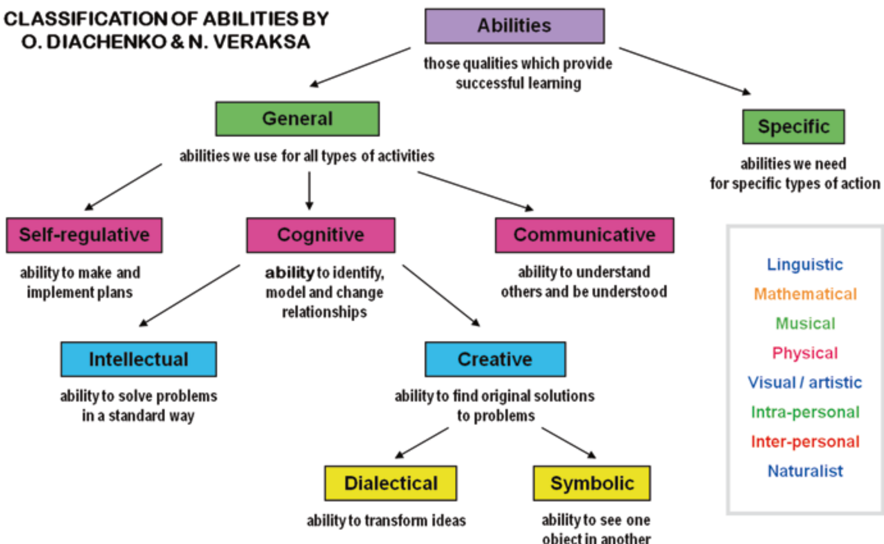

Fig. 54.1 Classification of abilities by Diachenko and Veraksa (Adapted from Dolya (2010, p. 15))

The main set of cognitive skills of preschool children includes (a) abilities to organise the attributes and structural relationships of reality (normative abilities), (b) the abilities which enable children to act in uncertain situations (symbolic mediation abilities) and (c) abilities which allow them to transform the initial situation (dialectical abilities). A fundamental task faced by preschool children is caused by a need to transform a situation. This challenge is met by a specific type of abilities which enable children to operate with the concept of opposites. Note that amplification should not be limited to the assimilation of sensory standards and visual models, but should also involve the acquisition of symbolic mediation and the formation of transformational abilities.

Along with the formation of cognitive skills, the amplification of development is defined by a system of various activities in which children are involved. Research works by Leontiev (2000) and Elkonin (1989) emphasise the special role of play activity. Play activity of preschool children is characterised by a scenario, a role assumed by a child and a specific spontaneity element. In other words, children independently create some imaginary situation and transform it in the logic of the development of the scenario. Therefore, it is play activity which becomes an important element of the amplification process and underlies the integration of different children's abilities into a unified system of children's conscience. Along with cognitive abilities, the play activity uses both self-regulative and communicative abilities.

Generally, the process of the amplification of a child's development involves the appropriation of both the tools ensuring the development of cognitive abilities and the tools aimed at the development of communicative abilities and self-regulative

abilities. Cognitive abilities enable children to understand situations and create action plans, both in uncertain situations and in normative situations by transforming such situation for their own benefit. Children use self-regulative abilities to control their own behaviour in various situations and implement projected action plans. Communicative abilities enable children to express their own attitude to the situation and communicate it to other people in a cultural way and understand themselves. Specific abilities may be also included into the amplification process, such as musical, physical and artistic talents. The main amplification line, however, is closely related to general abilities. Thus, amplification is based on the specific understanding of the structure of abilities (see Fig. 54.1).

54.3 Project Activity as a Method of the Integration of General Abilities

Abilities form a single mechanism of individual existence within human culture; therefore, there is a need for another integrative direction of amplification of development which is developed within K2L programme. This direction of amplification of development is called ‘Project Activity’.

In traditional practice, two opposing extreme approaches can be found in educational work with preschool children. In the first one, children are given the maximum freedom of action; in the other, their activity is rigidly determined and dictated by the adults. Both these approaches have, in our opinion, serious shortcomings. In the first case, the entire activity of children cannot find adequate expression in cultural forms; in the second case, even though activity is entirely cultural, it is absolutely de-individualised. That is why, there is a particular need not only for getting children to ‘meet’ with the culture but also to give the opportunity to meaningfully express their individuality in cultural forms. Years of work brought us to formulating the following understanding of the Project Activity.

The first characteristic of the Project Activity is that it confronts the child with a *problematic situation that cannot be solved by direct action*. By ‘direct action’ we mean an action that is performed without a preliminary orientation to the situation and does not require identification of resources (all that is necessary to perform an action is directly available to the child). If a child decides to build a garage for a car from cubes, it is obvious that this is a problem situation: the garage should be stable, and the car should fit in. However, solving this problem in play is by itself not Project Activity. Though the child builds a garage, estimates size, increases or decreases it, he proceeds in this play from the actual situation: a set of blocks and a car. The core issue that turns a child’s play into Project Activity involves a preliminary research of conditions to figure out how to meet the challenge and promote the total cognitive sphere of children. Real Project Activity comes into being when the problem task is to build a garage for a car in the yard to place the car there for a whole year. In this case, a variety of problems arise: the place of the garage that

should be discussed with the responsible adults, the materials that should be used, the model of the garage to be built, the weather conditions to be considered, etc. This activity cannot be spontaneous and thus, according to Leontiev (2000), is not play in a classical sense.

The second characteristic of Project Activity is the *exploration of the space of possibilities* (Veraksa and Diachenko 1996). Practical work with gifted preschoolers (Veraksa and Bulicheva 2003) showed that goal setting and planning their own actions does not move the children's thought process to a search for the solution. The most valuable for children is to search for such a way of acting that will correspond to their personal motives and will express their individuality. Because the relationship between the child's own experience and its possible cultural embodiment is not obvious, the child needs to explore the space of possibilities of the situation before moving on to planning. Almost any task can be turned into a project if an adult helps a child to open this space of possibilities which are inherent in the situation. For example, to make a bird feeder in winter we must see many aspects of the situation. What kind of birds (large or small) do we plan to feed? How do we make the feeder not to tip over (stable) when a bird sits on the edge of the feeder? How to make the feeder stable so that it will not tip over in the wind? How to protect the feeder from snow that can cover the food and hide it from the birds? Answers to these questions require selecting the material for the feeder, its size and shape, ways to attach to a tree, etc. After detailed discussion, when the best option is selected, planning takes place. Now the process of creating a feeder will be meaningful for the child at every stage of the planning.

The third characteristic of the Project Activity lies in the fact that its *participants must be motivated*. But simple interest is not enough. It is necessary that in Project Activity both the teacher and the child carry out not only their understanding but also their meanings. Preparations for a festival is a common event, and the technology of its organisation and procedure is described in detail in many educational programmes. A child may be interested in preparing for the festival, but the project work will begin only at the very moment when the teacher with the child tries to discover the meaning of the festival. What is this festival for? This is a special day in the life of a person or country, a reminder of some important event. Therefore, one must understand what this day or this event means for each child or teacher. How do we treat this festival? Why do we celebrate? What are the ways we express our attitude to the festival? And so on. Obviously, such questions will help children to think about meaning. As soon as meanings are defined, you can look for alternative ways to present them.

The fourth characteristic of Project Activity is *subjectivity of its participants*. Under 'subjectivity', the expression of initiative and self-manifestation of activity is implied, but the subjectivity of the child may manifest itself with varying degrees of complexity. Thus, a child may express an original idea (not previously expressed in the group) or support and slightly reshape the idea of another child.

The fifth characteristic of the Project Activity is its *addressed* nature. Because in Project Activity children express their attitude and personal meanings, they always look for the recipient (the addressee) – a person to whom their statement, issued in

the form of the product, is addressed. That is why the Project Activity has a pronounced social dimension and ultimately is one of the few socially significant actions available to preschoolers.

No less important is the fact that in Project Activity children develop their self-regulatory skills and in project presentations their communication skills.

Thus, Project Activity integrates development of all abilities, and children may act within the scope of human culture. In the following sections, the 'Key to Learning' curriculum will be described. This early childhood education curriculum is based on the previously described theory and describes project activities in which curricular units are embedded for the development of the system of abilities, taking into account young children's susceptibility of the sensory aspects of their reality.

54.4 The Twelve Units of 'Key to Learning' Curriculum

The K2L curriculum is materialised through 12 curricular units designed to be put into practice with children aged from 3 to 7 years (preschool and kindergarten). Each subprogramme or curricular unit is made up of 60 sessions intended to improve the general learning abilities of the children, their communication, cognition and self-regulation. Below there is a description of the objectives of each unit with examples of activities.

The curricular unit 'Sensory Mathematics' aims to develop the ability to analyse the visual and external qualities of objects using sensory standards such as the colour, shape and size. According to Venger (1988), the sensory standards are socially elaborated representations of the characteristic sensory patterns of objects, and their acquisition allows the raising of perception from a natural to a superior level of functioning. It is precisely in the preschool period when a transition occurs between the acquisition of isolated standards to an internalisation, practical command and automatic application of a culturally originated system of sensory standards. Such a process plays an essential role in the mental development of the children (Bodrova and Leong 2003). One activity from this subprogramme is based on the use of three 'magic glasses'. In this activity, the teacher helps the children to create three glasses with different shapes. The first glasses are square, and the child searches for all square objects, while the other glasses are triangular and circular. The children put on the glasses and only choose those objects which have the shape represented by the glasses. The objective of this activity is to analyse the external shape of the objects using this sensory standard.

The 'Logic' unit is designed to develop the ability to analyse objects and events, to see their hidden sides, to identify the most essential features, to think following a certain sequence, to draw conclusions and to categorise information. In one of the activities called the Yellow Flowers, the children are requested, with the help of a Venn diagram, to put objects into groups depending on the category they belong to: the 'yellow family', the 'flowers from yellow family' and 'flowers in general'. Thus, one single object like a yellow flower would belong to the categories 'yellow fam-

ily', 'flowers from yellow family' and 'flowers in general', whereas another object, such as a yellow butterfly, would only belong to the category 'yellow family'.

The activities grouped in the 'Mathematics' unit use visual models through which children discover the language of mathematics (the concepts of measurement, comparison and relationship). For example, in one activity, children are asked to make a certain number of claps (or tongue clicks, eye winks, etc.) according to the number of buttons that the teacher has in his hand.

Another unit of the curriculum, called 'Story Grammar', aims to foster the love for stories, as well as to help the children to understand the language and its characteristics. For instance, the strategy of visual modelling can be used through storytelling, encouraging the children to represent the story characters with geometric shapes. In this sense, the story is told first using episode pictures and then retold using substitute geometric shapes for the characters and objects in the story. Little Red Riding Hood, for example, may be represented by a red circle, and a grey circle would represent the wolf.

The 'Developmental Games' unit has the objective to develop creative imagination, symbolic literacy, linguistic and communicative abilities, flexible thinking, self-regulation and creative problem-solving. We can promote, for instance, the development of the creative imagination using activities such as showing a triangle, a square or a circle to the children and asking them what may these shapes represent. The circle, for example, could become a ball, a plate, the sun, a flower, etc.

The 'Artographics' unit is designed to cultivate the skills required for writing and the creative artistic expression, by introducing different symbolic tools such as composition, rhythm and colour. An example is an activity where the children listen to different types of music with different rhythms, and they express through a free drawing what they feel and think.

The 'Visual-Spatial' unit seeks to develop the spatial consciousness and the ability to read and understand maps. Children are expected to look at objects in space and to represent what they or others see by using different symbols (maps, schemes, etc.). For example, the activity called 'from a different point of view' is aimed at helping children to understand that things can be viewed differently depending on the observer's position in space. The procedure is very simple and consists in placing the children in different parts of the classroom. Then, the children guess what a soft toy giraffe would see from the specific location in the room. After that, the animal's positions change, and children should understand that the toy animal's view is modified accordingly. In later stage, the children, aged from 5 to 7 years, are asked to draw a map of the class and to place the door, the windows and the tables in their correct position. Finally, the teacher gives the children some representations of the chairs, so they have to place them in the picture and indicate where their own chair would be.

In the 'Creative Modelling' unit through cooperative activity, the children create artistic compositions that represent their world by the manipulation of geometric felt shapes. For instance, they may create a big and a little bear using circular shapes of different sizes and colours (black, white, brown, red). They also create landscapes (snowy, sunny, rainy, windy, etc.) as environments for the bears.

The 'Construction' unit develops mathematical language and goal-directed behaviour. Children analyse the structure of objects, plan, articulate their plans and execute them using wooden modular blocks. In this unit, 'ghost models' are used (Dolya 2010). These models are 2D or 3D representations lacking detailed information of some of the aspects necessary to produce or reproduce them. Thus, we might have a castle represented by some lines, but the pieces required to construct it in 3D are not specified. The activity 'So Many Slides' will serve as an example for the Construction unit. In this activity, the children build a 3D representation of the slide using several pieces (different blocks of various forms and shapes) according to a 2D 'ghost model'. The interesting point of the activity is that the model can be interpreted in different ways, so that creativity and flexibility in problem-solving abilities are promoted.

In the 'Exploration' curricular unit, games, stories and simple experiments are used to help children learn scientific concepts such as the states or the different qualities of substances. For example, in one activity called 'Playing With Symbols: Ice, Water and Steam', the children perform different actions following certain symbols or instructions given by the teacher, such as 'when I say cold, you have to hug your shoulders' or 'you have to pretend that you are swimming when the ice melts because of the sun'. The objective of this activity is twofold. On one hand, it intends to consolidate the knowledge about the three states of water. On the other, the understanding of these states is put into practice through the introduction and use of symbols for water, heat and cold.

The 'Expressive Movement' unit aims to develop emotional intelligence, nonverbal communication, creativity and imagination, through body movements, gestures, facial expressions and music. In the activity 'Let's Drive the Car', different movements are simulated, for example, stopping a pretend car when the teacher says 'stop' or moving into the direction indicated by the teacher when she says 'move'. This kind of activity fosters the expression of different movements, while it requires the children to react to verbal and nonverbal commands and to control their own behaviour.

Finally, the 'You-Me-World' unit promotes the knowledge about the natural and material world, about living things and inanimate objects using symbols and visual models children learn about themselves as physical, emotional and social beings. In the activity 'Who Lives Here?', several substitute shapes such as circles are used to represent the members of a family, so the big circles are the parents and the little ones are the children. Moreover, the activity is directed to familiarise the children with their address and with the symbolic representation of house and family. This activity serves as an example of the above-mentioned process of 'visual modelling', which consists, as we explained, in moving real, concrete information into abstract models using signs and symbols, e.g. different size circles representing people.

EARLY LEARNING GOALS	DEVELOPMENTAL COGNITIVE CURRICULUM				
Personal, Social and Emotional Development	DEVELOPMENTAL GAMES	YOU-ME-WORLD	CREATIVE MODELLING	EXPRESSIVE MOVEMENT	STORY GRAMMAR
Communication, Language and Literacy	STORY GRAMMAR	ARTOGRAPHICS	DEVELOPMENTAL GAMES	YOU-ME-WORLD	CREATIVE MODELLING
Problem Solving, Reasoning and Numeracy	SENSORY MATHEMATICS	MATHEMATICS AND LOGIC	CONSTRUCTION	CREATIVE MODELLING	VISUAL SPATIAL
Knowledge and Understanding of the World	EXPLORATION	YOU-ME-WORLD	VISUAL SPATIAL	CONSTRUCTION	CREATIVE MODELLING
Physical Development	EXPRESSIVE MOVEMENT	ARTOGRAPHICS	DEVELOPMENTAL GAMES	CREATIVE MODELLING	CONSTRUCTION
Creative Development	DEVELOPMENTAL GAMES	CREATIVE MODELLING	ARTOGRAPHICS	EXPRESSIVE MOVEMENT	CONSTRUCTION

Fig. 54.2 Overview of learning goals and their corresponding curriculum units in K2L

54.5 Description of the Programme in the Classroom

Each of the 12 units consists of developmentally appropriate and carefully sequenced 60 sessions: 30 for younger children (caterpillars) and 30 for older children (butterflies). It provides opportunities for child-initiated and teacher-structured activities. There are, in addition, suggestions for follow-up activities that can be shared with parents. The programmes form a coherent whole: they have a particular view of the role of the teacher, they emphasise group work and they offer young children opportunities to master five types of cognitive task. Each programme contributes in differing proportions to the six areas of the Early Years Foundation Stage (Fig. 54.2): communication, language and literacy; problem-solving, reasoning and numeracy; creative development; knowledge and understanding of the world; personal, social and emotional development; and physical development.

The Key to Learning approach recognises three types of learning and teaching process. During sessions teachers lead short bursts of structured activity. Sometimes they share their expertise with children, modelling and mediating the use of mental tools through developmentally appropriate and engaging activity. At other times, perhaps during the same session, the teacher and children collaborate to create something together, through joint activity. Finally, the expectation is that the children will continue to do what they already do, spending much of their time engaged in spontaneous free choice play, under the watchful eye of a facilitating adult. Of course, at such times, teachers are free to enrich the range of available choices by leaving relevant materials from recent sessions available for the children to use independently (Fig. 54.3).

Group work is an important component of the Key to Learning approach. The most obvious, common sense reason for this is that the ability to work co-operatively

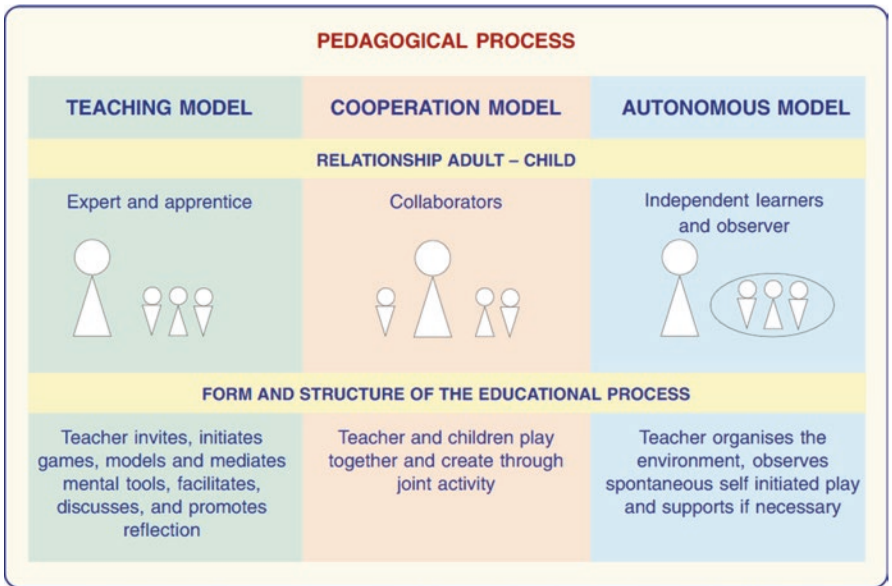

Fig. 54.3 The pedagogical process in K2L

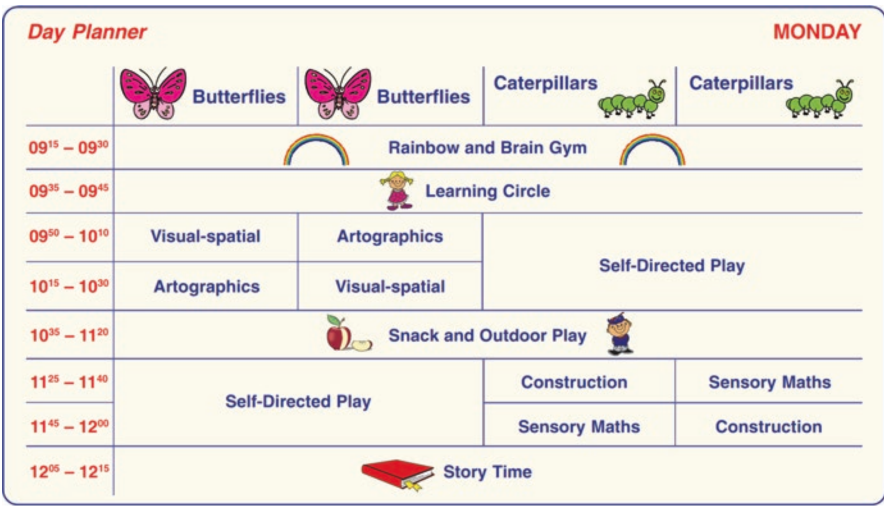

Fig. 54.4 Units of the K2L curriculum during the day in different age groups

	CATERPILLARS	BUTTERFLIES
1	Story Grammar	Story Grammar
2	Story Grammar	Visual-Spatial
3	Expressive Movement	Expressive Movement
4	Developmental Games	Developmental Games
5	Creative Modelling	Creative Modelling
6	Artographics	Artographics
7	Sensory Maths	Mathematics
8	Sensory Maths	Logic
9	Construction	Construction
10	You – Me – World	Exploration

Fig. 54.5 A sequence of curriculum units of K2L in the two stages

as part of a group is essential if a child is to make a smooth transition to formal schooling; if we wish to foster communication and co-operation, we must provide rich opportunities for practice. Less obviously, but perhaps more profoundly, working in a group offers children the opportunity to reflect on other children's opinions. Toddlers are very egocentric, subjective and one sided in their understanding of things and their perception of the world around them. They sincerely believe that anything they see really is exactly as they see it at that moment, from where they are standing. It is not possible for them to understand that from the other side, from a different place, a thing may look different; that something is the same thing from both sides rather than two different things. Even if they walk around it many times, they are not sensitive to contradictions. If one child gives one answer and another a different answer, an opportunity emerges of putting oneself in another's place and seeing things from another's perspective (Fig. 54.4).

54.6 Implementation of the Programme

Key to learning is best implemented in the kindergarten/preschool by practitioners who have been trained in both the theory and practice. These practitioners can be trained by trainers who have been certified by Key to Learning. The training of trainers involves ideally 80 h of direct training plus some experience in the implementation of the programme. Initially there is a 40-h course followed by some implementation experience in the classroom. It is helpful, but not essential, for the teacher to be paired with an educational psychologist. Normally the first 40 h would

involve a comprehensive introduction to the Vygotskian Theory of Learning and Development and then practical workshops on the units in the 'caterpillar' stage. The next 20 h (between 3 and 6 months later) will include reflections on the implementation of the 'caterpillar' sessions followed by detailed training in the 'butterfly' units. The final 20 h is reflection and analysis followed by a presentation to their peer group. New teachers are trained by these qualified trainers (Fig. 54.5).

54.7 Prospect and Projection of 'Key to Learning'

The K2L educational programme has been implemented to date in more than 200 schools in England, Scotland and Wales, as well as in about 700 primary schools and preschools in Poland. There are also K2L centres in India, Singapore, Indonesia, Puerto Rico and South Africa.

Despite the fact that there are not published results on the effects of the K2L programme, there are preliminary results that indicate its positive effects. Madeleine Portwood (Portwood 2007), from the University of Durham, has reported in a research paper that the programme has had effects on different psychological processes in 88 children (55 girls and 28 boys) who participated, during a year, in the process of teaching and learning suggested by the K2L curriculum. Compared to a control group, these children showed a statistically significant higher performance in different measures of language development (vocabulary and storytelling), attention and fine motor skills, although these results have not been published yet. A similar study undertaken by the Birmingham City University, School of Education study, has recently been published (Aubrey et al. 2012).

Participation in the K2L programme, briefly described here, facilitates the planning and organisation of the children's activities and behaviour and expands their viewpoints and promote creative solutions to different problems. Also, this programme encourages the children to interact happily with other people, to have a positive attitude through learning, to interpret the semiotic systems used by a concrete community, to help them to communicate their emotions and feelings and to use logic strategies to solve mathematical problems. However, there is the need to apply and evaluate the curriculum in different parts of the world in order to assess its potential and consequences.

54.8 Future

It is the intention to make the programme available to as many preschoolers as possible worldwide especially disadvantaged communities. With centres now in the UK, Poland, Singapore, Indonesia, Puerto Rico, India and South Africa, there is a strong base to form a worldwide community. This will be further strengthened by the planned introduction of the programme into Russia as a means to teach English

as second language to preschoolers. Eventually an institute or a not-for-profit foundation may be the most satisfactory route forward.

References

Aubrey, C., Ghent, K., & Kanira, E. (2012). Enhancing thinking skills in early childhood. *International Journal of Early Years Education, 20*(4), 332–348.

Bodrova, E., & Leong, D. J. (2003). Learning and development of preschool children from the Vygotskian perspective. In A. Kozulin, B. Gindis, V. S. Ageyev, & S. M. Miller (Eds.), *Vygotsky's educational theory in educational context* (pp. 156–176). Cambridge: Cambridge University Press.

Diachenko, O. M. (1996). *Development of imagination of a preschool child*. Moscow: International Psychological Educational College

Diachenko, O. (2011). On major developments in preschoolers' imagination. *International Journal of Early Years Education, 1*, 19–25.

Dolya, G. (2010). *Vygotsky in action in the early years*. London/New York: Routledge.

Elkonin, D. B. (1989). *Izbrannye psikhologicheskiye trudy [Selected works in psychology]*. Moscow: Pedagogika.

Leontiev, A. N. (2000). *Lekcii po obshchey psikhologii [The lectures of general psychology]*. Moscow: Smysl.

Portwood, M. (2007). Evaluating the effectiveness of the key to learning curriculum. Interim report: Internal Program Publication.

Venger, L. A. (1988). The origin and development of cognitive abilities in preschool children. *International Journal of Behavioral Development, 11*, 147–153.

Venger, L. A. (1991). Development of child cognitive abilities. Moscow: Pedagogika.

Veraksa, N. (2011a). Development of cognitive capacities in preschool age. *International Journal of Early Years Education, 1*, 79–88.

Veraksa, A. N. (2011b). Symbolic mediation in cognitive activity. *International Journal of Early Years Education, 1*, 89–102

Veraksa, N. E., & Bulicheva, A. I. (2003). Razvitie umstvennoi odarennosty v doshkolnom vozraste [Development of cognitive giftedness in preschool age]. *Voprosy Psikhologii, 6*, 17–31.

Veraksa, N., & Diachenko, O. (1996). Sposobi regulyatsii povedeniya u detei doshkolnogo vozrasta [The means of behavior regulation in pre-schoolers]. *Voprosy Psikhologii, 3*, 14–27.

Veraksa, N., & Oers, B. (2011). Early childhood education from a Russian perspective. *International Journal of Early Years Education, 1*, 5–18.

Vygotsky, L. S. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University.

Vygotsky, L. S. (1986). *Thought and language*. Cambridge, MA: MIT Press.

Zaporožec, A. V. (1986). *Izbrannye psikhologicheskiye trudy* [Selected works in psychology]. Moscow: Pedagogy.

Chapter 55
Te Whāriki: The New Zealand Early Childhood Curriculum

Ken Blaiklock

Abstract *Te Whāriki*, the New Zealand early childhood curriculum, provides a broad framework of principles and goals that can be used to plan programmes for young children. Since its introduction, over 20 years ago, *Te Whāriki* has been widely praised by teachers and academics. The generalised and non-specific nature of the document can be seen as both a strength, in allowing for a diverse range of programmes, and a limitation, in failing to provide more specific guidance on important areas of learning.

The New Zealand Ministry of Education encourages teachers to design programmes that weave the content of *Te Whāriki* together with the context of the community in which they are located. Some supplementary resources have been provided to assist teachers, but these, like the curriculum, tend to be generalised and aspirational rather than being focused on the practical realities of using the curriculum. The open nature of the curriculum places responsibility on teachers to facilitate children's learning as opportunities arise. Such an approach relies on teachers who are well versed in pedagogy and domain content knowledge, but the coverage of these areas in teacher education programmes is variable.

Assessment of learning in early childhood centres using *Te Whāriki* is mostly carried out with Learning Stories, a narrative assessment technique that was designed to align with the principles and goals of the curriculum. Learning Stories can provide insightful descriptions of specific events but have yet to be shown to be a practical and effective means of assessing and enhancing children's learning. Evaluation of the quality of programmes in centres is often limited by a reliance on Learning Stories as the main source of evidence for children's learning.

Keywords Early childhood curriculum • Te Whāriki • Assessment • Learning stories

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55.1 The Development of *Te Whāriki*

The development of *Te Whāriki* (Ministry of Education 1996), the New Zealand early childhood curriculum, involved extensive consultation with early childhood professionals and the wider community. The contract to produce the curriculum was awarded in 1991 to Helen May and Margaret Carr, two academics who had previously worked as teachers and in the policy area (Smith 2011). May and Carr were aware of the need to develop a curriculum that catered for the wide variety of services that operated in the early childhood sector in New Zealand. The services include state-operated kindergartens, privately owned early childhood centres (some emphasising particular philosophies such as Montessori or Steiner), parent-led services (e.g. play centres, where parents undertake training as educators), Pacifika centres (providing immersion or bilingual education in the home language and culture of families from Pacific islands) and Kohanga Reo (providing education in Maori language and culture).

Representatives of the National Te Kohanga Trust, Tamiti and Tilly Reedy, worked alongside Carr and May to ensure that the curriculum would reflect the partnership that exists between indigenous Maori and Pakeha (non-Maori) as a result of the signing of a treaty (Tiriti o Waitangi) in 1840 between Maori and English settlers. Although the treaty was a founding document for the European settlement of New Zealand, it is only in more recent times that governments have recognised and acted on its legal and policy significance. The development of *Te Whāriki* as a bicultural and bilingual document is now seen as a model of how partnership between Maori and Pakeha can operate effectively (Ritchie 2012).

As well as the lead writers, many other groups contributed to the development of *Te Whāriki*. Specialist advisory groups were set up to focus on issues related to infants and toddlers, preschoolers, inclusive education, home-based services, Pasifika and Maori (Te One 2013). The groups trialled ideas and sought feedback from their networks. A draft of *Te Whāriki* was released in 1993 and copies were sent to all early childhood centres, teacher educators and related organisations. Further consultation followed and the final version of *Te Whāriki* was published in 1996.

55.2 The Structure of *Te Whāriki*

Te Whāriki begins with a statement of the aspirations on which it is founded. The statement provides a vision for children "to grow up as competent and confident learners and communicators, healthy in mind, body, and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society" (Ministry of Education 1996, p. 9).

The sociocultural emphasis of the curriculum is apparent throughout the document. Bronfenbrenner's ecological systems theory is discussed in the introductory pages, and there is frequent reference to the complexity of relationships and settings

that impact on children and their families. Interestingly, Vygotsky's work is not explicitly mentioned in *Te Whāriki* but parallels with his ideas are evident in statements such as the following:

> This curriculum emphasises the critical role of socially and culturally mediated learning and of reciprocal and responsive relationships for children with people, places, and things. Children learn through collaboration with adults and peers, through guided participation and observation of others, as well as through individual exploration and reflection. (Ministry of Education 1996, p. 9)

The developers of *Te Whāriki* sought to avoid a traditional curriculum that was divided into major domains of learning (e.g. physical, cognitive and social) or school-type subject areas (e.g. language, literacy, music, science). Carr and May (2000) have commented that they were wary of the influence of a "trickle down" effect from the school curriculum and instead favoured a much more holistic and open-ended approach. This is evident in the very broad definition provided in *Te Whāriki* for "curriculum" as "the sum total of the experiences, activities, and events, whether direct or indirect, which occur within an environment designed to foster children's learning and development" (Ministry of Education 1996, p. 10).

Adopting such a wide-ranging definition of curriculum means that it is not possible for a curriculum document to detail all the learning experiences that children may encounter in early childhood settings. Instead, the writers of *Te Whāriki* provided a more global approach that sets out four key *principles* and five *strands* of learning.

The four principles are described as follows (Ministry of Education 1996, p. 14):

1. Empowerment – Whakamana

The early childhood curriculum empowers the child to learn and grow.

2. Holistic Development – Kotahitanga

The early childhood curriculum reflects the holistic way children learn and grow.

3. Family and Community – Whānau Tangata

The wider world of family and community is an integral part of the early childhood curriculum.

4. Relationships – Ngā Hononga

Children learn through responsive and reciprocal relationships with people, places and things.

The five interrelated strands of *Te Whāriki* are also described (Ministry of Education 1996, 15–16):

1. Well-being – Mana Atua

The health and well-being of the child are protected and nurtured.

2. Belonging – Mana Whenua

Children and their families feel a sense of belonging.

3. Contribution – Mana Tangata

Opportunities for learning are equitable, and each child's contribution is valued.

4. Communication – Mana Reo

The language and symbols of their own and other cultures are promoted and protected.

5. Exploration – Mana Aotūroa

The child learns through active exploration of the environment.

Descriptions of the principles and strands are provided in both Maori and English. The Maori and English texts are not exact translations but "parallel and complement each other" (Ministry of Education 1996, p. 10). There is also a separate section of *Te Whāriki*, written in Maori, which focuses on the significance of the curriculum for Maori language immersion programmes.

In the English language sections of *Te Whāriki*, each strand is subdivided into three or four goals. Each goal includes a number of indicative learning outcomes that illustrate the knowledge, skills and attitudes that children might develop in relation to the goal. The learning outcomes are usually phrased in very general terms so that they can apply to any child in the birth to 5-year age range. Many of the outcomes use broad descriptors such as "understanding", "expectations", "capacity" and "awareness". For example, the first learning outcomes for the first goal in the Well-being strand are "children develop increasing understanding of their bodies and how they function" and "knowledge about how to keep themselves healthy" (Ministry of Education 1996, p. 48). The learning outcomes for the second goal in the Well-being strand include "Children develop an increasing ability to determine their own choices" and "a capacity to pay attention, maintain concentration and be involved" (Ministry of Education 1996, p. 50). The general phrasing of the learning outcomes suggests that the writers of *Te Whāriki* wished to avoid the outcomes being used as a basis for the assessment of children's learning.

Brief examples of experiences that children can be involved in are provided for each of the goals within the five strands of *Te Whāriki*. The examples of experiences are suggestions, not requirements, and are designed to illustrate the types of activities and interactions that can be linked with particular goals. Although the learning outcomes for each goal are not linked with particular ages, the examples of experiences are grouped into three overlapping age categories: infants (birth to 18 months), toddlers (1–3 years) and young children (2.5–5 years). The curriculum notes that there is considerable variation between children of similar age and "the program must be flexible enough to take into account the varying needs and characteristics of individual children" (Ministry of Education 1996, p. 20).

The types of experiences that *Te Whāriki* suggests for particular goals often overlap with suggested experiences for other goals. For example, the first goal for the well-being strand is "Children experience an environment where their health is pro-

moted". A suggested experience for this goal for the infant age group is "Adults observe and respond to signals of distress, hunger and tiredness" (Ministry of Education 1996, p. 49).

This experience overlaps with the suggested experiences for Goal 2 of the Contribution strand. The goal states "Children experience an environment where they are affirmed as individuals". A suggested experience is "Infants are carefully observed so that adults know individual infants well, respect their individual ways, and respond to them appropriately" (Ministry of Education 1996, p. 69). Such overlaps are evident for many of the experiences and goals, but this is to be expected given the holistic nature of *Te Whāriki* and the interconnections between different strands of the curriculum.

The name given to the curriculum, *Te Whāriki*, is significant. In Maori, it means a woven mat, traditionally made from the flax plant. Carr and May (2000) emphasised the value of this metaphor for showing the openness of the curriculum as a mat "for all to stand on. The principles, strands, and goals defined in the document provide the framework that allows for different program perspectives to be woven into the 'fabric'" (p. 59). Because the curriculum was designed to be able to be adapted by the many different types of early childhood service operating in New Zealand, it needed to avoid being too prescriptive. Carr and May (2000) have also noted that the weaving metaphor applies to how children develop knowledge and understanding as a "tapestry of increasing complexity and richness" (p. 60) rather than as "a series of independent steps which lead to a platform from which the child exits and at which point measurable outcomes can be identified" (p. 59).

55.3 The Response to *Te Whāriki*

Te Whāriki has received widespread, and often effusive, praise since it was introduced in 1996. The document strengthened the professional identity of early childhood teachers in New Zealand (Nuttall 2003) and gave them something that was comparable to the status of school curriculum documents. The union representing early childhood teachers continues to be very supportive of the "world-leading *Te Whāriki* curriculum" that sets out clear expectations for children's learning and means children arrive at school confident, competent, with an eagerness to learn and with the ability to persist and concentrate on new skills and tasks (New Zealand Education Institute 2010, p. 1).

Cullen (1996, p. 123) commented on the "gospel like status" that teachers gave to *Te Whāriki* shortly after its introduction. This enthusiasm was still apparent 10 years later in interviews with teachers conducted by Alvestad and Duncan (2006, pp. 36–37):

> [*Te Whāriki*] that's basically our bible. We always look to *Te Whāriki* to make sure we have done it correctly." "*Te Whāriki* – gives the defining word on that issue, because it is all in there." "The value [of *Te Whāriki*] is enormous … It's priceless I think.

New Zealand and international academics who have examined *Te Whāriki* have generally been very positive in their comments. Ritchie and Buzzelli (2012) suggested that the curriculum "has made a tremendous contribution to the field of early childhood education, both in its home country and abroad" (p. 146). Parker-Rees (2011) claimed that *Te Whāriki* helped to establish New Zealand "as an international model of innovative early years practice" (p. 209) (see also Drummond 2008, Smith 2011, Soler and Miller 2003). Some concerns about the curriculum have emerged, mainly in relation to the lack of detail about subject content (e.g. Hedges and Cullen 2005), but most publications about *Te Whāriki* have endorsed the merits of the document. Evidence of this favourable reaction is seen in *Weaving Te Whāriki* (Nuttall 2013), a collection of 14 essays by different authors on the theory and practice of the curriculum. Most of the chapters provide a very positive picture of *Te Whāriki* and suggest that it has made a significant contribution to the quality of early childhood programmes in New Zealand.

55.4 Implementation in Centres

55.4.1 Professional Development and Supplementary Resources

When *Te Whāriki* was introduced, it was recognised that teachers would need opportunities to become familiar with the curriculum and to learn about the implications for their practice. Considerable government funding was made available to provide early childhood services with professional development to assist them to adapt their programmes and teaching to align with the new approach. Most of the professional development was funded by the Ministry of Education and contracted out to different regional groups, often linked with teacher education institutions.

The professional development took many forms, including workshops, seminars, area cluster meetings and advisory support. What was covered in the professional development is hard to determine because it was often tailored to what individual centres requested. No publications are available to show how providers actually guided teachers to learn how to implement *Te Whāriki* in centres. An evaluation of the professional development programmes (Cherrington and Wansbrough 2007) noted that a major aim of the contracts was to "encourage teachers to engage with the document and explore the complexities of pedagogical practice advocated" (p. 37), but how this was done is largely unknown. The evaluation surveyed teachers about issues related to how effective the professional development programmes were "in supporting and sustaining shifts in pedagogical practices underpinned by *Te Whāriki*" (p. 103). This is an area open to much interpretation, but the large majority of teachers were of the opinion that the programmes had been effective or very effective at improving their teaching and enhancing the children's learning.

Empirical evidence about the effectiveness of the professional development for improving teaching and learning is not available.

In addition to supporting professional development, the Ministry of Education produced three videos, along with accompanying booklets, to provide teachers with information about *Te Whāriki* (Ministry of Education 2000, 2001a, b). The first video introduces the philosophy and structure of *Te Whāriki*. The second and third videos show scenarios where teachers demonstrate their use of the curriculum for infants, toddlers and young children. The information provided in the videos, however, is of a very general nature, reflecting the non-prescriptive emphasis of the curriculum. Some quotes from Helen May, talking in the first video, illustrate this:

> 'Very early in the development process, it became clear to us that we weren't actually writing a curriculum, what we were really doing, we weren't spelling out the content of the curriculum, we weren't defining the subject areas of what is taught, what we were doing was trying to think through what is childhood in this country, what do we want for children in this country, what is learning about in this country.' … 'The principles, strands and goals are not the actual curriculum. You've actually got to weave your own curricula around your children and the activities in the centre and what the children might want to do that day, what your passions are.' …'Who are we to tell you what to do with the children at your centre? Each child is unique; everybody weaves the curriculum and makes their own curriculum statements'. (Ministry of Education 2000)

Placing responsibility on centres to "weave their own curricula" allows teachers to be creative and innovative in their work. The drawback of this approach, however, is that teachers are provided with little guidance about what should be included in effective programmes. Although the videos show "a series of scenarios in which teachers demonstrate their use of *Te Whāriki* to develop and implement the curriculum" (Ministry of Education 2001a, p. 3), the descriptions of how they do this are very broad. The booklets that accompany the videos provide only general ideas about what teachers may do to provide quality experiences for children. Indeed, rather than providing guidance, large sections of the booklets consist of "suggestions for discussion" and "questions for reflection".

The Ministry of Education (2000, p. 2) acknowledged that, "*Te Whāriki* is a curriculum framework. The document does not contain the content of the curriculum. It is a springboard. It establishes principles and strands that give policy and direction for teaching and learning". Teachers are expected to develop their own curriculum that is grounded in *Te Whāriki* and shaped by teachers' knowledge of children, families and the wider community. Given the complexity of such a task, it would be reasonable to expect the Ministry to provide teachers with resources that supplement the framework of *Te Whāriki*. However, the Ministry has published no guidebooks to assist teachers with developing effective programmes based on the curriculum document. The limited supplementary material that is available consists mostly of an eclectic collection of brief articles and internet links on the Ministry early childhood website (www.education.govt.nz/early-childhood). The articles provide some useful general ideas but are usually at an introductory level and lack the depth of information that teachers may require to provide a full range of quality experiences for children.

55.4.2 Programme Planning Using Te Whāriki

The non-prescriptive nature of *Te Whāriki*'s guidance on curriculum content is matched by its open approach to planning. Because the writers of the document wanted it to be suitable for a diverse range of early childhood services, it was thought that precise guidelines on programme planning would be too restrictive. The guidelines on planning that are included in *Te Whāriki* are very brief (less than half a page of the 100-page document) and allow for considerable freedom for services to determine their own approaches to planning:

> Each early childhood education setting should plan its program to facilitate achievement of the goals of each strand in the curriculum. There are many ways in which each early childhood service can weave the particular pattern that makes its program different and distinctive. (Ministry of Education 1996, p. 29)

While openness to a range of planning approaches allows for flexibility, it also means that services may have insufficient guidance on how to plan effectively. Similarly, concerns can be expressed about the lack of guidance in *Te Whāriki* about what actual learning experiences to plan for. The document suggests that programmes should plan "to offer sufficient learning experiences to ensure that the curriculum goals are realised". The broad nature of the goals, however, means that it is highly problematic to evaluate when the goals are actually being met.

55.4.3 Examples of Te Whāriki Being Used in Early Childhood Services

Although a great deal has been written about *Te Whāriki*, it is surprisingly difficult to find descriptions of how early childhood services are using the curriculum as a basis for their daily programmes. The non-prescriptive nature of the curriculum means that there is no "right way" to utilise the document. The Ministry of Education has provided no models or exemplars of programmes to illustrate how to use *Te Whāriki* effectively. Some case study research has been carried out to explore the influence of the curriculum document on teachers' beliefs and practices (e.g. Dalli 2011; Nuttall 2013), but these investigations do not provide detail about how to plan and implement a programme using *Te Whāriki*.

Additional information about utilising *Te Whāriki* is contained in a recently published book, *Understanding the Te Whāriki Approach* (Lee et al. 2013). This publication is the nearest thing to a guidebook that is available for the curriculum and aims to be a "much-needed source of information for those wishing to extend and consolidate their understanding of the *Te Whāriki* approach" (p. i). Authors of the book included Wendy Lee, a leader of many professional development programmes on topics related to *Te Whāriki*, and Margaret Carr, one of the original developers of the curriculum.

The central part of the book is made up of chapters focusing on each of the four principles of *Te Whāriki*: Empowerment, Holistic Development, Family and Community and Relationships. Each of these chapters discusses the significance of a particular principle and makes links with the work of other writers on education and early childhood issues. Examples from case studies are used to illustrate how programmes seek to enact the principles within their programmes.

Understanding the Te Whāriki Approach emphasises the interconnectedness of the principles and strands and shows that the curriculum is flexible enough for aspects of it to be incorporated in a diverse range of early childhood settings. However, the book's discussion of the principles, along with the eclectic collection of anecdotes that make up each case study, provides very limited information about how centres actually use *Te Whāriki* as the basis for effective programmes.

Take, for example, the information that is provided about fostering children's language development. This is one of the most important aspects of early childhood education, but it is only discussed in general terms in *Understanding the Te Whāriki Approach*. The book recognises the significance of catering for children with different language backgrounds and emphasises the importance of the revitalisation of Maori language. Useful points are briefly made about the importance of having dialogue between teachers and children. The book, however, contains no guidance about effective ways that teachers can best foster language for children at different levels of communicative development. Much research has shown that the type of language that teachers use when they interact with children makes a difference to the development of the children's language skills (e.g. Bridges et al. 2012; Mashburn et al. 2008). This research, and its implications for centre practices, receives no mention in *Understanding the Te Whāriki Approach*.

Similar concerns can be raised about a lack of guidance in the book about effective ways to plan and implement learning experiences in a number of key areas (e.g. social relationships, music, drama, physical development, early literacy, early mathematics, visual arts). Little consideration is given to the developmental patterns that children show as they grow and learn in the years from birth to age five. However, to be fair to *Understanding the Te Whāriki Approach*, it could be said that the book is simply reflecting the open-ended and non-prescriptive approach of *Te Whāriki* itself.

Te Whāriki emphasises the processes of learning rather than the content of what is learned. Smith (2003, p. 5) argued in favour of such an approach, believing it to encourage children's motivation as learners:

> *Te Whāriki*, in contrast to overseas early childhood curricula (such as the UK curriculum) is oriented towards setting up attitudinal and dispositional thinking. Instead of being preoccupied with specific skills, which children do or do not have when they get to school, the concern is for developing an overall enthusiasm for learning. *Te Whāriki* encourages children's autonomy, communication, exploration, commitment and aspirations. Children and their learning, rather than subject areas, are the starting points of educational thinking.

Some writers, however, have raised concerns about the lack of subject content in *Te Whāriki*. Brostrom (2013) suggested the document would be enhanced by paying more attention to *what* children should be learning rather than suggesting that any

activity the child is motivated for, and involved in, will contribute to the child's development (p. 252). Hedges and Cullen (2005) have also advised that curriculum content is crucial. In reporting on a case study of teachers in one centre, they concluded:

> a curriculum's lack of emphasis on subject content knowledge may limit learning and teaching opportunities and children's inquiry-based learning. Teachers described their curriculum planning and pedagogical approaches in ways consistent with their interpretation of *Te Whāriki* as focused on learning processes rather than content. Yet, to think, theorise, and problem solve, children need to have something substantive of interest and relevance to theorise about. In short, cognitive learning processes require subject knowledge to make learning meaningful. (p. 75)

Te Whāriki places responsibility on teachers to integrate content knowledge as they follow children's interests and interact with them during play. This is a very complex task and relies on teachers who are knowledgeable in early childhood pedagogy and subject areas (e.g. art, music, science, early mathematics, early literacy). Ideally teachers would gain such knowledge during their initial training but providers of teacher education vary greatly in the emphasis that is given to subject content. The guidelines for teacher education programmes in New Zealand are, like *Te Whāriki*, flexible and non-prescriptive. This has led to the situation where subject content is a focus in some early childhood teacher education programmes but receives much less attention in others (see Kane 2005).

Numerous learning outcomes related to subject content are included in *Te Whāriki*, but these are "indicative rather than required" (Ministry of Education 1996, p. 44). Early childhood services are not required to cover a specified set of learning outcomes. The way that learning outcomes are spread throughout different strands of the document means they are not always easy to find. For example, learning outcomes for music are included within the following strands and goals:

> Contribution: Goal 2. "Children experience an environment where they are affirmed as individuals". (p. 68)
>
> Communication Goal 1. "Children experience an environment where they develop non-verbal communication skills for a range of purposes". (p. 74)
>
> Communication Goal 4. "Children experience an environment where they discover and develop different ways to be creative and expressive". (p. 80)
>
> Exploration Goal 2. "Children experience an environment where they gain confidence in and control of their bodies". (p. 86)

Similarly, mathematical concepts can be found in the Communication and Exploration strands, science-related topics are found in the Contribution and Exploration strands and so on. The inclusion of subject content across different strands and goals reflects the holistic and integrated nature of *Te Whāriki*. It shows teachers that learning in key areas can occur through a wide range of experiences as teachers interact with children throughout the day. However, the structure of *Te Whāriki* also means that teachers may overlook important areas of learning. Nowhere in *Te Whāriki* is there guidance to ensure teachers are providing a sufficient range of appropriate experiences in important subject content areas. Centres could plan and implement programmes that follow the principles and strands of *Te Whāriki* but omit to include experiences that facilitate learning in key areas.

Table 55.1 Links between curriculum strands, learning dispositions and behaviours

Curriculum strand	Disposition	Behaviour indicative of disposition
Belonging	Courage and curiosity	Taking an interest
Well-being	Trust and playfulness	Being involved
Exploration	Perseverance	Persisting with difficulty, challenge and uncertainty
Communication	Confidence	Expressing a point of view or feeling
Contribution	Responsibility	Taking responsibility

Adapted from Carr (1998)

55.5 Assessment Using *Te Whāriki*

Te Whāriki contains a general discussion of how assessment should relate to the principles of the curriculum but does not describe how teachers should actually assess children. Following release of the document, the Ministry of Education sought input on what appropriate assessment practices could be used for *Te Whāriki*. A contract was given to Margaret Carr to work with a group of early childhood practitioners in order to develop an approach to assessment that aligned with the curriculum.

The result was the technique of Learning Stories (Carr 1998, 2001). This approach requires teachers to write stories or narratives that show the learning that occurs in experiences that children are involved in. The stories are usually illustrated with photos and are kept in portfolios that are available for children and parents to revisit and comment on. Learning Stories can be written for individual children or for groups and often also record a teacher's involvement in a situation. Increasingly, Learning Stories are written in a style similar to a letter from a teacher to a child (see Carr and Lee 2012).

Learning Stories focus on children's dispositions to learn rather than on specific knowledge and skill outcomes. It is the focus on dispositions that provides the rationale for using Learning Stories as an assessment technique that aligns with *Te Whāriki*. Carr (1998) argued that particular dispositions link with particular strands of the curriculum. Furthermore, she suggested that certain behaviours of children could be taken as indicating particular dispositions (see Table 55.1).

Carr (1998) believed that children often showed a sequence of behaviours as they became engaged in a learning experience. The sequence followed the order set out in Table 55.1, with children first taking an interest, then becoming involved, persisting, expressing a viewpoint and taking responsibility. It was recommended that teachers observe children and write Learning Stories with this sequence in mind.

Learning Stories have become the dominant, and often the only, form of assessment in most early childhood centres in New Zealand (see Mitchell 2008). Part of the reason for the popularity of Learning Stories is that they are promoted as being suitable for all settings and for all children from birth to age five. Hence, there is no requirement for teachers to use any other assessment techniques. The increase in the widespread use of Learning Stories can be linked to the large amounts of funding

granted to professional development providers to promote this approach. Considerable funding was also directed towards producing *Kei Tua o te Pae: Early Childhood Exemplars*, a series of 20 booklets that provide examples of the use of Learning Stories in early childhood settings (Ministry of Education 2004, 2007, 2009).

Learning Stories have been welcomed by a number of academics as an innovative approach to assessment (e.g. Drummond 2008; Smith 2011). Smith (2003) claimed, "Learning Stories seem to have extraordinary power to excite and energise teachers, parents and children. Parents have become much more interested in and convinced of the extraordinary learning achievements of children in their early childhood centres" (p. 12). More recently, Nyland and Alfayez (2012) concluded that "New Zealand has emerged as a world leader in early childhood education, and observation and assessment techniques developed in New Zealand have become an international focus of research and practice" (p. 392).

Case study and action research projects indicate that there are benefits in the use of Learning Stories. They can be useful for describing insights into particular aspects of children's learning and can facilitate communication between teachers, children and families. The photos and text that make up a Learning Story can be valuable for promoting dialogue with children about past events and for developing understandings of early literacy (Carr 2001; Carr and Lee 2012).

Questions remain, however, about the validity and effectiveness of Learning Stories as an assessment technique. Because they are time-consuming to write, centres typically aim to produce just one Learning Story per month for each child. This Learning Story, often based around a photo and written after the event, will only represent a very small part of the child's time in an early childhood setting. Learning Stories are situation specific; they describe an experience in relation to the context (environment, teachers and other children) at that time. Hence, it can be very difficult to use a Learning Story about one experience as the basis for planning future learning experiences for a child in different contexts. The situational specificity of Learning Stories also makes it difficult to show changes in key areas of learning (e.g. language development) over time (see Blaiklock 2008, 2010a).

Questions can also be asked about the rationale for using Learning Stories as an assessment that aligns with the strands of *Te Whāriki*. The rationale is based on assumptions that particular behaviours shown by a child are indicative of particular dispositions, which in turn can be related to particular strands of the curriculum (see Table 55.1). These assumptions are not supported by empirical evidence. Indeed, it would be difficult to gather such evidence because the behaviours and dispositions have not been clearly defined. The overall concept of dispositions has been described in general terms by Carr (2001) as "situated learning strategies plus motivation-participation repertoires from which a learner recognises, selects, edits, responds to resists, searches for and constructs learning opportunities" (p. 21). Specific definitions of the strand-related dispositions (e.g. courage and curiosity, trust and playfulness) are not available. Also unknown is how these dispositions would vary for a child in different contexts and how the dispositions would change

as a child grows and develops. Trying to assess such dispositions, which are understood in only vague and imprecise ways, is highly problematic.

Another concern with Learning Stories is that the focus on dispositions could lead to teachers overlooking important areas of knowledge and skill development. Learning Stories are designed to provide insights into children's dispositions to learn and their identity as learners. What children are actually learning is often not specified. Carr and Claxton (2002) suggest "it is all too easy for parents, teachers and students attention to be captured by the traditional goals of achievement and to lose sight of the slippery but more important, development of dispositions" (p. 16). In New Zealand, however, there are no requirements for early childhood services to assess any "traditional goals" of early childhood programmes (e.g. language development, knowledge of early literacy and mathematics). Instead, teachers are encouraged to write stories that attempt to show how children are becoming "ready, willing, and able" (Carr 2001, p. 123) as learners. This may result in centres gaining little valid information about the achievements and progress of their children. Without such information, it will be difficult for teachers to monitor the effectiveness of their work and for centres to adjust their programs to cater for the individual needs of children.

A lack of information about what children are learning is also problematic when it comes to reviewing the quality of early childhood programmes. In New Zealand, the Education Review Office (ERO) carries out reviews of early childhood services on a 3-year cycle. However, a difficulty ERO faces when undertaking reviews is that it relies on centre documentation to show what children are learning. This documentation nearly always consists of collections of Learning Stories, which may provide little information about children's learning and development in key areas. ERO's reliance on Learning Stories may explain why ERO reports often contain only generic comments about children's learning. ERO typically uses phrase such as "quality teaching and learning experiences" and "extending children's learning" when reporting on centre quality. What it is that children are learning as a result of the early childhood programme is not specified. ERO claims, "the focus on how well children learn is central to all reviews" (2012, p. 7), but in reality it cannot discuss *how well* children learn in the absence of information about *what* children are learning.

55.6 Research Evidence on the Effectiveness of *Te Whāriki*

Although there is widespread support for *Te Whāriki* from New Zealand early childhood teachers and academics, there is little research evidence about its effectiveness. *Te Whāriki* contains many aspirational statements about children's well-being and learning, but there are no empirical studies to show that these aspirations are being met. The research that has been done in relation to *Te Whāriki* is almost all qualitative and small scale. Most of these studies have been funded by the Ministry

of Education as part of the Centres of Innovation (COI) and Teaching and Learning Research Initiative (TLRI).

The COI and TLRI projects provided descriptions of innovative programmes and approaches in a range of early childhood centres. All of the centres were using *Te Whāriki* as the basis for their programmes. Teachers in the centres worked in partnership with research academics in a total of 38 investigations that examined a wide range of topics, including visual arts, use of computers, inclusion, transition to school, bicultural development and early mathematics teaching. Action research techniques were used to monitor the impact of the innovations.

The teachers who were involved in the projects reported that they had benefited from opportunities to more closely examine their teaching practices. They also often expressed a belief that there had been benefits for children. What is missing from the investigations, however, is valid evidence that the innovations were successful in enhancing the learning of children at the centres. Information that was provided about children's learning was most often sourced from Learning Stories and tended to be anecdotal and non-specific. Independent reviews of the projects have noted that there was insufficient evidence to show that changes in practice had resulted in changes in children's learning (see Gibbs and Poskitt 2009; Meade 2010; Nuttall 2010). Hence, it is not possible to use the results of the COI and TLRI projects to make any conclusions about the value of programmes based on *Te Whāriki* for enhancing children's learning.

Although there is a lack of evidence about the effectiveness of *Te Whāriki*, the curriculum received a strong endorsement from an advisory taskforce set up by the Ministry of Education to make recommendations on the future of early childhood education in New Zealand. The Early Childhood Education (ECE) Taskforce (2011), consisting of senior academics and early childhood sector representatives, stated that *Te Whāriki* "is considered a model of best practice" (p. 6). The taskforce concluded that they "found nothing to detract from the widely-held national and international view that *Te Whāriki* is a profoundly important document that is fit for purpose and meets our society's needs as well as the needs of a diverse early childhood education sector" (p. 112). The taskforce suggested it would be useful to review the implementation of *Te Whāriki* but made no criticism of the structure or content of the curriculum.

The ECE Taskforce (2011) made some bold assertions about *Te Whāriki*, but it appears that the claims may not match the research findings that the Taskforce used to support its endorsement of the curriculum. Among the claims made by the Taskforce are the following:

> [*Te Whāriki*] "is not prescriptive, and does not tell teachers 'what to teach'; rather it focuses on supporting learning dispositions and broad competencies that can be readily transferred to new situations (such as entry to school)". … "Research shows that curricula that address motivational aspects of learning, focused on learning dispositions rather than static skills or competencies, are associated with better performance in later schooling than those that are overtly 'academically' oriented" (p. 107). [*Te Whāriki*'s] "general approach to learning, and the principles, goals and strands it contains, align well with recent research and evidence. … We therefore do not believe the content of *Te Whāriki* requires review". (p. 110)

The Taskforce cited two references to support the above statements: the first being a literature review on early childhood education commissioned by the Ministry of Education (Mitchell et al. 2008) and the second being a report from the Organisation for Economic Cooperation and Development (OECD 2006), *Starting Strong II. Early Childhood Education and Care*.

An examination of these references suggests the Taskforce may have misinterpreted some of the research it has used to endorse *Te Whāriki*. Mitchell et al. (2008) provided a review of research on cognitive and social outcomes for a range of early childhood programmes, but some of the strongest evidence they report in relation to the benefits of early education comes from longitudinal studies in the United States (e.g. Abecedarian Project, High-Scope). These programmes are much more structured and academically oriented than *Te Whāriki* and hence cannot be used to support the ECE taskforce's (2011) claim that research shows curricula, such as *Te Whāriki*, that "focused on learning dispositions rather than static skills or competencies" (p. 107), are associated with higher achievement at school than are more academically oriented curricula (see also Blaiklock 2010b). It is also pertinent to note that neither Mitchell et al. nor any other recent investigations provide research evidence that *Te Whāriki* is more effective at promoting learning dispositions than more skills- or content-oriented curriculum. Indeed Mitchell et al. acknowledge that there is a paucity of research on the learning dispositions included in *Te Whāriki* (p. 91). The main New Zealand research that Mitchell et al. refer to is the Competent Children study (Wylie et al. 2006). This longitudinal investigation found benefits for participation in early childhood education, but the findings cannot be used to support *Te Whāriki* because the curriculum had not been introduced when the children included in the study were in early childhood centres.

The OECD (2006) report expresses some concerns about overly structured programmes, but this does not mean that their findings support the laissez-faire approach that is possible with *Te Whāriki*. In fact, the OECD report found that "recent research from the United Kingdom and the United States supports a structured approach to curriculum and learning in pre-school. … A Dutch meta-analysis of different programming types also concludes that the most enduring cognitive results are achieved when both cognitive and socio-emotional outcomes are pursued simultaneously through structured programming" (p. 63; see also the chapter on *Piramide*, this volume). Although the Taskforce endorsed *Te Whāriki*, its praise for the curriculum was not substantiated with research evidence. Given the significance of its work in providing recommendations on the future of early childhood education in New Zealand, it would have been advisable for the Taskforce to distinguish more carefully between opinions about *Te Whāriki* and what empirical evidence actually shows.

55.7 Conclusion

When it was first released in 1996, *Te Whāriki* was seen as an innovative and exciting approach to early childhood curriculum. The extensive consultation that had taken place prior to its release meant that *Te Whāriki* was quickly embraced by the early childhood sector in New Zealand. Part of the appeal of the curriculum was that it was designed to cater for a very wide range of different types of early childhood services. To do so, *Te Whāriki* adopted a non-prescriptive approach, setting out a framework of principles and strands but allowing teachers maximum flexibility to "weave" their own curricula for their own centres.

The open-ended nature of the curriculum, however, has its downside. *Te Whāriki* provides little guidance on how to plan or organise an effective early childhood programme. *Te Whāriki* makes no requirements to cover any particular learning outcomes nor does it show teachers the developmental patterns that children typically show in key areas (e.g. language) as they learn and grow from birth to age five. The generalised nature of the curriculum means that it is possible for teachers to believe they are adhering to *Te Whāriki* be they providing a high-quality, or a very poor quality, programme for children.

A safeguard to balance the lack of guidance in *Te Whāriki* would be to have credible assessments to show that children are learning as a result of their early childhood experiences. In New Zealand, however, the widespread use of Learning Stories, often as the only type of assessment in a centre, provides little evidence about children's learning in key areas. Learning Stories can provide anecdotal-type descriptions of particular events but fall well short of being a valid and practical technique to assess and enhance children's learning. An over-reliance on Learning Stories as a data source has limited the value of many of the research studies that have examined the benefits of early childhood programmes that use *Te Whāriki* (e.g. the Centres of Innovation studies).

Te Whāriki contains many admirable statements about the value of childhood, relationships, families and communities. It expresses high ideals for children's well-being and learning. Hence it would be ironic if its open and non-prescriptive structure, in combination with unproven assessment procedures, resulted in children being provided with an inadequate range of learning experiences in the early childhood years. Children start school in New Zealand with widely differing levels of achievement in areas that contribute directly to school learning (e.g. oral language, early literacy and mathematics). It is usually children from lower-income families and/or minority ethnic groups who are at most disadvantage (see, e.g. Tunmer et al. 2006). Quality early childhood education should aim to reduce these differences and contribute to greater equity in educational outcomes throughout the school years.

Currently, however, there is no empirical evidence that the use of *Te Whāriki* is reducing disparities in children's learning at school entry. Indeed it could be argued that the nature of the curriculum, by providing little guidance for teachers and making no requirements to assess or teach key areas of learning, may actually be rein-

forcing the differences in learning that are associated with children's backgrounds. After more than 20 years of using *Te Whāriki*, it is now essential that well-designed research be carried out to examine its effectiveness. New Zealand early childhood teachers and academics have shown great loyalty to *Te Whāriki* but need to ensure that this loyalty does not prevent them from being open to learning from international research evidence on what makes for high-quality early childhood education.

55.8 Final Note Regarding Updated Program

This chapter has reviewed the 1996 version of Te Whāriki. In 2017, an updated version of Te Whāriki was released (Ministry of Education 2017). The new version retains much of what was in the 1996 version, including the same principles and strands. The guidance provided to teachers on how to plan, conduct, and evaluate effective programmes remains very general. Little information is given on how to provide valid assessments of children's learning. Hence, the concerns raised in this chapter about the 1996 version still apply to the updated version of Te Whāriki.

References

Alvestad, M., & Duncan, J. (2006). "The value is enormous – it's priceless I think" New Zealand preschool teachers' understanding of the early childhood curriculum in New Zealand: A comparative perspective. *International Journal of Early Childhood, 38*(1), 31–45.

Blaiklock, K. (2008). A critique of the use of learning stories to assess the learning dispositions of young children. *New Zealand Research in Early Childhood Education, 11*, 77–87.

Blaiklock, K. (2010a). The assessment of children's language in New Zealand early childhood centres. *New Zealand Journal of Educational Studies, 45*(1), 105–110.

Blaiklock, K. (2010b). *Te Whāriki*, the New Zealand early childhood curriculum: Is it effective. *International Journal of Early Years Education, 18*(3), 201–212.

Bridges, M. S., Justice, L. M., Hogan, T. P., & Gray, S. (2012). Promoting lower- and higher-level language skills in early education classrooms. In R. C. Pianta (Ed.), *Handbook of early childhood education* (pp. 177–193). New York: Guilford.

Brostrom, S. (2013). Understanding *Te Whāriki* from a Danish perspective. In J. Nuttall (Ed.), *Weaving Te Whāriki* (pp. 239–257). Wellington: NZCER Press.

Carr, M. (1998). *Assessing children's learning in early childhood settings: A professional development program for discussion and reflection*. Wellington: New Zealand Council for Educational Research.

Carr, M. (2001). *Assessment in early childhood settings: Learning stories*. London: Paul Chapman.

Carr, M., & Claxton, G. (2002). Tracking the development of learning dispositions. *Assessment in Education, 9*(1), 9–37.

Carr, M., & Lee, W. (2012). *Learning stories: Constructing learner identities in early education*. London: Sage.

Carr, M., & May, H. (2000). *Te Whāriki*: Curriculum voices. In H. Penn (Ed.), *Early childhood services: Theory, policy and practice*. Buckingham: Open University Press.

Cherrington, S., & Wansbrough, D. (2007). *An evaluation of ministry of education funded early childhood education professional development programs*. Wellington: Ministry of Education.

Cullen, J. (1996). The challenge of *Te Whāriki* for future developments in early childhood education. *Delta, 48*(1), 113–126.

Dalli, C. (2011). A curriculum of open possibilities: A New Zealand kindergarten teacher's view of professional practice. *Early Years, 31*(3), 229–243.

Drummond, M. J. (2008). Assessment and values: A close and necessary relationship. In S. Swaffield (Ed.), *Unlocking assessment: Understanding for reflection and application* (pp. 3–19). London: Routledge.

ECE Taskforce. (2011). *An agenda for amazing children: Final report of the ECE Taskforce*. Wellington: Ministry of Education.

Education Review Office. (2012). *ERO's approach to reviews in early childhood services*. Wellington: Education Review Office.

Gibbs, R., & Poskitt, J. (2009). *Report on the evaluation of the early childhood Centres of Innovation program*. Evaluation Associates Ltd. Retrieved from https://www.educationcounts.govt.nz/publications/ECE/22551

Hedges, H., & Cullen, J. (2005). Subject knowledge in early childhood curriculum and pedagogy: Beliefs and practice. *Contemporary Issues in Early Childhood, 6*(1), 66–79.

Kane, R. G. (2005). *Initial teacher education policy and practice*. Wellington: Ministry of Education.

Lee, W., Carr, M., Soutar, B., & Mitchell, L. (2013). *Understanding the Te Whāriki approach*. London: Routledge.

Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., & Bryant, D. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development, 79*(3), 732–749.

Meade, A. (2010). *The contribution of ECE Centres of Innovation to building knowledge about teaching and learning 2003–2010*. Retrieved from http://tlri.org.nz/sites/default/files/background-paper-pdfs/AMeade-ECE-Paper2010.pdf

Ministry of Education. (1996). *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa. Early childhood curriculum*. Wellington: Learning Media.

Ministry of Education. (2000). *The big picture (video recording & booklet): Te Whāriki: policy to practice: Early childhood curriculum materials for Aotearoa New Zealand*. Wellington: Learning Media.

Ministry of Education. (2001a). *Empowered to learn (video recording & booklet). Te Whāriki for young children: Whakamana ki te ako*. Wellington: Learning Media.

Ministry of Education. (2001b). *Empowered to learn (video recording & booklet). Te Whāriki for infants and toddlers: Whakamana ki te ako*. Wellington: Learning Media.

Ministry of Education. (2004, 2007, 2009). *Kei tua o te pae: Assessment for learning: Early childhood exemplars*. Wellington: Learning Media.

Ministry of Education. (2017). *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa. Early childhood curriculum*. Wellington: Learning Media.

Mitchell, L. (2008). *Assessment practices and aspects of curriculum in early childhood education*. Wellington: New Zealand Council for Educational Research.

Mitchell, L., Wylie, C., & Carr, M. (2008). *Outcomes of early childhood education: Literature review*. Wellington: New Zealand Council for Educational Research.

New Zealand Education Institute. (2010). *Early childhood education – quality at risk*. Retrieved from http://www.slideshare.net/NZEINorth/ece-special-report-quality-at-risk

Nuttall, J. (2003). Introduction. In J. Nuttall (Ed.), *Weaving Te Whāriki: Aotearoa New Zealand's early childhood curriculum document in theory and practice* (pp. 7–15). Wellington: New Zealand Council for Educational Research.

Nuttall, J. (2010). *The contribution of the teaching and learning research initiative to building knowledge about teaching and learning: A review of early years projects, 2004–2010*. Paper

presented at the TLRI Symposium, Wellington. Retrieved from http://tlri.org.nz/sites/default/files/background-paper-pdfs/Nuttall_TLRI_final_paper2011.pdf.

Nuttall, J. (2013). Curriculum concepts as cultural tools: Implementing *Te Whāriki*. In J. Nuttall (Ed.), *Weaving Te Whāriki*. New Zealand Council for Educational Research: Wellington.

Nyland, B., & Alfayez, S. (2012). Learning stories – crossing borders: Introducing qualitative early childhood observation techniques to early childhood practitioners in Saudi Arabia. *International Journal of Early Years Education, 20*(4), 392–404.

Organisation for Economic Co-operation and Development (OECD). (2006). *Starting strong II: Early childhood education and care*. Paris: OECD.

Parker-Rees, R. (2011). Editorial. *Early Years, 31*(3), 209–210.

Ritchie, J. R. (2012). An overview of early childhood care and education provision in 'mainstream' settings in relation to kaupapa Maori curriculum and policy expectations. *Pacific-Asian Education, 24*(2), 9–22.

Ritchie, J. R., & Buzzelli, C. A. (2012). *Te Whāriki*: The early childhood curriculum of Aotearoa New Zealand. In N. File, J. J. Mueller, & D. Basler Wisneski (Eds.), *Curriculum in early childhood education: Re-examined, rediscovered, renewed* (pp. 146–159). New York: Routledge.

Smith, A. (2003). Editorial: What is special about early childhood education in New Zealand? *International Journal of Early Years Education, 11*(1), 3–4.

Smith, A. B. (2011). Relationships with people, places and things – *Te Whāriki*. In L. Pound & L. Miller (Eds.), *Theories and approaches to learning in the early years* (pp. 149–162). London: Sage.

Soler, J., & Miller, L. (2003). The struggle for early childhood curricula: A comparison of the English foundation stage curriculum, *Te Whāriki* and Reggio Emilia. *International Journal of Early Years Education, 11*(1), 57–67.

Te One, S. (2013). *Te Whāriki*: Historical accounts and contemporary influences 1990–2012. In J. Nuttall (Ed.), *Weaving Te Whāriki* (2nd ed., pp. 7–34). Wellington: New Zealand Council for Educational Research.

Tunmer, W., Chapman, J., & Prochnow, J. (2006). Literate cultural capital at school entry predicts later reading achievement: A seven year longitudinal study. *New Zealand Journal of Educational Studies, 41*(2), 183–204.

Wylie, C., Hodgen, E., Ferral, H., & Thompson, J. (2006). *Contributions of early childhood education to age-14 performance*. Wellington: New Zealand Council for Educational Research.

Chapter 56
Tools of the Mind: A Vygotskian Early Childhood Curriculum

Elena Bodrova and Deborah J. Leong

Abstract *Tools of the Mind* is an early childhood curriculum based on the principles of cultural-historical psychology. The program was originally developed and pilot tested in Denver, Colorado, in the 1990s and since then has expanded to many other states and is currently serving over 30,000 children ages 3–6. The main goal of the program is to help children learn how to become – in Vygotsky's words – "masters of their own behavior." To accomplish this, *Tools of the Mind* engages young children in activities that promote their social, emotional, and cognitive self-regulation. Mature intentional make-believe play is one of the hallmarks of the program, and special instructional strategies are employed to scaffold play in children who enter preschool or kindergarten lacking mature play skills. In addition to supporting play, Tools teachers engage children in a variety of other activities and games that have children acquire early academic skills while at the same time practicing other-regulation and self-regulation.

Tools of the Mind gained attention in education community when a study published in the journal *Science* by one of the leading neuroscientists in the USA showed that Tools preschool children had higher levels of self-regulation than a control group. Several new studies are currently underway, and their preliminary results look promising. Tools represents innovative early childhood programs in the UNESCO's international database INODATA and is listed among seven effective social-emotional learning programs in the 2013 Collaborative for Academic, Social and Emotional Learning Guide.

Keywords Cultural-historical approach • Early childhood education • Make-believe play • Scaffolding • Early literacy instruction

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Tools of the Mind (for short: Tools) is a comprehensive early childhood curriculum based on the principles of cultural-historical psychology. It draws upon work of several generations of post-Vygotskian scholars in the areas of education and psychology as well as the recent developments in cognitive neuropsychology, particularly in the area of self-regulation/executive functions. Tools uses both *specific* activities that promote self-regulation and *embeds* self-regulation strategies into the content of academic activities. At the core of the program are strategies designed to promote the development of mature make-believe play. These strategies, along with carefully planned activities designed to "amplify" social-emotional and cognitive skills, enable Tools to support the internalization of mental tools helping children become true "masters of their own behavior." All Tools activities are designed to be multilevel so that teachers can meet the needs of children of varying abilities within the class.

Tools of the Mind was originally developed and pilot tested in Denver, Colorado, in the 1990s and since then has expanded to many other states and is now being used outside of the USA in Chile and Canada. To date, Tools has been implemented in a variety of early childhood settings including public and private preschools, Head Start, Even Start, as well as half-day and full-day kindergarten classrooms. Tools has been aligned with early learning standards and kindergarten academic standards in 20 states and 230 districts and programs as well as with the Common Core State Standards. Tools training staff has been delivering professional development and technical assistance to thousands of teachers, teacher assistants, administrators, and support staff with their educational levels varying from high school to advanced degrees. Tools professional development program also follows the Vygotskian approach, scaffolding teacher learning through a system of coaching, workshops, and self-reflection activities designed to provide teachers with an understanding of learning processes and specific instructional tactics.

56.1 *Tools of the Mind* in the American Educational Landscape

Although the definition of early childhood education used in the American educational community technically applies to children birth to age 8 (Copple and Bredekamp 2009), in reality children of this age range are served by very different educational systems. The very notion of early childhood curriculum typically is not applied to the programs serving infants and toddlers. Children aged 3–5 that attend center-based programs are more likely to be taught using curricula designed specifically for preschoolers. Some of these curricula are comprehensive, while others focus on one or two content areas – mainly literacy or mathematics. Oftentimes, teachers combine elements of several curricula and supplement these with activities and materials they design on their own. State- and federally funded programs such as Head Start are more likely to use curricula produced by major publishing houses,

while in private or municipal preschools, one can find a greater variety of curricula and assessments.

Although not mandatory, kindergarten programs are considered part of the K-12 system of education, so they exist in primary schools. Five-year-old children learn in settings similar to their 6- and 7-year-old peers, and their curricula has grown to be more and more similar to the ones used in first and second grades. For example, while 20 years ago by the end of their kindergarten year children were expected to name the letters of the alphabet and recognize some high frequency words, today they are expected to "read emergent-reader texts with purpose and understanding" (Common Core State Standards Initiative 2012). This tendency to "push down" content and pedagogy initially designed for older children to kindergartners and now even preschoolers alarms developmental psychologists and early childhood educators who attribute increase in learning difficulties and challenging behaviors to the decline of make-believe play and other "uniquely preschool" activities (Miller and Almon 2009).

Developing Vygotsky-based early childhood curricula in this social context requires maintaining fine balance between ever-growing demands of state and national academic standards and the goal to help young children develop cognitive and social-emotional competencies that cultural-historical scholars consider developmental accomplishments unique to preschool and kindergarten age (Elkonin 1977; Karpov 2005). For *Tools of the Mind*, it meant that none of the activities or materials could be simply adapted from activities designed by post-Vygotskian educators in Russia or in Europe but had to be built "from the ground up" in response to the specific demands of the US early childhood classrooms.

56.2 Cultural-Historical Roots of *Tools of the Mind*

Tools is grounded in the Vygotskian cultural-historical theory of development and learning. The curriculum also incorporates the contributions of post-Vygotskians including Piotr Galperin, Daniel Elkonin, Alexander Zaporozhets, and Leonid Venger. The contributions made by post-Vygotskians to the field of early childhood education could be summarized in the idea of amplification of child development. The term "amplification" was coined by Vygotsky's colleague and the founder of the All-Soviet Institute for Preschool Education, Alexander Zaporozhets, as the answer to the push-down curricula ending up in turning preschool classroom into a miniature copy of a primary classroom with teaching methods and materials modeled after the ones used by elementary teachers:

> Optimal educational opportunities for a young child to reach his or her potential and to develop in a harmonious fashion are not created by accelerated ultra-early instruction aimed at shortening the childhood period, that would prematurely turn a toddler into a preschooler and a preschooler into a first-grader. What is needed is just the opposite – expansion and enrichment of the content in the activities that are uniquely preschool: from play to painting to interactions with peers and adults. (Zaporozhets 1986, p. 88)

The idea of amplification was also intended to offer an alternative to the notion of "spontaneous development" of young children, the idea that development could not and should not be affected by instruction. Amplification focuses on the role of education in child development, emphasizing that properly designed educational interactions do not stifle development of young children but instead promote it, thus, presenting a logical extension of Vygotsky's principle of instruction leading development.

Tools is one of the first attempts in the USA to create a comprehensive Vygotsky-based curriculum that could be used in early childhood classrooms. While Vygotsky-based curricula have been designed for older students (Campione and Brown 1990; Newman et al. 1989; Tharp and Gallimore 1989), most of the previous attempts to use Vygotsky-based pedagogy with younger children were limited to individual instructional strategies such as the use of "Elkonin boxes" to teach phonemic awareness (Clay 1993), isolated content areas such as the use of measurement to introduce the concept of number (Sophian 2007), or focused on only one type of scaffolding, primarily on adult-assisted learning in one-to-one setting (e.g., Hammond et al. 2012).

In contrast, Tools applies the cultural-historical approach consistently throughout the entire program – from the design of specific activities and materials to the organization of student's daily experiences in a classroom to the use of dynamic assessment in ongoing monitoring of student progress. The hallmark of Tools' activities is the emphasis on children's practicing self-regulation. Self-regulation (*volition* in Vygotsky's terms) is a mental facility necessary for the development of higher mental functions (Vygotsky 1987) and one of critical prerequisites for school success (Elkonin 1977, 1978). Tools' activities used in preschool and kindergarten are designed to "grow with the child," constantly presenting children with new levels of challenges. This makes activities and their variations too numerous to describe in this chapter so we limited the description of *Tools of the Mind* classroom to just two examples to illustrate how Vygotskian principles are embedded in daily experiences of preschool and kindergarten children attending our program.

56.3 Make-Believe Play Is the Leading Activity of Preschool- and Kindergarten-Aged Children

For Vygotskians, certain activities children engage in produce the greatest gains in development. Called "leading activities," they are age specific and provide the best conditions for the acquisition of cognitive and social competencies most critical for child development at this age (Chaiklin et al. 1999; Karpov 2005). The major changes in the structure of these competencies marking the end of early childhood are associated with their growing intentionality. This ability to engage in intentional behaviors enables young children to make the necessary transition from learning that "follows the child's own agenda" to learning that "follows the school agenda"

(Vygotsky 1956, p. 426). In addition, when engaged in a leading activity appropriate for their age, children develop prerequisites for the competencies that make it possible for them to successfully transition to the leading activity specific to the next age level (Elkonin 1977; Leont'ev 1978).

According to this theory, make-believe play is the leading activity of preschool- and kindergarten-aged children, while the students of primary grades engage in the activity of intentional learning (frequently referred to as the "learning activity") (Elkonin 1977; Leont'ev 1978). Vygotskians cite multiple benefits of young children's engagement in make-believe play focusing especially on play's contributions to children's developing symbolic thinking and self-regulation. In their writings, however, Vygotsky and his colleagues limited their definition of play to the dramatic or make-believe play of preschoolers and children of primary school age (Vygotsky 1967; Elkonin 1978). Thus, the Vygotskian definition of play does not include such activities as object manipulations and explorations that are considered precursors to play in toddlers and younger preschoolers and such activities as games and sports that are considered an outgrowth of play in children of school age. Consistent with the foundational ideas of the cultural-historical theory, Vygotskians do not believe that play develops spontaneously in all children once they reach preschool age but rather associate the level of play sophistication with certain features of a child's social situation of development, namely, the adult mediation of play.

There is indication in the writing of post-Vygotskian scholars that children need to reach a certain level of play in order for it to start having its beneficial impact on child development. Elaborating on Vygotsky's insights on the nature of play, Daniel Elkonin (1978, 2005b) introduced the idea of "mature" play, emphasizing that only this kind of play can be a source of development in early childhood. Elkonin defined mature (he used such terms as *advanced* or *fully developed*) play as a *unique form of children's activity, the subject of which is the adult – his work and the system of his relationships with others* (Elkonin 2005a, p. 19), thus distinguishing this form of play from other playful activities children engage in. Although Vygotsky himself never used the terms "mature" or "advanced," the play vignettes in his writings seem to describe play that is fairly advanced. Based on the work of Vygotsky and Elkonin as well as the work of their students, it is possible to identify several components of mature play (Bodrova and Leong 2007):

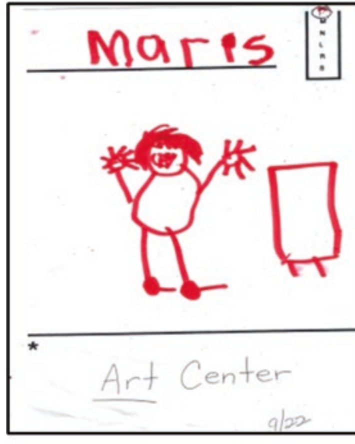
First, mature play is characterized by the child's use of objects-substitutes that may bear very little if any resemblance to the objects they symbolize: they can use a piece of yarn as a doctor's stethoscope and colored playdough as pretend food – it only matters that these substitutes can perform the same function as the object-prototype. As play continues to advance, these objects-substitutes become eventually unnecessary as most of the substitution takes place as the child uses gestures or words to describe imaginary objects (Elkonin 1978). In contrast, children playing at immature level can only use props if they are exact replicas of a real object (miniature tools, utensils, dolls' dresses, etc.). When such a child cannot find a realistic-looking prop, she cannot use a less realistic prop as a substitute so her play stops.

The second characteristic of mature play is the child's ability to take on and sustain a specific role by consistently engaging in pretend actions, speech, and

interactions that fit this particular character. The more mature the play, the richer the roles and the more complex the relationships between them. Another sign of mature play is the child's ability to follow the rules associated with the pretend scenario in general (playing restaurant vs. playing school) and with a chosen character in particular (playing a chef vs. playing a teacher). It is the practice in following these rules that is associated by the Vygotskians with children's emerging ability to regulate their own behaviors and the behaviors of their play partners (Vygotsky 1967; Elkonin 1978). Unlike children with well-developed play, immature players do not assume a specific role or may only label the role they are playing (e.g. "I am mommy") without engaging in pretend actions or role speech, consistent with this role. This child may even dress up in "mommy's" clothes or put on high heels but can be easily distracted by a new toy even if it is the "baby's" toy. It shows that this immature player is not yet able to conform to the rules associated with playing the role of "mommy."

Yet another characteristic of mature play is high quality of play scenarios that often integrate many themes and span the time of several days or even weeks. While growing in their length, play scenarios also grow in their complexity as they evolve over time. Finally, as play becomes more mature, children progress from extended acting out preceded by rudimentary planning to extended planning followed by rudimentary acting out. Elkonin argues that "the more general and abbreviated the actions in play, the more deeply they reflect the meaning, goal, and system of relationships in the adult activity that is being recreated" (2005b, p. 40). This extended planning of future play is another indicator of children's growing ability to engage in deliberate, intentional behaviors. While play scenarios of mature players incorporate multiple scripts (e.g., taking care of a baby involves feeding the baby, bathing the baby, putting the baby to bed, reading her a bedtime story, etc.), immature players are typically limited to acting out one or two scripts. When these children try to act out more than one script, they may sequence these with no attention to whether this sequence makes sense: a child may wash the "baby" with her clothes on and then put "baby" to bed without taking her wet clothes off.

Evidence has been accumulating that play that exists in many of today's early childhood classrooms across the world does not always fit the definition of mature play (Gudareva 2005; Levin 2008). Even 5- and 6-year-old children who according to Vygotsky and Elkonin should be at the peak of their play performance often display signs of immature play that is more typical for toddlers and younger preschoolers: playing only with realistic props, enacting play scenarios that are stereotypical and primitive, and displaying a repertoire of themes and roles that is rather limited (Miller and Almon 2009; Smirnova and Gudareva 2004). Researchers associate this apparent decline in play with changes in the culture of childhood such as the tendency of children to spend more time in adult-led activities, the disappearance of multi-age groups with older children serving as play mentors to the younger ones, and the increase in time children spend playing on computers or watching TV. In addition, teachers in early childhood classrooms often do not provide much needed support for play which results in children not only not making progress but even regressing to more primitive forms of play (Farran and Son-Yarbrough 2001).



I am going to build a
princess tower

Fig. 56.1 and 56.2 Play plans of one child at the beginning and the end of the year

56.3.1 Make-Believe Play in Tools of the Mind Preschool

As a leading activity for children of preschool and kindergarten age, make-believe play holds a special place in the Tools curriculum with a special focus on adult's role in scaffolding children's play to bring it to a more mature level. An important part of this scaffolding process is helping children to plan their play. Elkonin (1978) identified planning as one of the features of mature play, describing play of older children as consisting mostly of lengthy discussions of who is going to do what and how followed by brief periods of acting out. As with other components of play, role and scenario planning can benefit from adult scaffolding. In Tools preschool classrooms, children engage in a planning session preceding their playtime. The teacher starts by asking children what they want to play or what they want to be, encouraging them to discuss the choice of the roles with their peers. Later in the year, the teacher asks children about more specific details of their future play scenarios including what props they might need or whether they need to assume a different role (see Fig. 56.1 and 56.2 for play plans produced by the same preschool child at the beginning and at the end of the year).

By making planning a necessary step in play, the Tools teachers direct children's attention to the specifics of their roles and to the existence of rules associated with them. The planning process first takes place orally, but as children are encouraged to represent their plans in drawing or pretend writing, this process produces even greater benefits. First, as children engage in drawing, they are able to focus on their future play for a longer period of time, thus thinking over more details of their pretend scenarios. Second, having a tangible reminder helps children to regulate their

own and their partners' behaviors; if a child has a picture of a doctor with her name on it, it becomes harder for another child to usurp this role. It also makes it easier to the teacher to troubleshoot for possible conflicts and to engage children in brainstorming the solutions: if two children want to be doctors, the teacher can introduce different kinds of doctors such as an eye doctor and a surgeon. As children's play becomes more mature, teacher scaffolding during planning session fades away and children initiate discussions of their future play on their own leading to longer play episodes with more elaborate pretend scenarios.

Other forms of adult scaffolding of children's play in preschool include introducing children to the use of multifunctional and unstructured play props, modeling role speech associated with the characters children will be playing, and brainstorming various developments of a play scenario. Another important component in scaffolding preschooler's play in Tools classrooms is making sure that children have sufficient background knowledge associated with the theme of their play. To help children build this background knowledge and acquire related vocabulary, Tools teachers take children on field trips, invite speakers to tell children about their jobs, and use pictures and videos to illustrate what happens in a restaurant or in a veterinarian's office. To ensure that children can successfully use this new information in their play, Tools teachers engage children in Make-Believe Play Practice prior to children going to their play centers. During these practice sessions, teachers first model how characters may act and talk and then children take turns playing different characters and trying out new actions and phrases used in these roles. As with any form of adult scaffolding, Make-Believe Play Practice sessions are used more in the beginning of the year, and their use is decreased as children become more independent in creating and acting out their own pretend scenarios.

56.3.2 Make-Believe Play in Tools of the Mind Kindergarten

While extended periods of make-believe play can still be observed in most preschool programs in the USA, the situation is different in kindergarten. In most kindergartens, play is usually relegated to a 10–15 min free choice time at the beginning or end of a school day or during recess. Many kindergarten classrooms no longer have materials to support children's engagement in make-believe play, and their rooms do not have housekeeping or block areas (Miller and Almon 2009). While some of these curricula may suggest using elements of play in literacy and math activities, it is never done in a systematic fashion across different topics and activity formats. What is described by teachers as "playful learning" in reality is often no more than a teacher-led activity that was made more engaging for children due to the presence of a familiar cartoon character.

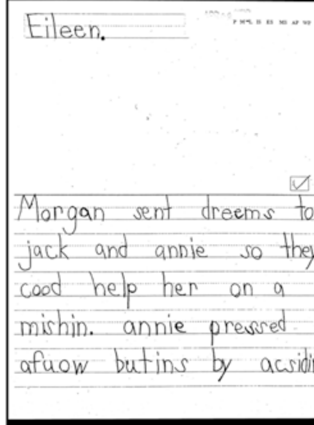
In contrast, in Tools kindergarten classrooms, teachers continue to support the kind of make-believe play that used to occur in kindergarten; they also help children bring their play to a more mature level, as well as master new vocabulary and develop text comprehension. To distinguish kindergarten play from play in preschool,

it is called dramatization, because it is tied to stories and literature. While in Tools preschool children play the experiences grounded in their lives and communities – sick babies going to the doctor, families going to the restaurant, or friends coming to a birthday party – in kindergarten, children play stories, events and interactions that they might never have experienced themselves, but must use their imaginations to dramatize what they imagine happened and might happen. Tools kindergartens first use fairy tales as a fodder for dramatization scenarios and then quickly move into chapter books, dramatizing the *Magic Tree House* stories, one chapter at a time, as well as dramatizing the life and times of the book. For example, one *Magic Tree House* book is about pirates, and children dramatize what they imagine life on a pirate ship would be like as a backdrop to the adventures that befall the fictional characters on their adventure. Chapter books were chosen because they challenge children to remember a complicated ten-chapter story with very few illustrations, to immerse themselves in imagining and creating the life and times of the book, and to learn new vocabulary about living in the days of pirates. In these ways, children's dramatization of the *Magic Tree House* book strengthens children's comprehension skills as well as assists in developing intentionality and self-regulation.

Play planning, having started in Tools preschool, now continues in kindergarten taking on a different form. Planning for play is now combined with language arts and writing activities as children come up with their play scenario based on the stories they hear during literacy time block. First, children draw and write a summary of what happened in the chapter the teacher read or about what they learned from reading a nonfiction book or from watching a specifically designed PowerPoint that described life as a pirate. The teacher scaffolds the writing by helping the children act out what happened in the chapter he just read or by talking and acting out how it would feel on a pirate ship, hoisting the sails, rowing the boat, and burying the treasure. Children immerse themselves in pretend world of the book, so they have not just the words but have tried to feel what it would be like. Then the children write a summary of the current chapter or something they want to remember which serves as a plan for the play (see Fig. 56.3 for an example of chapter summary).

Having completed their chapter summaries, children then go into centers where they act out the story. Each center has a slightly different set of 'props' challenging the children to work together to figure out how to use the available materials to dramatize the story. Teachers have a critical role during the dramatization; they circulate and observe children's dramatization in each of the centers, assess the level of play, and provide targeted scaffolding to support the development of play. Teachers support children in various ways based on the level of play they observe, from planning what might happen next in the story and helping the play scenario evolve, to supporting children exchanging roles and replaying the story, to encouraging children to think explicitly about their plans in advance and discuss who will do what and what will happen when.

Similar to make-believe play of preschoolers, dramatization in Tools kindergarten facilitates children's internalization of rules and expectations for how the pretend scenario will happen and how each player will play and imposes constraints on behavior. Children must remember the scenario they chose, the role they chose, and



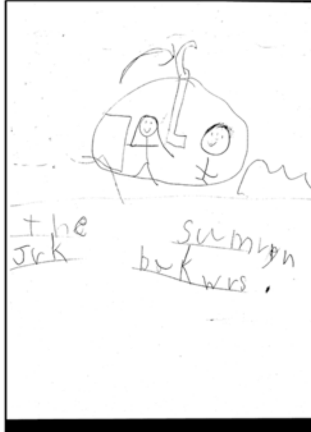


Fig. 56.3 *Magic Tree House* chapter summary

the roles other children chose. They must inhibit behaviors inconsistent with their role (e.g., the pirates act differently from Jack and Annie, and the quartermaster behaves differently than the captain or crew), and they cannot impulsively grab non-scenario-related toys but must honor the plans they agreed on. Children's writing of the chapter summary becomes a plan for play. The children help regulate one another as they monitor each other's compliance with the rules and assigned roles and dramatize the story. Thus, dramatization continues to help children increase intentionality of their behaviors building toward the developmental accomplishments of the early childhood age.

56.4 Scaffolded Interactions Are Essential to Children's Learning

Although the term "scaffolding" has a long history in the West of being associated with Vygotsky's paradigm (Berk and Winsler 1995), it is not a term used either by Vygotsky himself or by the post-Vygotskians. The closest term found in the writings of the post-Vygotskians is "razvivajuschee obuchenije" (development-oriented instruction) (Davydov 1990), which provides an important link between Vygotsky's theory of learning and development and its classroom applications. We are using the term "scaffolding" to describe the pedagogy unique to the Tools classroom, but we use it in a way that makes this term more consistent with the Vygotskian view on the relationship between instruction and development.

Scaffolding interactions are used in the course of teaching to help a child move from being assisted by an adult in performing a new task to being able to perform

this and similar tasks independently (Bodrova and Leong 2007). These interactions must fall within each individual's Zone of Proximal Development so that they would support the very skills and knowledge that are on the edge of emergence (Vygotsky 1978). When providing scaffolding, an adult does not make the task easier but instead makes the child's job easier by giving this child maximum support in the beginning stages and then gradually withdrawing this support as the child's mastery of a new skill increases (Wood et al. 1976). An appropriate support is the one that not only makes it easier for a child to complete a current task or brings to the surface behaviors most mature to date but also plays a role in the child's "construction of mind," influencing the development of mental categories and processes responsible for the child's performance on a variety of tasks. Thus, effective scaffolding provides only temporary support, needed until these new mental processes and categories are fully developed and can be used by the child without any outside assistance. From this perspective, scaffolding may exist in different formats ranging from teacher-child interactions when they work on a task jointly, to teacher introducing the child to a strategy or a "tool" the child will be later able to use on his/her own, to the teacher planning for a specific context or environment where the child will be supported by other children (Bodrova and Leong 2007; Campione and Brown 1990; Wood et al. 1976).

When applied to young children, scaffolding consistent with the Vygotskian approach focuses on introducing children to the earliest strategies and "tools" even young children can use on their own. Among these tools are private speech, external mediators, and symbolic representations written or drawn by a child. According to Vygotsky, private speech in young children is a precursor to verbal thinking that serves as a carrier of thought at the time when children's higher mental functions are not fully developed (Vygotsky 1987). As it was later found by Alexander Luria, (Luria 1969) and then confirmed by many studies within and outside Vygotskian framework, private speech has another important function: it helps children regulate their behaviors, both overt and mental (Berk 1992; Winsler et al. 2003). External mediators are another example of the first tools that are used by children. They include tangible objects, pictures of the objects, and physical actions that children use to gain control over their own behavior. Alphabet chart used in many early childhood classrooms is an example of an external mediator that reminds children of the associations between a letter symbol and a corresponding letter sound. As a scaffold, it is used only temporarily until children memorize the letter-sound associations and no longer need an external reminder. Finally, children's early representations – symbolic drawings (pictographs), scribbles, or writing – were also found by the Vygotskians to act as the first tools that children use to support their memory (Luria 1983).

Yet another form of scaffolding, effectively used by post-Vygotskians but rarely mentioned in the Western accounts of Vygotskian-based pedagogy, is the use of specific social contexts facilitating children's acquisition of mental tools and the formation of higher mental functions. These social contexts vary from children

assisting each other with the transition from other regulation to self-regulation as they act out complex play scenarios (Vygotsky 1967; Elkonin 1978) to children developing self-reflection and monitoring strategies as they check each other's performance on academic tasks (Rubtsov 1991).

Tools expands children's repertoire of mental tools and provides new opportunities for children to use their existing tools. In Tools classrooms, teachers provide scaffolding that meets the developmental and instructional needs of young children in a variety of formats and across various contexts. For example, as children are mastering the concept of number, the teacher may use several scaffolding strategies (separately or combined in a single activity) to ensure that these children continue to function at the upper levels of their zone of proximal development. For example, the teacher may encourage children to use their private speech as they count, or children may be introduced to a variety of "tools" – from simple external mediators such as counters and manipulatives to more sophisticated ones such as a number line. Finally, children engaged in counting activities may be assigned complimentary roles of "doer" and "checker" assisted by corresponding picture cards with a hand and a checkmark. In this case children scaffold each other by taking turns checking each other's work thus developing the ability to self-monitor that would be critical later for their successful transition to learning activity.

Scaffolded Writing is an example of an instructional strategy unique to Tools that uses multiple forms of scaffolding to help children master a complex skill of writing (Bodrova and Leong 1995, 1998, 2001). In Scaffolded Writing, children use a line to represent each word in a message that the child plans in advance. The child says the message aloud and draws a line to represent each word. The lines act as a "tool" (or a "symbol-substitute" in Vygotsky's terms) for "word" in the same way that a unit block stands for the concept of number and the lines are drawn in a way that mimics the motor action of actual writing (left to right progression, continuing the text by sweeping back to the left and ending with a punctuation mark). Once the lines are drawn, the child goes back through the message and writes letters on each line to represent the sounds. The level of representation of the sounds in a word follows a developmental progression from the representation of initial sounds to ending, medial, and then eventually following the alphabetic principle (sounds in the order that they appear in the word).

In addition to the lines serving as a temporary scaffold for the child's emerging concept of word, other formats of scaffolding are introduced to further support children's memory and attention that are extensively taxed during writing tasks. One of these additional strategies used for scaffolding is engaging children in task-relevant private speech. The other one is the use of children's drawings that help them remember the overall meaning of their message as they are focusing on writing down letters and isolated words. Scaffolded Writing is first introduced in Tools preschool in the context of play planning (see Fig. 56.1 and 56.2) and is later used in Tools kindergarten in all of the writing activities (see Fig. 56.3).

56.5 Research: Results and Challenges

From the very beginning, Tools positioned itself as an evidence-based curriculum, its authors constantly researching, piloting, and refining all of its materials and activities. The early studies employed primarily microgenetic design focusing in depth on the changes in a single process such as writing as it had been systematically scaffolded (Bodrova and Leong 1995, 1998). In the first study that compared preschool and kindergarten classrooms that implemented first Tools strategies with non-Tools classrooms, the differences between children were significant in several areas of development which resulted in Tools being nominated as the first innovative early childhood programs to be included in the UNESCO's international database INODATA (Bodrova and Leong 2001).

The first formal evaluation of the effectiveness of Tools was conducted by the National Institute for Early Education Research (NIEER) in a study where teachers and their students were randomly assigned to either treatment or control classrooms (Barnett et al. 2008). All of the classrooms were state-funded preschool classrooms with the control group implementing an established, district-created model described as a "balanced literacy curriculum with themes"(p. 299). The study was conducted in a school district with a high level of poverty and a predominantly non-English speaking population. Children (88 Tools and 122 controls ages 3 and 4) were compared on social behavior, language, and literacy growth. The Tools curriculum was found to improve classroom quality and children's self-regulation, as indicated by lower scores on the problem behavior dimension of the *Social Skills Rating Scale* (Gresham and Elliot 1990). In addition, there were gains in language development; however, these effects were smaller and did not reach conventional levels of statistical significance. Teachers trained in Tools scored higher in classroom management, use of classroom time, and appropriate engagement interactions that challenged children to learn at the next level.

Tools' impact on children's self-regulation/executive functions was the focus of a separate study that used a subsample of children participating in the Barnett et al. (2008) study reported above. In this study (Diamond et al. 2007), children with 1 year of Tools and 2 years of Tools were compared with children with similar demographic characteristics who had no Tools experience. All children were administered tests designed to measure their executive functions (EF) – the neuropsychological correlate of self-regulation. At the time of the study, all children attended kindergarten and were an average of 5 years of age. To test EF, children were assessed on the *Dots* and *Flanker* tests, which have been used with individuals from age 4 to adult (Rueda et al. 2004). The results showed that on the test trials requiring minimal EF, children in the Tools and control conditions performed the same. In those conditions that taxed EF, children in Tools did significantly better than controls. Further analyses comparing the child's scores on the two EF tests and the academic achievement measures collected on the Tools children found that the higher the level of EF,

the higher the achievement scores. In addition, the results regarding the EF measures correlated with the teachers' ratings of behavior on the *Social Skills Rating Scale*. Another interesting outcome of this study that was not formally measured but was however reported by data collectors is that Tools graduates demonstrated higher task persistence: children kept asking the testers to let them try one more time after the test was over, and they felt they had made errors. In contrast, children from the control group became easily discouraged after they made a couple of errors and did not want to keep trying.

In the years following this study, there were several RCT studies where the entire Tools curriculum or its elements were compared with other high-quality early childhood curricula (e.g., Farran 2012). In all of these studies, children in the Tools classrooms showed the same yearly progress on academic measures as children in the control classrooms. In addition, children in the treatment and control conditions did not differ on the measures of self-regulation, although self-regulation measures used in these studies were classroom measures rather than the neuroscience measures used in Diamond's study of 2007.

These results appear puzzling both in the light of earlier studies and in the context of positive feedback from numerous school districts and programs that have been implementing Tools for many years. These districts and programs report not only immediate impact of Tools as reflected in student achievement gains at the end of preschool or kindergarten but also long-lasting effects of the program as reflected in test scores on standardized tests in third and fourth grades.

The newest efficacy study has just been completed, and this time researchers compared academic achievement as well as the performance on EF tasks of kindergarten students that were or were not enrolled in Tools (Blair and Raver 2014). This time, the results were consistent with earlier findings in Diamond et al. (2007) and Barnett et al. (2008) studies: in addition to showing better results on a battery of EF tasks, children enrolled in Tools outperformed their peers on literacy and math tests with strongest effects in high-poverty schools. Most compelling is the data showing that Tools graduates carried these gains into first grade, with even higher results in reading and vocabulary. These stronger outcomes may reflect the fact that the development of executive functions actually improves how children learn, making learning more effective, even beyond kindergarten.

Tools teachers share their students' successes at professional conferences and demonstrate their transformed classrooms to dozens of visitors including researchers, policymakers, and reporters. Tools is listed as one of the accepted early childhood curricula in many states and is chosen among seven effective social-emotional learning programs in the 2013 *Collaborative for Academic, Social and Emotional Learning Guide* (Domitrovich et al. 2013). With no advertisement, the number of Tools sites continues to grow each year with many more sites waiting to implement Tools in their classrooms. To date more than 450,000 children have been in Tools programs.

56.6 *Tools of the Mind*: Future Developments

The results of recent evaluation studies provided valuable feedback to the Tools developers, which led to the revision of some procedures and materials used in professional development. One of the important changes is increased focus on the fidelity of Tools implementation and the development of formative assessments (Bodrova et al. 2013) that will allow Tools trainers to provide timely support to teachers struggling with the implementation. Since providing on-site support to teachers proved to be very time-consuming and oftentimes teachers were not able to receive needed feedback when they needed it most, Tools has developed a computer application to become classroom teachers' "mobile trainer." The application (for now developed for the iPads) is now being piloted with a group of Tools teachers. Further development of this application with its future version available for other platforms is now one of the top priorities in the Tools development efforts.

Another priority is the development of Tools materials designed specifically for the teachers working with special populations such as children who are dual language learners and children with special needs. The numbers of children in both of these categories are growing and so is the need for increased individualization of classroom instruction. Providing teachers with the knowledge of children's developmental trajectories followed by further refining of scaffolding strategies to fit the needs of children at different places on these trajectories will make this individualization not only feasible but also more effective.

Finally, with more and more children attending state-funded preschools and kindergartens, Tools needs to make sure that its activities meet the need of all children and not just those who are at risk of falling behind in their academic and social-emotional development. This includes providing the enrichment activities that helps children who are gifted and talented to also continue to grow and learn to their highest capacities.

References

Barnett, W. S., Jung, K., Yarosz, D., Thomas, J., Hornbeck, A., Stechuk, R., & Burns, S. M. (2008). Educational effects of the tools of the mind curriculum: A randomized trial. *Early Childhood Research Quarterly*, *23*, 299–313. doi:http://dx.doi.org/10.1016/j.ecresq.2008.03.001.

Berk, L. E. (1992). Children's private speech: An overview of theory and the status of research. In R. M. Diaz & L. E. Berk (Eds.), *Private speech: From social interaction to self-regulation* (pp. 17–53). Hillsdale: Lawrence Erlbaum.

Berk, L. E., & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education*, *NAEYC research into practice series* (Vol. 7). Washington, DC: National Association for the Education of Young Children.

Blair, C., & Raver, C. (2014). Closing the achievement gap through modification of neurocognitive and neuroendocrine function: Results from a cluster randomized controlled trial of an innovative approach to the education of children in kindergarten. *PLOS ONE, 9*(11), e112393. doi:10.1371/journal.phone.0112393.

Bodrova, E., & Leong, D. J. (1995). Scaffolding the writing process: The Vygotskian approach. *Colorado Reading Council Journal, 6*, 27–29.
Bodrova, E., & Leong, D. J. (1998). Scaffolding emergent writing in the zone of proximal development. *Literacy Teaching and Learning, 3*(2), 1–18.
Bodrova, E., & Leong, D. (2001). *Tools of the mind: A case study of implementing the Vygotskian approach in American early childhood and primary classrooms* (Innodata Monographs 7). Geneva: International Bureau of Education.
Bodrova, E., & Leong, D. J. (2007). *Tools of the mind* (2nd ed.). Columbus: Merrill/Prentice Hall.
Bodrova, E., Germeroth, C., & Leong, D. J. (2013). Play and self-regulation. *American Journal of Play, 6*(1), 111–123.
Campione, J. C., & Brown, A. L. (1990). Guided learning and transfer. In N. Fredricksen, R. Glaser, A. Lesgold, & M. G. Shafto (Eds.), *Diagnostic monitoring of skill and knowledge acquisition* (pp. 141–172). Hillsdale: Erlbaum.
Chaiklin, S., Hedegaard, M., & Jensen, U. J. (Eds.). (1999). *Activity theory and social practice: Cultural-historical approach*. Aarhus: Aarhus University Press.
Clay, M. (1993). *Reading recovery*. Portsmouth: Heinemann.
Common Core State Standards Initiative. (2012). *Common core state standards for English language arts*. http://www.corestandards.org/ELA-Literacy/RL/K
Copple, C., & Bredekamp, S. (Eds.). (2009). *Developmentally appropriate practice in early childhood programs serving children from birth to age 8*. Washington, DC: National Association for the Education of Young Children.
Davydov, V. V. (1990). *Types of generalization in instruction*. Reston: National Council of Teachers of Mathematics.
Diamond, A., Barnett, S., Thomas, J., & Munro, S. (2007). Preschool program improves cognitive control. *Science, 318*, 1387–1388. doi:10.1126/science.1151148.
Domitrovich, C., Durlak, J., Goren, P., & Weissberg, R. (2013). *Effective social and emotional learning programs: Preschool and elementary school edition. 2013 CASEL guide*. Chicago: Collaborative for Academic, Social, and Emotional Learning.
Elkonin, D. (1977). Toward the problem of stages in the mental development of the child. In M. Cole (Ed.), *Soviet developmental psychology* (pp. 538–563). White Plains: M. E. Sharpe.
Elkonin, D. (1978). *Psychologija igry* [The psychology of play]. Moscow: Pedagogika.
Elkonin, D. B. (2005a). The psychology of play: Preface. *Journal of Russian and East European Psychology, 43*(1), 11–21 (Original work published 1978).
Elkonin, D. B. (2005b). The psychology of play: Chapter I. *Journal of Russian and East European Psychology, 43*(1), 22–48 (Original work published 1978).
Farran, D. C. (Chair). (2012). *Enhancing executive function and achievement in prekindergarten classrooms: The effectiveness of tools of the mind*. Symposium conducted at the meeting of the Society for Research on Educational Effectiveness.
Farran, D. C., & Son-Yarbrough, W. (2001). Title I funded preschools as a developmental context for children's play and verbal behaviors. *Early Childhood Research Quarterly, 16*, 245–262. doi:10.1016/S0885–2006(01)00100-4.
Gresham, F., & Elliot, S. (1990). *Social skills rating scale*. Circle Pines: American Guidance Service.
Gudareva, O. V. (2005). *Psikhologicheskie osobennosti suzhetno-rolevoy igry sovremennykh doshkol'nikov* [Psychological features of make-believe play in today's preschoolers]. Unpublished doctoral dissertation. Moscow City University for Psychology and Education, Moscow.
Hammond, S., Müller, U., Carpendale, J., Bibok, M., & Liebermann-Finestone, D. (2012). The effects of parental scaffolding on preschoolers' executive function. *Developmental Psychology, 48*(1), 271–281. doi:10.1037/a0025519.
Karpov, Y. V. (2005). *The neo-Vygotskian approach to child development*. New York: Cambridge University Press.
Leont'ev, A. (1978). *Activity, consciousness, and personality*. Englewood Cliffs: Prentice-Hall.

Levin, D. E. (2008). Problem solving deficit disorder: The dangers of remote controlled versus creative play. In E. Goodenough (Ed.), *Where do children play?* (pp. 137–140). Detroit: Wayne University Press.
Luria, A. R. (1969). Speech development and the formation of mental processes. In M. Cole & I. Maltzman (Eds.), *Handbook of contemporary soviet psychology*. New York: Basic Books.
Luria, A. R. (1983). The development of writing in the child. In M. Martlew (Ed.), *The psychology of written language: Developmental and educational perspectives* (pp. 237–277). Chichester: Wiley.
Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need play in school*. College Park: Alliance for Childhood.
Newman, D., Griffin, P., & Cole, M. (1989). *The construction zone: Working for cognitive change in school*. Cambridge, MA: Cambridge University Press.
Rubtsov, V. (1991). *Learning in children: Organization and development of cooperative actions*. New York: Nova Science Publishers.
Rueda, M. R., Fan, J., McCandliss, B. D., Halparin, J. D., Gruber, D. B., Lercari, L. P., & Posner, M. I. (2004). Development of attentional networks in childhood. *Neuropsychologia, 42*, 1029–1040.
Smirnova, E. O., & Gudareva, O. V. (2004). Igra i proizvol'nost u sovremennykh doshkol'nikov [Play and intentionality in modern preschoolers]. *Voprosy Psychologii, 1*, 91–103.
Sophian, C. (2007). *The origins of mathematical knowledge in childhood*. London: Routledge.
Tharp, R. G., & Gallimore, R. (1989). *Rousing minds to life: Teaching, learning and schooling in social context*. Cambridge: Cambridge University Press.
Vygotsky, L. S. (1956). *Izbrannye psychologicheskije trudy* [Selected psychological works]. Moscow: RSFSR Academy of Pedagogical Sciences
Vygotsky, L. S. (1967). Play and its role in the mental development of the child. *Soviet Psychology, 5*(3), 6–18.
Vygotsky, L. S. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
Vygotsky, L. S. (1987). *Thinking and Speech* (N. Minick, Trans. Vol. 1). New York: Plenum Press.
Winsler, A., de Leon, J. R., Wallace, B. A., Carlton, M. P., & Willson-Quayle, A. (2003). Private speech in preschool children: Developmental stability and change, across-task consistency, and relations with classroom behaviour. *Journal of Child Language, 30*, 583–608. doi:10.1017/S0305000903005671.
Wood, D., Bruner, J. C., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*, 89–100.
Zaporozhets, A. (1986). *Izbrannye psychologicheskie trudy* [Selected works]. Moscow: Pedagogika

Chapter 57
Developmental Education for Young Children in the Netherlands: Basic Development

Bea Pompert and Marjolein Dobber

Abstract This chapter describes Starting Blocks and Basic Development.

This approach and curriculum provides possible answers for professionals working with young children. We focus on broad development of children by creating meaningful teaching opportunities in the context of play. We define play as a specific format of cultural activities that are characterised by rules that constitute the activity, high levels of involvement and the degrees of freedom that the cultural community allows to the player (B. van Oers, 2010).

In Basic Development, we start from activities infused with sociocultural contents matching with everyday situations, books, stories, etc.

The professional's role is important. During play and other activities, the professional is alert for 'teaching opportunities', taking care that the quality of play is not impaired.

In activities and dialogue, both professional and children cooperate in a dynamic process. We use five didactic impulses to structure the professionals assistance (Janssen-Vos 2008) for promoting children's meaningful learning in play. These five impulses are useful to achieve the balance between the active process of meaning making of the children and the explicit educational goals and expected results.

In this chapter we describe some examples and give insight into the *ingredients* of Starting Blocks and Basic Development. We finally describe the implementation strategy, focusing on the enhancement of the adults' abilities to work with a play-based curriculum in their own everyday practices.

Keywords Starting blocks • Basic development • Developmental education • Play • Implementation

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57.1 A Bit of History

In the Netherlands, 'Basic Development and Starting Blocks' represent an innovative and long-standing approach for early childhood education (2- to 8-year-olds). In this chapter, the meaning of Basic Development and Starting Blocks will be clarified, both historically and theoretically. We start with a description of the genesis of this approach and an account of the most important basic principles. After this, we give an overview of the curriculum's components and point out the important role adults (preschool teachers and primary school teachers) play. Then, we describe the organisation of the implementation processes that are required to get the curriculum into the professionals' heads, hands and hearts. Finally, we will say something about the results and current and future research of Basic Development and Starting Blocks.

In the genesis of Basic Development, Dutch politics have played a key role. In the run-up to the realisation of a new law on primary education in the early 1980s, Frea Janssen-Vos formulated the huge importance of good education for the youngest pupils within that new primary school.

When, in 1985, kindergartens for children four to six years old disappeared and merged into the encompassing whole of primary schools, Janssen-Vos pointed to the importance of a solid school curriculum for the lower grades in this new primary school. She formed a project group which was to take care of developing a coherent and renewed curriculum and to elaborate this for first to fourth grade (children four to eight years old), in which good transitions for pupils were to be realised for the former kindergarten groups to the first stages of primary school.

From an early stage in the development of this new early childhood education approach, Bert van Oers (Vrije Universiteit Amsterdam) became the project group's main advisor. His Vygotskian approach to developing, learning and teaching proved a perfect source of inspiration for the developers and teachers who took part in the development of what came to be known as '*Basic* Development'. Central to Basic Development is the idea that children actively take part in meaningful sociocultural activities in the classroom.

Van Oers' first publication about educating young children made some practitioners better aware of the importance of working from an explicit and valid theory of practice. Actually, this resulted in an intensive and long-lasting cooperation between academics, developers, teacher educators and teachers.

As a first result of this cooperation, the book *Alles op het spel* [*Everything for play*] appeared in 1989 (authored by Pompert, in Dutch), and in 1990, the book *Basisontwikkeling* [*Basic Development*] was published, in which Janssen-Vos described the outcomes of the first explorations in – then especially – the lower grades of primary school. The title refers to the ambition to lay a firm and productive foundation, already from the beginning of primary school, for children's actual and future learning and identity development, and provide them with the best opportunities for participating autonomously in sociocultural practices.

The book, written for real-life practice, immediately found a wide public among teachers and teacher educators. The mental legacy met approval and was embraced by many practitioners. In 1992, both van Oers and Janssen-Vos passed on their ideas to a wide public in their edited book (in Dutch) *Visies op onderwijs aan jonge kinderen* [*Visions on the Education of Young Children*]. Van Oers described the contours of his cultural-historical educational vision for the lower grades of primary school. Janssen-Vos indicated the consequences of this vision for a plan of work/curriculum aimed at improving teaching practices. These pieces are now part of the classic texts on Basic Development in the Netherlands.

57.2 Where We Stand Today

We are many years ahead since then, and in many schools and preschools, Basic Development has been introduced. Currently, we are working in a changed political and societal landscape. Basic Development is needed more than ever as a broad programme focussing on the complete development of the individual! And even though we know all too well that the narrow programmes, predominantly stressing cognitive, academic skills, do not offer the desired quality to young children (Miller and Almon 2009), many teachers still feel the pressure to further advance instructions aimed at small, cognitive goals and narrow the range of activities consequently.

Today, Basic Development still wants to offer a lot more to young children than mere mastery of cognitive skills and information. This is achieved by involving them in sociocultural activities, in which all kinds of cultural experiences and actions can be encountered and learned. The importance of education in schools does not lie solely in acquiring knowledge and competencies. The main aim is that children acquire cultural knowledge, concepts and actions *in a meaningful way* through their participation in sociocultural activities so that they can use these in other situations, including those outside of school. By this, Basic Development invests in the possibilities children already have for participating more and more autonomously as a whole individual and for contributing to a variety of social practices.

57.2.1 Practical-Theoretical Highlights

Basic Development finds its foundation in Vygotsky's cultural-historical theory of human development and learning. The initial plan of Basic Development is extended at the beginning of the twenty-first century with a plan called *Starting Blocks*, which caters for children under four years of age and is meant as a precursor of Basic Development. Basic Development and Starting Blocks together can serve as a firm

foundation for the development and cultural participation of children aged two to eight years old. We will refer to this entire programme as 'Basic Development'.

Vygotsky's mental legacy has remained relevant to practitioners in Dutch education mostly through the work of B. van Oers, Carpay, Wardekker and other colleagues, well versed in Cultural-Historical Activity Theory. This has made it possible to formulate a new and accountable answer for the development of young children in present day educative settings. 'Developmental Education' has become the common term under which the Vygotskij-inspired approach to education in the Netherlands has become known, encompassing both Starting Blocks and Basic Development, but also continuing into the higher grades of primary education.

Developmental Education appeals to children's rich potentials and simultaneously wants to stimulate professionals to bring the cultural achievements of our world into the activities undertaken by pupils.

Developmental Education has an outspoken position by being explicitly both pupil- and teacher-focussed. The children's personal meaning, together with the cultural meanings that the adults bring in, forms the foundation of developmentally stimulating interactions. This means that the curriculum is not fixed and static but is realised in learning and developmental trajectories, which emerge in the lively interactions in the classroom. Together, pupils and teachers work at content that matters, both culturally and personally.

The learning trajectories consist of fundamental cultural learning processes and are, therefore, social in their character. By taking part in social activities, children and their teachers both acquire a view on possible future developments.

Example

In the grade two/three of teacher Marco, the children (aged five to seven years old) are going to take the train (Fijma 2013). For some, this is a completely new experience. The children have all sorts of questions, such as: *How expensive is our train ticket? Did we take enough money with us? What time does our train leave? Where is platform 2a?* The teacher takes their questions seriously and links them, among others, to the schedules, symbols and timetables that are present at the train station.

By learning to use these schedules and symbols on the street and in the context of play activities in the classroom, much interest will emerge for these cultural symbols, but the pupils can also gain new mathematical understandings and vocabulary (regarding number, time, money). In this way, pupils' learning is not only culturally relevant but also personally meaningful as learning processes are continuously linked to comprehensible real-life contexts and contribute to pupils' agency to take part in these practices self-dependently.

Within these sociocultural activities, the children's broad development is the first priority. They are accepted as legitimate agents in the true sense of the word. Through their actions, they can seize different aspects of the activities. In their own ways, they master aspects of content, such as important concepts, cognitive and linguistic skills and social aspects of the sociocultural activity. This happens through active participation, feedback (from teacher and peers) and modelling. By observ-

ing contributions of others, by joining and by repetition, development is primed and carefully partaken from the start, which optimises the chances that such participation in sociocultural practices will lead towards autonomous and independent performance later on (see Lave and Wenger 1991).

In the example of the train journey with the five-to-seven-year-olds, the children turned out to be able to use the acquired schedules in their play and in other activities within the classroom. The teacher learns to recognise the potentials of such real-life contexts for learning and enriches his understanding of how to use them in the future.

57.2.2 Play in the Centre

Basic Development is a play-based curriculum. This means that all activities that children undertake ought to be organised as play. The cultural-historical view on play sees play as a mode of activity with specific parameters, which can have different values depending on the activity and the decisions of the educator. These parameters are (B. van Oers 2013):

- High level of involvement
- Following the rules that are part of the activity
- Participation in an individual, creative way (degrees of freedom)

Young children are extremely fond of playing, and learning embedded in such playful activities fulfils actual needs of the children within this play and is therefore personally meaningful for them. Hence we assume that this learning is beneficial for pupils' identity development. Numerous different aspects of development, such as cooperation and self-regulation, as well as cognition and language, can be promoted in playfully formatted sociocultural activities.

B. van Oers (2013) indicates that if children take on roles in their play and feel tensions between the rules and the structures of the play activity and their own playful field of acting, all sorts of opportunities for learning and teaching arise. These teaching opportunities are linked with several types of rules that he distinguishes in play activities:

- Social rules, indicating how to interact with each other
- Technical rules, indicating how to use certain instruments
- Conceptual rules, learning to use concepts about print, concepts in language, mathematics and also cultural content
- Strategic rules: rules that support the course of the activity, play scripts, making plans for play and roles

Example: Playing Restaurant

In teacher Elly's group, five children aged four to five years old play in the restaurant. Three children want to eat out and call the restaurant to arrange a date. The waiter confirms the reservation in the agenda. When just a bit later the guests arrive,

he writes down their order and the cook starts cooking. The food is being served. First, there is soup and then the main dish. After the meal, the food has to be paid for and everything in the kitchen needs to be cleaned up.

In this play, the children use several social rules, such as making a reservation, waiting until the food has been served out, paying the bill and cleaning up together. But there are also technical rules: think of using the phone, using pen and paper, making up the menu and using it. In the play, quite a number of conceptual rules pass by, such as rules regarding quantities, using written language, what is healthy? Strategic rules are, among others, used when the children share their roles and swap roles ('Now I'd like to be the waiter') or plan what they will be eating. With the application of each type of rules, the teacher can take the opportunity to support children's ways of dealing with these rules, i.e. take the opportunity to teach.

57.2.3 Promoting Play Development

In order to have a good grasp of the role that adults play within Basic Development, it is important to be able to distinguish transitions in children's play. After all, in the leading activity (play) and in cooperation, zones of proximal development are continuously constructed.

In Developmental Education, the adult and the children together search for possibilities to deepen current play by offering new cultural input. For example, in the restaurant, more and more detailed menu cards are made, in which new concepts are introduced, such as *set menu*, *dessert* and *starter*, which are brought in by the teacher or by a child.

In order to be able to make such interventions, the teacher is aware of developmental perspectives that refer to the types of play children are engaged in. We started out from El'konin's theory on this aspect (Karpov 2005) with this difference: we stick to the idea that all cultural activities can be formatted as play. Consequently, we consider the learning activity as an activity that potentially can maintain a play character. Playing and learning are not each other's opposites. There is learning in play and there can be play when learning. The play format is a perspective on each leading activity in the development of young children. Right from the first year of their lives, this is valid for manipulative play, where children playfully discover the world of the objects, and physical play. After the stage of manipulative play, the emphasis will shift to role-bound acts in exploring the world. Playing with toys also brings cultural acts and roles closer by. Children give cultural meaning to all sorts of objects and learn to recognise roles that are often connected to the use of such objects.

The balls of sand on the edge of the sand box are buns or tennis balls. This role-bound manipulative play forms a step towards role-play (also called thematic play) in which different roles are coordinated in a larger activity. This type of play is an imitation of a cultural activity such as the bakery, the restaurant, the garage or the garden centre. The children learn by taking up roles within cultural practices and

enriching these. Every role is associated with specific needs and demands specific qualities (knowledge, skills and tools). The cook needs to be able to weigh, and the waiter needs to be able to explain the menu card.

Additionally, van Oers distinguishes another type of role-play, which he calls director play (B. van Oers 2012a). In director play, children project their ideas about a role to external objects (toys, puppets, home-made figures) and play out a narrative in a role-play, for example, at a story table. In this kind of play activity, the child is able to imagine the mind life of the toy puppet and develops a theory of mind. This type of play has been found to have positive effects on language development (Nauta 2010).

Another type of thematic play is called story acting. Children are acting out their own stories. The children's own stories are told, drawn and read. Next, small groups of pupils act out these stories in the different playing corners of the classroom. The individual stories can also be inspired by the reading of picture books and stories or by watching animated books or film stories, just like in the director play. This type of play, in which storytelling and role-play continue to be linked, has been found to have positive effects on story comprehension skills, vocabulary and self-regulation (Nicolopoulou et al. 2010).

B. van Oers (2012b) argued that the play format should be continued into the stage of productive learning processes for pupils in grades five to eight (children aged eight to twelve years old). For cultural activities that aim at learning subject matter such as mathematics, reading and writing, geography and history, the previously described play format is considered valid as well, as it allows participants to *play cultural roles*, attribute their personal meanings, apply own solutions, give structure together and establish rules. Hence, he suggests to talks about *productive* play, during which pupils are wilfully engaged in activities, freely explore the themes and contents (like rules, concepts) together and learn to look critically at their own contributions.

Example: 'We've Got Pets'

A group of four to six years old is working on the theme 'pets'. Teacher Tessa has installed several playing corners in the classroom, such as the home corner with pets that need to be taken care of, the pet shop and the vet practice.

The children watch clips and read books about pets, their characteristics, living circumstances and care. At the vet's the animals have to be examined, weighed and measured. The examination has to be recorded on a patient card (see Fig. 57.1).

The questions children ask, such as '*Why does the rabbit drink from his mother?*' or '*What does the guinea pig eat?*' are answered by reading together in information books. Personal drawings and texts make sure that the newly acquainted knowledge is reified (see Fig. 57.2).

The reading, writing/drawing and calculating activities that are triggered by this theme *pets* are by themselves examples of playfully formatted activities, because the children start working with their own questions, out of personal commitment and freely exploring possibilities. At the same time, they learn the tricks of the trade, such as reading and writing and learning to weigh and to measure.

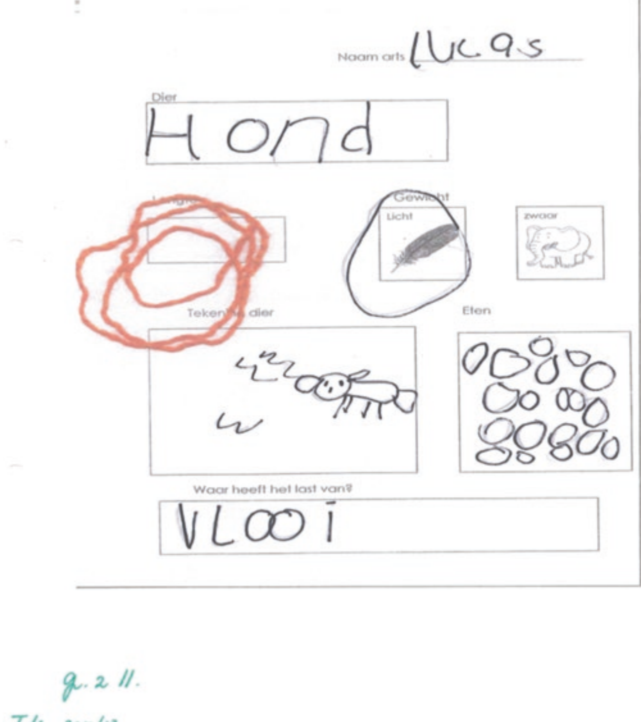

Fig. 57.1 Case history of Lucas' dog (Hond). The card summarises among others the dog's length, his weight (light as a feather), his food (dry dog food) and his problem (vlooi = flea)

57.3 The Teacher's Role

Teachers play a powerful role in *Basic Development*. Adults are able to foresee future developments of the children and to bring these into the present. By good observation and partaking in children's activities, teachers can build an idea of the significance of children's actions, which may signal new developmental steps (B. van Oers and Pompert 1991).

By doing this, they will acquire insight in the actions children can already execute independently and, simultaneously, recognise which new actions children can perform with some help.

Example: In the Restaurant

In the restaurant play, Timo wants to write out a bill. He's not that satisfied anymore with the scribbles on the paper and wants to put down exactly how expensive everything is. The teacher starts a dialogue with him about this and together they manage to make a bill that satisfies Timo's emerging needs. Timo is going to use the number line in order to write down the amount. This example indicates how important it is

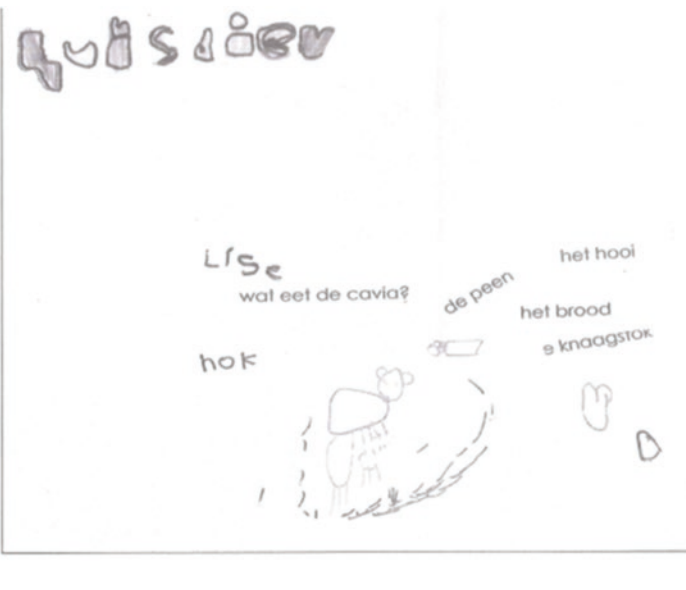

Fig. 57.2 Summary of a child's knowledge about the food of the guinea pig ('What does the guinea pig eat?' e.g. the carrot, the bread)

that teachers take time to guide well. In Developmental Education, the teacher always wears two hats at the same time: one of the observer and one of the guide/instructor.

To accomplish this, tools have been developed with which teachers can give content to these varied roles. Five so-called didactical impulses (Janssen-Vos 2008) help to deepen and broaden children's activities and add new actions and skills.

Impulse 1: Orientation

Orientation is focused on the content of the activity. What are we playing and talking about? What kinds of questions are popping up? Children must have sufficient opportunities to explore the content, the activities and also feel committed to each other.

Impulse 2: Adjust and Deepen the Activity

The teacher joins the activity to give it structure together with the children, so that the activity becomes richer and deeper and the organisation of the activity is better understood. The children's interest extends and more clarity about the real content develops. The teacher and the children explore their actions together, asking

questions such as: ‘Where do we want to arrive? Which steps do we need to take? What step comes first?’

Impulse 3: Broaden the Activity

This impulse aims at mutually connecting different activities and building coherent play narratives (Pompert 2013). Play narratives are chains of integrated language activities with a ‘head and a tail’ that are linked to a sociocultural activity.

Example: In the Bakery
In the bakery, Christmas is coming. Christmas loaves have to be made. At this moment, a play narrative develops in which reading and writing take place: a Christmas story, the recipe for the Christmas loaves and the shopping list for the Christmas loaves. Numbers and counting also occur: *What do the ingredients cost? How much do we need? What do the loaves cost? How many loaves will we need for the Christmas breakfast?*

The children want the shop to be decorated nicely and the Christmas leaflets have to be made. Of course, playing and selling are part of the bakery activities, and, additionally, other special wishes are brought up by the clients or the teacher, such as wrapping up in Christmas paper and selling Christmas biscuits.

Impulse 4: Adding New Actions

The teacher gives the children ‘nudges’ towards the desired development by bringing in new tools, skills and content. She introduces these by modelling, instructional conversation or direct instruction. These interventions should be in line with the motives of the children to accomplish their activity in the best way, and should not destroy the play character of the activity for the children.

Impulse 5: Reflection

The teacher takes every opportunity to monitor the ongoing activity. She helps the children to reflect upon their actions and also consider a possible follow-up. Furthermore, she reflects on the effects of her own actions and upon her contribution to the value of the activities for the children and for their developmental progress.

These didactic tools and strategies rest upon underlying pedagogical motives. Personal, social interaction and cooperation are powerful forces in educational activities, as they rouse new needs and goals in children that call for new understandings.

57.4 Building Blocks of the Curriculum

Basic Development offers ‘building blocks’ for the layout of the early years’ curriculum on the working floor of professionals teaching two up to eight-year-olds. Hence, these are no detailed learning plans with prescriptions for daily or weekly lessons or activities. As a matter of fact, in Developmental Education, learning

trajectories are never fixed, but they are continuously constructed on the basis of pupils' individual meaning making, by linking their developmental and learning needs to the teacher's goals and by the cultural agenda that the teacher manages.

In other words, teachers always design hypothetical learning trajectories, which unroll, and are continually critically adjusted, so that all pupils may contribute to the best of their abilities to their own and their group's development.

For this, the teacher has several ideas and tools at her disposal:

- Ideas about a play-oriented learning environment
- A pool of possible themes and thematic narratives
- Conceptions of meaningful activities
- Imaginations about a varied teacher role
- HOREB (which is a Dutch acronym for *action-oriented observation*, *registration and evaluating of Basic Development*)

Each of these 'building blocks' will be further elaborated below.

57.4.1 A Play-Oriented Learning Environment

In order to create teaching opportunities in play, focused on a broad development, the teacher collaboratively creates a rich learning environment with her group. Characteristics of this learning environment are, firstly, related to the intent to build up varied and coherent play stories, in which the children are able to make transitions from manipulating towards role-bound actions, towards role-play and productive play. Concretely, this means that the classroom is arranged in such a way that there are materials that enable various types of play activities.

Example: Moving House
In the group of teacher Chantal, 'moving house' is the word that is in the air. The children aged four to five years old are able to play with all kinds of boxes, carts and small furniture; paper, felt-tip pens and sticky tape are also available. All pupils play in small groups in the moving corner. They can all join in their own way. We see some children piling up, moving and replacing boxes. Other children are putting boxes onto a cart and take them from one place to another.

Children pack boxes with items and old newspapers and play house together, in which one of them is about to move. Other children also pack and subsequently put labels on the boxes that say which items are in the box and sometimes indicate by drawings or by made-up symbols for which room this box is meant to be. During a visit to a real mover, the conventions (demands and rules) of this practice have become clear for the children.

Furthermore, it is important that the children are able to construct their play story within this practice and expand it by creating links with several materials from various subject domains, such as language, literacy, mathematics, science, technology and arts. To be able to carry on and expand the moving play, not only boxes and

carts are available. There are also picture books and informative books, illustrations and clips that can be read and watched individually, in small groups and/or together with the teacher. The children learn to divide the objects in different categories, e.g. fragile and solid, learn how to use a tackle to hoist materials and learn to fit and measure. What fits in a box and what fits in the cart? They design the cabin of the moving van with two large side mirrors and a hooter on the roof, with all sorts of material.

The visit to the mover results in all sorts of interesting content for the role-play and the story plays in the group. When specific human activity becomes better visible in the real stories, clips, posters and books, this increases involvement with the content and the desire to bring meaning to the specific activity.

This happened in Chantal's group with the labels on the moving boxes. Many children, including the youngest ones, loved to make labels for a mover after he had told how important the labels are for him and he had shown them how the labels were being written on.

The children actively join in constructing the learning environment, because the teacher is attentive to the matters the pupils bring in and to the questions they have. In the moving corner, children wondered how large items that can't be brought into a house or an apartment via an elevator or stairs still can come inside. After watching a video item, the children – with their teacher – begin to make a sort of tackle with rope and wheels, which can be fixed onto the ceiling and can be used in the play.

Apart from these characteristics, it is of great importance that the furnishing of the spaces and the materials enable such expanded joint play. Children learn from and with each other in their shared play, making plans and taking care of each other. Many smaller playing spots *and* a space for small talk, reading, writing and calculating together are needed. Of course, the whole group has to be able to gather to share, plan and evaluate.

Room for planning together and to evaluate improves the play and the activities children undertake. They are able to look more sharply at the development of their play, the actions, roles and tools, the function of the materials related to the content of the activity and the rules of the play.

Example: Baking Pancakes

In Marieke's preschoolers group, a bunch of children had been baking pancakes in the house corner during playtime. With real frying pans, spoons and spatulas, they were playing with sand and other materials on the stove in the kitchen of the house corner.

At the end of playing time, Marieke asks the children to bake pancakes once more in the circle, so all children can watch. As the children demonstrate and tell, the teacher jots down the various actions in the right order on a flip-over, with the help of pictograms and text. This notation makes it easier for the pupils to repeat this activity and evaluate it.

The learning environment and the related materials together form a dynamic whole. It is changeable in time and space. This has to do with the children's contri-

bution and agency in their learning process, as they go into the learning environment and have influence on it by making choices of their own in how they relate to the objects and attributes.

According to Vygotsky (1994), precisely this aspect is the most essential characteristic of the environment that teachers need to understand. The environment and children have a mutual relationship, and the environment can only affect children's thinking and acting as a personally experienced environment ('perezhivanie') that comes into being through the prism of the child's personal emotions and needs. The environment offers the ideal forms of future behaviour and opportunities for assisted learning and developing; the children's development contributes to their personal interpretations of the learning environment and materials.

57.4.2 Themes and Thematic Narratives

In Basic Development, a fundamental principle is working with themes in the group and thematising relevant subjects along with the children. Classroom activities are linked to sociocultural contents (themes) in a process that we call 'thematising'. It means that cultural content is not pre-described and carried out rigidly through a fixed programme, but the themes are to be set up and built as activities by children and teacher together. The themes represent familiar sociocultural situations and experiences that children encounter in their everyday lives. The teacher selects themes which are and can become both interesting for the group of children involved and important from an educational point of view.

Themes are taken from various sources.

Themes concerning children's concrete life situations, such as:

- Going to the supermarket
- Visiting the doctor
- Going to the garage
- Having a birthday party
- Playing football
- Walking your dog
- Gardening

Themes representing the wider cultural and physical world, such as:

- Going to the museum
- Having a flight to a foreign country
- Watching films about nature, landscapes and wild animals

Themes connected with current events:

- A sudden winter storm
- A traffic accident in town
- Seasonal events: Christmas, Halloween
- News on television

While working with themes, a many-sided approach of language, literacy, mathematics, arts and science is guaranteed. In the bakery, we once could observe part of the playgroup of children from two to four years old playing with clay, dividing it in smaller pieces to make rolls and bread, while others are building the shop, and some children are writing and drawing folders and pricelists.

The themes develop with time and often last for more than four to six weeks. Thematising the content means that the input from the children, their experiences and questions lead the course and layout of the activities. Personal involvement and sense making direct the course of the themed activities. The group learns together and is aware of shared interests and personal preferences. Learning is active and cooperative. During the theme, the teacher connects the children's plans and ideas to her own goals. This belongs to the core of Developmental Education: neither the children nor the teacher one-sidedly determine(s) the programme on their own – it is the teacher's responsibility to create a sound balance between the children's motives, needs and abilities on the one hand and the competencies needed to participate in sociocultural practices on the other.

57.4.3 Meaningful Activities

In *Basic Development*, meaningful activities with a play character are the basic context in which all acting, communicating and learning is embedded. We focus on a broad development of children's identities. Children need more for their future place in society than isolated skills and knowledge. Instead of focusing on short-term objectives and teaching for school readiness, we aim at three kinds of interconnected objectives (see Fig. 57.3).

First, the affective dimension is conditional for all development of children: well-being, self-confidence and curiosity (see centre of the circle).

Secondly, broad development is encouraged through metacognitive and social aspects, such as understanding in communication, exploring the social, cultural and psychological world, expression of thought and feelings in arts, drawing and writing, and self-regulation (see the middle ring).

And thirdly, the academic skills and knowledge that also need to be acquired for development in a broad sense, including competences for well-informed participation in sociocultural practices. These goals are addressed through joint activities that generate both personal sense and cultural meaning. Specific knowledge and skills, like vocabulary, counting and measuring, become necessary and functional in children's ongoing activities, and, as such, they become objectives for meaningful learning (see the outside ring of the circle).

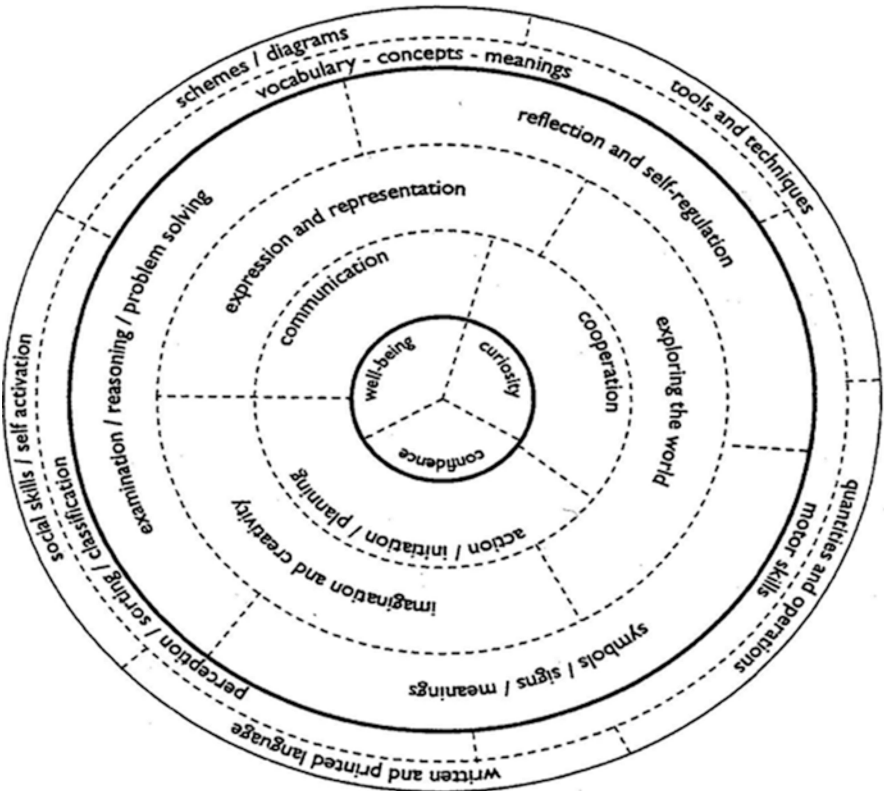

Fig. 57.3 Circle of contents in Basic Development

An Example: Taking the Bus

In the group of teacher Marjolijn, children aged four to five years play that they are taking the bus to the zoo, the playground or the library (Fijma 2012). The children are eager to play with their own bus made of chairs and make several bus stops. At the same time, they learn to read route descriptions at the bus stop (names of the streets and the buildings) and route descriptions in the bus (pictures and names of the bus stops), and they learn how to make a bus ticket (numbers, sequences, counting). During different conversational activities, the children learn to communicate about their own experiences of travelling by bus, to plan their play activities and to talk about using all kinds of cultural tools.

Meaningful activities are essential for children, because they link up with their personal needs and motives. They provide for occasions of exploring, communicating and individual, energetic acting. At the same time, these activities can only be culturally meaningful and remain so because the teacher keeps an eye on relevant goals.

In Basic Development it is essential to set up 'real-world' sociocultural activities in which children participate and discover what they already know and want to learn and what is necessary for them to learn for now (in their current roles) and for the near future. Specific knowledge and skills are embedded in these activities.

57.4.4 Varied Role of the Teacher

In Basic Development, the teacher's assistance of children boils down to the question of how teachers can deliberately promote young children's development within meaningful activities with a play character without disturbing the children's own intentions. The teacher's assistance is focused on strengthening, enriching and deepening the personal contribution of each pupil to the activity. The teacher is specifically present as a participant in order to promote the initiation of meaningful learning processes.

In this, the teacher makes use of a variety of stimulating interventions. In our discussions of the didactical impulses above, we already pointed out how these impulses lead to systematic guiding. These five impulses (orientation, adjust and deepen, broaden, adding and reflection) can be accomplished through different instructional styles to reach the perfect balance between active meaning making processes by the children, explicit educational goals and learning results.

The teacher uses three instruction types:

- Instructional conversation

  The teacher talks with a small group of pupils on a specific topic or problem they have encountered in their life or during activities in the classroom. She elicits pupils' talk by listening, questioning, rephrasing or modelling. Together they are 'weaving new information into existing mental structures' (Tharp and Gallimore 1988) to ensure that an interface between academic concepts and everyday concepts is provided.

  Children use language as a means to express their personal ideas, to explore their environment and to exchange information. So, both learning to communicate and communicating to learn are major objectives (De Haan 2012).

- Participating and scaffolding

  By active participation in joint activities, the teacher is able to scaffold, by bringing in relevant understandings, appropriate props, scenarios, narratives, roles and different rules and tools.

- Explicit instruction

  Explicit instruction and modelling are necessary for learning to use certain strategies, e.g. reading and writing strategies. These instructions are designed mainly for groups and are responsive and interactive, as the children need to take an active part in learning how to use the strategies in their own way.

57.4.5 HOREB: Activity-Oriented Instrument for Observation and Evaluation of Basic Development

Teachers need tools to be able to plan the activities for all children, to be able to observe during the activities and to evaluate their development afterwards.

For the assessments in *Basic Development*, an instrument is developed called HOREB, which helps teachers to take steps in planning, registration, performance observation, reflection and evaluation. HOREB is an open, strategic instrument, consisting of a number of specific tools (see E. van Oers 2012):

- The activity book is used for the planning and evaluation of the themes and activities over a period of four to six weeks.
- The logbook is used for daily planning and organising whole group and small group activities.
- There are observation models for play activities, language and literacy, mathematics and construction activities.
- The children's diary with learning stories and records.
- The evaluation instruments for children's development over time.

The HOREB instrument is in line with the idea of dynamic assessment (van der Veen and Poland 2012). Dynamic assessment fosters an integration of instruction and observation/assessment, as a way to understand the child's process and development. The HOREB instrument is used by all teachers in *Basic Development*, which provides them with the opportunity to make the transfer of information about children from one year to the next easier and forms a rich source of information for the parents too.

57.5 Characteristics of the Implementation of Starting Blocks and Basic Development

Since the late 1980s, we have gained rather good insights into successful developmental trajectories of teachers. Building up meaningful innovation takes at least two or three years and is not an easy job. The challenge is to implement a curriculum that is relevant and practical and at the same time theory driven. We want to create a curriculum that transcends the gap between looking at children's personal development and focusing on cultural equipment.

The curriculum of teacher education consists of several elements (see below), by which teachers can build up their own developmental practice in collaboration with the children in their own classroom. Schools and preschools that are successful have responsible and reflective teachers who acquire important knowledge and competences on six main aspects of Developmental Education for young children (Pompert 2012) that also apply to Basic Development:

- *Teaching should be accomplished as an act of 'assisting performance'*. Many teachers believe in the direct instruction model for teaching children. However, commitment to the Developmental Education point of view requires a change in the nature of teachers' purposeful interactions. In Developmental Education the teacher brings in the five didactic impulses and relates them to pupils' learning needs and to related meaningful embedded instructions on language, literacy, mathematics, social studies and science.
- *Instructional conversations and lively communication need to take place in every classroom*, as it brings Developmental Education to life. One of the most important competences for the teacher is to revoice. Revoicing is a powerful instrument in the interaction with the children. The teacher rephrases the child's message in such a way that it becomes accessible for open discussion in the (small) group. This is important because it aligns different points of view and gives children a chance to react and reformulate. Revoicing helps to deepen conversations and relate new concepts and thoughts with the everyday concepts children use in their own stories. Most teachers find revoicing a complex skill to apply and need supervision and support over a longer period.
- *Community of learners*: successful teachers create many opportunities for children to cooperate with each other in complex activities. These activities are meant to challenge pupils to join and exchange their ideas and understandings, cooperate and learn from each other. The teacher organises cooperative activities to build up a community in the classroom in which the children become real partners. The teacher organises meetings with the whole group in combination with conversations in pairs. These meetings create opportunities to share stories and engage in cumulative and exploratory talk as well as to make plans for future activities, to evaluate outcomes and the collaborative process and to present results from play and work. Besides whole group meetings, the teacher organises small group conversations, instructions and also expert activity. In small group conversation, teachers are able to optimise dialogue between the children and deepen their understanding of the different kinds of perspectives on the subject.
- Expert work is used to organise the exchange of understandings in the whole group. Pairs or small groups participate in different activities, study a specific topic or read their own texts. In a way they become experts. They prepare a presentation for their classmates and, together with the teacher, discuss their findings and evaluate their outcomes. In the end, all children participate and can operate with the new knowledge that they collectively gained. To build up a community, the teacher needs to understand that she herself is a member with a special role. She actively mediates and serves as a model for rendering meaning making, and she seeks every opportunity to improve the quality of interaction in the direction of better:

  - Questions
  - Predictions
  - Summaries
  - Argumentation

  - Presentation of own opinions
  - Reflection

- *Using activity-oriented observations*: Teachers who want to work goal-oriented, focusing on the broad development, hardly profit from standardised tests. Those test results give a distorted view on children's development and possibilities. In Developmental Education, teachers work goal-oriented, with small groups of children, the whole group and individual children: planned with the help of observations that were collected in shared activities. For this, the HOREB instrument offers observation models that help to signal development, with which the teacher is able to make a sufficient plan *and* keeps an eye on every single child's development. Learning to work with HOREB is a systematic method to introduce working in a development-focused way.

Teachers' reflections on their own role are vital, because their views on children, the nature of guidance and substantive input are strongly influential for their pedagogical choices and arrangements of possible learning processes and development. This differs from most teachers' common practices, which favors directing, assessing and controlling children's results in independent activity, individually and momentarily.

In order to teach teachers how to use their own knowledge about the development of children and to transpose this in solid further steps, we work at the activation of the triangle for reflection and evaluation and do so from the very start (Fig. 57.4).

The model supports the teacher during the triangulation of the child's meaning rendering processes, the developmental perspectives of the activity and the objectives. This triangle diagram has proven to be an effective tool in making high-quality decisions for new learning trails for all children.

- Balance in instruction and organisation

  Teachers should allow pupils enough time to master their activity to the best of their abilities. This requires substantially more time in making connections between different play activities. Both pupils and teacher construct shared activities and within these the teacher creates a balance in instruction, guidance

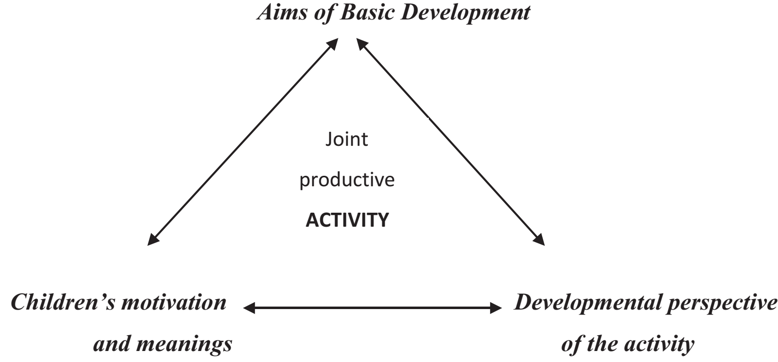

Fig. 57.4 Reflection triangle Basic Development

and independent play. The teacher is in search of vertical and horizontal continuity. Vertical continuity guarantees essential connections during the day; the horizontal one guarantees repetitions and extensions throughout a week or several days. An example shows how successful teachers take care of this.

Example: We Are Making a Cleaning Machine

In teacher Chantal's group of children aged four and five years, a problem has been brought in by the school principal. He told the children that the two cleaners couldn't manage to clean their classroom completely everyday.

The principal asks: 'Does the class have any ideas to help?'

Immediately, the children are enthusiastic and the first ideas are immediately uttered. In the course of the day, the idea is crystallising, because in small groups:

- Word fields are made about a cleaning machine
- Drawings are made
- Graphs are being constructed
- Experiments with soap, sponge and chamois take place

New questions emerge and are written down. The following days, informative books are read, children talk with the cleaners and watch clips. Materials are welcomed into the class, the first drawings are elaborated, and the first cleaning machines are constructed (Picture 57.1).

Due to the development of this horizontal and vertical continuity, the teacher is able to vary and enrich her instructions – in this case about making working plans for the cleaning machines – for all pupils with the language of arrows. In so doing she also tailors instructions to the needs of the children. Every pupil takes part and gets the support needed. Often, these instructions are performed in small groups, sometimes with children individually. There is much room for conversations about the cleaning machine (Picture 57.2).

Thus, teachers take part intensively and often have to set aside their instilled routines, like (1) walking around through the classroom and, hence, as a matter of fact, have no substantial input, plus (2) being always approachable for children, so they are far too often disturbed during talks and instructions in small groups. In her logbook, the teacher has to plan her instructions well and take care of providing interesting activities for the other children, which they can perform independently.

- *Teaching as a distributed activity*: Introducing Developmental Education is not a solo project. The team, the management, parents and society influence the developments and improvements in the school.

  This demands an open attitude from teachers and a willingness to reflect on their own roles critically. Co-teaching, collaborative research and reading groups should become common practice. Wardekker (2012) indicates that for this, the most essential competence is to be able to handle uncertainty in a positive and creative way. In this context, teacher educators have a shared responsibility. They make sure that teachers receive specific support, tailored to the personal needs that are formulated and aimed at a reliable interpretation of Developmental Education.

Picture 57.1 Children's design of the cleaning machine

Picture 57.2 Children evaluating the finished cleaning machine

57.6 Does It Work?

We've been granted an even better view on the results of all our efforts during the last decades. In this paragraph, an overview follows which deals with the research that took place in order to measure the effects of Basic Development on the development of pupils and teachers.

57.6.1 Teaming-Up Teachers

In order to get the feel of Basic Development, an intensive cooperation within the team is necessary. This teaming-up is done in a special way, with the following characteristics:

- Teachers dare to investigate their own practice and to make quality claims about it in their team (Bruin 2013).
- Teachers continuously involve the input of external educators and developers, so that they can plan improvements and revise their ideas about learning and developing.
- Teachers take responsibility for the implementation of Basic Development and grow towards a joint vision and unity in a professional learning culture. If the team does not form a single coherent unit, this will hamper or halt development of shared vision (Bakker 2012).

Teachers will need HOREB for the implementation of Basic Development, in order to involve all children in a responsible way into this play-oriented curriculum. This exhaustive instrument has been digitalised and has been much improved on manageability (research by Kennisnet 2010). Already in 1999, research by B. van Oers (1999) showed that teachers that make the best of HOREB have a far wider view on the development of pupils than traditional instruments offer.

57.6.2 Play and Language

Play and language development are interwoven within Basic Development. In the research into this close knit and its impact on the pupils' results, we see the following:

- Teachers create opportunities for children's spoken language by focussing on high involvement in the children's play activities, by joining in with children's activities, guiding them and prompting new actions. Research has shown that such playtime expands and intensifies the interactions (de Haan et al. 2008).
- When teachers give attention to vocabulary expansion in play and link them to the themes in the classroom, the pupils do not only learn more words than pupils that are exposed to vocabulary in a fixed programme. The pupils that are supported by *Basic Development* have more shared conversations and also use the new words in different activities (B. van Oers and Duijkers 2013).

57.6.3 Learning to Read and Write

The most essential element in approaching the development of written language is by working with narratives. One's own stories about experiences, issues, ideas and newly acquired knowledge do not only make it possible to utter one's own voice. Own stories are also meaningful to stories of others and in understanding texts in books and informative texts. Research into this narrative approach of reading and writing in grades two, three and four shows that:

- Commencing reading and writing (i.e. text composition) in Developmental Education at the end of grade three (age six) resulted in reading performance scores slightly above the national average. It was also found that at this age pupils made great progress in writing their own texts as compared to the start of the year in group three. Unfortunately, it is impossible to compare the writing performances of pupils from the Developmental Education group with a standard group, due to the fact that nationwide writing tests do not take place at this age in the Netherlands (Harskamp and Suhre 2000).

57.6.4 Playing and Counting

Counting in Basic Development deals with the development of mathematical insight in a world filled with numbers, measures and formulas. The main research in this field has been conducted by B. van Oers (1994, 1996); Poland and B. van Oers (2007, 2010) and Poland et al. (2009) and concerns the relationship between schematising, play and the development of mathematical thinking.

In this research area we see that:

- Young pupils (starting from age three) can be stimulated by their teachers to make schematic representations in their playing activities.
- Young pupils learn to reflect on the meaning of relations between the chosen schemes and symbols and the phenomena in play.
- During the transition to the formal arithmetic/mathematics in grade three, the children profit from their schematising activities. Moreover, they perform better in standardised arithmetic tests than the standard group.

57.7 Finally

In the Netherlands, a huge stress is being laid upon pre- and early school education to grant children better opportunities in their school career. *Basic Development and Starting Blocks* belong to the nationwide acknowledged curricula. Researchers in this field conclude that we still have to be careful with making too strong claims about effectiveness, because more replications and long-term research are needed. It has become clear, however, that realising our broad educational goals does not profit from the setup of antitheses, such as faith in the children's spontaneous development or strictly following predefined programmes. Learning processes that promote development can only be fertile within an interactive system in which experiences can be shared in young children's meaningful play activities and teachers can offer prompts and help for the appropriation of new abilities. By entering into conversation with small groups and individual children, children learn to know the world and themselves. Improving interactions will also lead to better language and thinking development and the children's well-being within the group.

References

Bakker, H. (2012). Developmental education schools as learning organisations. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice, and implementation* (pp. 121–136). Dordrecht: Springer.

Bruin, T. (2013). *Leidinggeven in een OGO-school* [Management in a DE school]. Alkmaar: De Activiteit.

de Haan, D. (2012). Learning to communicate in young children's classrooms. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice, and implementation* (pp. 67–87). Dordrecht: Springer.

de Haan, D., Pals, J., & Schut, J. (2008). Participatie in symbolisch spel [Participation in symbolic play]. In D. de Haan & E. Kuiper (Eds.), *Leerkracht in beeld* (pp. 86–94). Assen: Van Gorcum.

Fijma, N. (2012). Learning to communicate about number. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice, and implementation* (pp. 253–269). Dordrecht: Springer.

Fijma, N. (2013). Reken je rijk. Trek erop uit met de trein [Calculate and become rich. Going out with the train]. *ZONE, 12*(4), 13–15.

Harskamp, E., & Suhre, C. (2000). *Ontwikkelingsgericht lezen: Lesportretten en leerresultaten* [Reading in developmental education: Lesson portraits and outcomes]. Groningen: GION.

Janssen-Vos, F. (2008). *Basisontwikkeling voor peuters en de onderbouw [Basic development for preschoolers and the lower years of primary education]*. Assen: Van Gorcum.

Karpov, Y. (2005). *The Neo-Vygotskian approach to child development*. Cambridge: University Press.

Kennisnet. (2010). *Een digitaal klassenboek*. [A digital classroom registration manual]. Zoetermeer: Kennisnet.

Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. College Park: Alliance for Childhood.

Nauta, M. (2010). *Spel voor taal* [Playing for language]. Master thesis. Amsterdam: VU University.

Nicolopoulou, A., Barbosa de Sá, A., Ilgaz, H., & Brockmeijer, C. (2010). Using the transformative power of play to educate the hearts and minds: From Vygotsky to Vivian Paley and beyond. *Mind, Culture and Activity, 17*(1), 42–58.

Poland, M., & van Oers, B. (2007). Effects of schematising on mathematical development. *European Early Childhood Education Research Journal, 15*(2), 269–293.

Poland, M., & van Oers, B. (2010). Resultaten echt in beeld [Real outcomes of learning]. *De Wereld van het Jonge Kind, 38*(5), 20–23.

Poland, M., van Oers, B., & Terwel, J. (2009). Schematising activities in early childhood education. *Educational Research and Evaluation, 15*(3), 305–321.

Pompert, B. (2012). Creating knowledge and practice in the classroom. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice and implementation* (pp. 207–222). Dordrecht: Springer.

Pompert, B. (2013). Hij bestaat echt [He really exists]. *Wereld van het Jonge Kind, 41*(3), 10–13.

Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning and schooling in social context*. Cambridge: Cambridge University Press.

van der Veen, C., & Poland, M. (2012). Dynamic assessment of narrative competence. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice and implementation* (pp. 105–120). Dordrecht: Springer.

van Oers, B. (1994). Semiotic activity of young children in play: the construction and use of schematic representations. *European Early Childhood Education Research Journal, 2*(1), 19–34.

van Oers, B. (1996). Are you sure? The promotion of mathematical thinking in the play activities of young children. *European Early Childhood Education Research Journal, 4*(1), 71–89.

van Oers, B. (1999). Quality of diagnostic teaching abilities in early education. *European Early Childhood Education Research Journal, 7*(2), 39–51. doi:10.1080/13502939985208391.

van Oers, B. (2009). *Ontwikkelingsgericht werken in de bovenbouw van de basisschool [Developmental education in the upper grades of primary school]* (pp. 77–85). Alkmaar: De Activiteit.

van Oers, B. (2010). The emergence of mathematical thinking in the context of play. *Educational Studies in Mathematics*, *74*(1), 23–37. doi:10.1007/s10649-009-9225-x.

van Oers, B. (2012a). Culture in play. In J. Valsiner (Ed.), *The Oxford handbook of culture and psychology* (pp. 936–956). New York: Oxford University Press.

van Oers, B. (2012b). Meaningful cultural learning by imitative participation: The case of abstract thinking in primary school. *Human Development*, *55*(3), 136–158. doi:10.1159/000339293.

van Oers, E. (2012). Evaluation of learning and development. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice and implementation* (pp. 223–238). Dordrecht: Springer.

van Oers, B. (2013). Is it play? Towards a reconceptualization of role play from a activity theory perspective. *European Early Childhood Education Research Journal, 21*(2), 185–198.

van Oers, B., & Duijkers, D. (2013). Teaching in a play-based curriculum: Theory, practice and evidence of developmental education for young children. *Journal of Curriculum Studies, 45*(4), 511–534.

van Oers, B., & Janssen-Vos, F. (Red.) (1992). *Visies op onderwijs aan jonge kinderen*. [Visions on the education of young children]. Assen: Van Gorcum.

van Oers, B., & Poland, M. (2012). Promoting abstract thinking in young children's play. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice, and implementation* (pp. 121–136). Dordrecht: Springer.

van Oers, B., & Pompert, B. (1991). Kijken naar kinderspel [Watching children's play]. *Vernieuwing, 50*(7), 3–8.

Vygotsky, L. (1994). The problem of the environment. In R. van der Veer & J. Valsiner (Eds.), *The Vygotsky reader* (pp. 338–354). Oxford: Blackwell Publishers.

Wardekker, W. (2012). Responsible teaching. In B. van Oers (Ed.), *Developmental education for young children. Concept, practice and implementation* (pp. 27–39). Dordrecht: Springer.

Part V
Curriculum and Assessment

Geerdina van der Aalsvoort

Chapter 58
Introduction to the Theme of Early Childhood Curriculum and Assessment

Geerdina van der Aalsvoort

Abstract This section within the *Handbook of Early Childhood Education and Development* contains eight papers on the theme of curriculum and assessment; eight country-related perspectives are presented to allow a global overview of early childhood education. Each of the chapters was written by leading early childhood researchers and those who are currently paving new directions and giving new insights into what may be possible for the future with regard to early childhood curriculum and assessment. After two short paragraphs to provisionally frame curriculum and assessment, a short introduction of each chapter is offered based upon three themes:

– The long way from effective incidental to government-led early childhood education with contributions from Brazil, China, and Israel
– The special role of play in early childhood education curriculum and assessment that is represented by inputs from Australia and England
– Research findings that empower the specifics of early childhood curriculum and assessment with texts from the United States, Finland, and the Netherlands

Keywords Curriculum • Assessment • Child care arrangements • Child development • Governmental management

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58.1 A Provisional Frame to Define Curriculum and Assessment

58.1.1 Curriculum

In formal education a curriculum is the set of courses, and their content, offered at a school or university. A curriculum may also refer to a defined and prescribed course of studies, which students must fulfill in order to pass a certain level of education. A curriculum includes the teaching, learning, and assessment materials that are available for a given course of study. “Curriculum” for early childhood education suggests that it is clear-cut how children develop and that a course or a set of course may add to this development. At the same time there are many research findings (see Hirsh-Pasek et al. 2009 for an overview) which reveal that it is not so much the curriculum but rather the way children are allowed to explore academic themes such as numbers, letters, and science that enhance children’s development. Moreover, there are many discussions about the actual content of early childhood curriculum. Which content promotes children’s development best is a question that has been in focus for a longer time. Especially the growing research body on emergent literacy (see Marulis and Neuman 2010) and numeracy (see Lembke and Foegen 2009) has been impressive. The findings suggest that recognizing children’s interest in numbers and letters and using it in child-appropriate ways are not a matter of instruction only as children profit from context-rich environments (Van Oers and Duijkers 2013). However, what it means to be able to profit from such an environment is not part of curriculum content. Therefore, statements about curriculum and writings on curriculum content have to be read closely in order to grasp what it means for everyday practice. Moreover, as countries for all kinds of reasons differ in their view and approach to curriculum for early childhood education, research findings from separate countries often do not justify to the strong relationship between the context in which children are growing up and the added value of early childhood education. The contributions in the handbook therefore aim at advancing the discussion on a global level.

58.1.2 Assessment: Defining and Grasping Essential Topics with Regard to Early Childhood Development

Assessment is the collection of relevant information that may be relied on for making decisions. There are different purposes of assessment (Office of Superintendent of Public Instruction 2008, p. 14): screening, to identify potential problems in development; instructional, to inform support and monitor learning; diagnostic, to diagnose strengths and areas of need to support development; and program evaluation (accountability), to reveal whether a program succeeds to reach its goals and gather data for program improvement. Specifically with young students, the literature

claims context-based assessment which refers to information that is derived from the home, community, and early childhood program that the child is attending (Lidz 2003). The information supposedly is drawn from "a broad comprehensive process, and not from a specific activity or technique" (Lidz 2003, p. 2). It should also be recognized that children more easily show their competences by doing and their knowledge by showing rather than talking or writing (Shepard et al. 1998). This means that the information is often derived on the spot. It requires using authentic sources such as drawings, photos, and audio- and videotapes to allow a collection of child-specific data for purposes of documentation and evaluation of a child's progress over time. Carr and Lee (2001) as well as van Oers (2003), for example, suggest the use of so-called learning stories as they allow narrative assessment to take place; they are affordances for both teacher and child to construct the meaning of the learning that has occurred. Carr et al. (2001) state that assessment allows participating in the community of learners and teachers. A child's product, such as a drawing or photo of him working, allows other children, his parents, and other teachers to affirm the child's acting as a learner and to use it as a means to communicate about it, make further plans, and so forth (see also Lapponen et al. in this volume). Thus, trajectories of learning can be developed and stimulated. Assessment is always a process of reasoning from evidence and is imprecise to some degree. Results are only estimates of what a person knows and can do. Therefore, we need a rich and coherent set of assessment practices. Early childhood education hovers between allowing development to unfold and addressing children with tasks that function as affordances to further development. Therefore, the meaning of assessment for early childhood education requires specific consideration. Again, countries may differ in their view and approach to assessment for early childhood education. The contributions in the handbook therefore aim at advancing the discussion on a global level.

58.2 A Preview of the Contributions

58.2.1 The Long Way from Effective Incidental to Government-Led Early Childhood Education

According to the Office of Superintendent of Public Instruction (2008), early childhood curriculum and assessment rarely appear together. However, focusing on early learning programs and written standards on what goals are aimed at elicits questions on benchmarks and expectations about what the child can do after having participated in an early childhood program. The step from regional initiatives for all kinds of reasons to a national concern of early childhood education has elicited a context of standards and accountability for early learning outcomes in very different ways.

The chapter from Maria Malta Campos about curriculum and assessment in Brazilian early childhood education describes how the Brazilian educational system has gone through major changes. Since 1996, day care centers (crèches) for

0–3-year-old children have been integrated into the educational system. Since 2007 state funding is provided for all young children who attend public day care or preschool. Early childhood education is mainly under the responsibility of the municipal education departments. Curriculum and assessment are being impacted by all these changes. These areas are now the object of disputes between the academic groups from the universities, the educational authorities, the school managers at the local level, and the editorial market that sells pedagogical packets (student's workbooks and teachers manuals) to schools. The chapter describes and analyzes this complex reality and discusses the most important issues that affect ECE curriculum and assessment in Brazil.

Jiaxiong Zhu and Jie Zhang review main kindergarten curriculum reforms in the past nearly 100 years in mainland China and explicate the important role of western early childhood education theories and thoughts in driving those curriculum reforms. A contemporary early childhood education is aligning itself with the increasingly open and diversified society since it is strongly influenced by sociocultural changes and conditions. The chapter points out that discussion about the future of kindergarten curriculum reform in China needs to be based on an observation of the development of Chinese economy, politics, society, and culture. Huge developing countries such as Brazil and China have to address the massive numbers of children that need to profit from early childhood education and seek a way to justify in early childhood development both alikeness in the human race and differences from a cultural perspective. The case of Israel, written by David Brody, illustrates that it is not the size of the country that seems to make the difference but the trying to do justice to views on early childhood while preparing adequate care centers. At the same time, however, from a governmental perspective, standards and questions about accountability come to the fore. He describes how this process is currently taking place in Israel.

58.2.2 The Special Role of Play in Early Childhood Education Curriculum and Assessment

The former paragraph addressed three ways on how early childhood curriculum slowly becomes nationally organized. However, when one looks at the curriculum content more closely, other subjects draw attention. Susan Grieshaber describes how the Australian curriculum turned out to be a content curriculum and teachers are required to teach specific content but can choose the pedagogical approaches they use. It adopts a standards-based approach to assessment, with standards identified for each year, and a special role for play. Teachers are required to assess children against the standard in each school year for specified subject areas. The chapter describes and analyzes these recent developments in the context of prior approaches to curriculum and assessment. Pat Broadhead makes the case for play in early childhood curriculum based on the national curriculum in England. She claims that when

play has high status, those curricula usually also require educators to observe play in order to be better placed to understand and facilitate playful learning through the informed application of playful pedagogies. The chapter considers the complexities in evidence when observation informs the understanding of both playful learning and playful pedagogies as they arise in early years' settings. Hande Ilgaz, Brenna Hassinger-Das, Kathy Hirsh-Pasek, and Roberta Golinkoff define so-called guided play as a middle ground between free play and direct instruction. They illustrate with a wealth of research findings how this type of play can be successfully used to enrich children's experiences with language, mathematics, and science.

58.2.3 Research Findings that Empower the Specifics of Early Childhood Curriculum and Assessment

Hande Ilgaz, Brenna Hassinger-Das, Kathy Hirsh-Pasek, and Roberta Golinkoff make the case for playful learning. They state that play is one of the natural strengths of childhood through which children acquire and also practice critical language, cognitive, and socio-cognitive abilities. This long-standing belief has widely shaped curriculum in early childhood. However, lately the effectiveness of play for early childhood development and consequently its place in the early childhood curriculum is under attack especially in the United States. Policy makers are substituting playtime with didactic instruction aiming to impart decoding skills that speak to a narrow set of literacy skills. In their chapter some of the newly emerging evidence for the effectiveness of guided play, a form of play that is situated on a continuum between adult-directed didactic instruction and child-directed free play, is offered. Lasse Lipponen, Kristiina Kumpulainen, and Maiju Paananen describe a transition from understanding child perspective to understanding children's perspective. The focus is on the child as subject, not object, in his own world. They describe the findings of a study that explores and identifies moments that children find important, meaningful, and positive in their daily life at the preschool context. The authors discuss to what extent the documentation and reflection practices can be used as tools for understanding children's perspective on learning opportunities from their point of view and what implications this kind of approach would set for curriculum and curriculum development. Henderien Steenbeek and Paul van Geert present curriculum and assessment departing from a complexity approach (see also Steenbeek et al. 2014). They claim that the overarching goal of assessment in classrooms is to capture the dynamics of the learning process of individual children. This self-organizing process is characterized by fluctuations and variations, which are fundamental aspects of the process. In addition, it is a socially situated process, which – among others – implies that the quality of the teacher-student interaction plays an important role in forming the process. They describe three examples of such process-oriented assessment.

References

Carr, M., & Lee, W. (2001). *Learning stories. Assessment in early childhood settings*. London: Sage Publications.

Carr, M., Cowie, B., Gerrity, R., Jones, C., Lee, W., & Pohio, L. (2001). *Democratic learning and teaching communities in early childhood: Can assessment play a role?* Wellington: New Zealand, Early childhood education for a democratic society. Conference proceedings.

Hirsh-Pasek, K., Golinkoff, R. M., Berk, L. E., & Singer, D. G. (2009). *A mandate for playful learning in preschool*. New York: Oxford Press.

Lembke, E., & Foegen, A. (2009). Identifying early numeracy indicators for kindergarten and first-grade students. *Learning Disabilities. Research and Practice, 24*(1), 12–20.

Lidz, C. S. (2003). *Early childhood assessment*. Hoboken: Wiley.

Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research, 80*(3), 300–335.

Office of Superintendent of Public Instruction. (2008). *A guide to assessment in early childhood; infancy to age eight*. Washington State Office of Superintendent of Public Instruction.

Shepard, L., Kagan, S. L., & Wurtz, E. (1998). *Principles and recommendations for early childhood assessments*. Washington: The National Education Goals Panel.

Steenbeek, H., van der Aalsvoort, G. M., & van Geert, P. (2014). Collaborative play in young children as a complex dynamic system; revealing gender related differences. *Nonlinear Dynamics, Psychology, and Life Sciences. Journal of the Society for Chaos Theory in Psychology & Life Sciences, 18*(3), 251–276.

Van Oers, B. (Ed.). (2003). *Narratives of childhood*. Amsterdam: VU University Press.

Van Oers, B., & Duijkers, D. (2013). Teaching in a play-based curriculum: Theory, practice and evidence of developmental education for young children. *Journal of Curriculum Studies, 49*(4), 511–534.

Chapter 59
Curriculum and Assessment in Brazilian Early Childhood Education

Maria Malta Campos

Abstract The Brazilian educational system has gone through major changes especially regarding early childhood education. Since 1996, day care centers (crèches) for 0–3-years-old children have been integrated into the educational system. In Brazil public ECE services can be offered at public administered centers or at private nonprofit centers supported by municipalities. The most important official documents about curriculum and assessment for ECE, produced from 1995 on, are summarized in this chapter. During all these years, several national official documents were prepared defining quality criteria for early childhood education systems and institutions. The picture that emerges from the few avaliable Brasilian studies shows that assessment of children at ECE institutions is not being sufficiently addressed by the national official orientations or by most local educational authorities. However, the panorama presented in this chapter indicates that issues related to ECE curriculum have been seriously addressed by official initiatives in the last two decades. Assessment of children and assessment of services are matters more recently debated, and a more detailed orientation has still to be defined. But many urgent problems must be addressed if Brazilians decide to shorten the distance between what is written and what is practiced in the daily life of ECE institutions. The adoption of more effective enforcing mechanisms to ensure that regulations are followed by the local systems and the individual services is very important to bridge the gap. Nevertheless it is also true that ECE present situation is very dynamic and diverse. Much has been done since a new Constitution was approved, 25 years ago.

Keywords Early childhood education • Brazil • ECE curriculum • ECE assessment • ECE legislation • Research on ECE quality

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59.1 Introduction

According to Brazilian legislation, crèches and preschools are considered the first part of "basic education," which also includes fundamental and secondary education.[1] Since 2007 state funding is provided for all young children who attend public crèches or preschools. The most important recent legal change is that compulsory education in Brazil now starts at the age of 4 and continues up to 17 years of age.

ECE is mainly under the responsibility of the municipal education departments. In a country as big and diverse as Brazil, with a population of more than 200 million people, living in 5.570 different municipalities, 16 of them with more than one million people and others having a very small population and located in remote places, it is easy to figure out how segmented and unequal or even inexistent these municipal services can be. Even if a national legislation is there, that defines the basic conditions that must be in place for ECE services everywhere, included the private sector, the social realities of the more underdeveloped regions and of the remotest municipalities, as well as of the impoverished sectors of the more developed regions, impact the real conditions presented by public ECE services in the country. These problems present a very challenging panorama to the public administration, for the country does not have an efficient monitoring and enforcement system of what is required by law.

Curriculum and assessment are being impacted by all these changes. These areas are now the object of disputes among the academic groups from the universities, the educational authorities, the school managers at the local level, and the editorial market. Assessment is also becoming a very controversial issue, due to the fact that fundamental and secondary education are the object of external mass evaluation by a federal agency and up to now ECE has been excluded from this kind of quantitative evaluation based on student tests. Due to the distance between what is defined by law and by the official documents, at one side, and what characterizes the real conditions of operation and the day-by-day experiences lived by children and adults at crèches and preschools, at the other side, the issues in this chapter include these two different perspectives.

Gimeno-Sacristán (2008) presents a conception of curriculum as a process that occurs in a context of social and cultural interactions (p. 21). According to this author, the process of curriculum construction has many phases: the prescribed curriculum that contains its general framework and guidelines; the curriculum as it is translated to teachers, by pedagogical materials and textbooks; the curriculum as it is interpreted and changed by teachers; the curriculum in practice, how it is translated into real actions; the curriculum effects, on students and teachers; and the assessed curriculum that can take different forms and produce various consequences

[1] Basic education is composed of early childhood education, for 0–5-year-old children (crèche for 0–3 and preschool for 4 and 5 age groups); fundamental education, for 6–14-year-old students; and secondary education, for 15–17-year-old students. Superior education is offered at private and public colleges and universities.

(p. 105–106). This description of a "top-down" process is based on what happens in most educational systems at the primary and secondary education levels.

When applied to the ECE context, even the idea of a curriculum is not accepted by many pedagogical approaches. Both curriculum and assessment are polemic themes in the ECE area today. Moyles and Papatheodorou (2012) acknowledge these tensions between recent developments in curriculum policies, which focus on "developing children for later formal education and work," and pedagogical conceptions that "value early childhood as a period in its own right" (p. 112). These authors also make distinctions between the government regulated curriculum, the "delivered" curriculum, and "the curriculum as it is received by children" (p. 112). In the words of Bertram and Pascal (2002), "in any discussion about curriculum it is important to emphasise that what is written is not necessarily what is practiced" (p. 7). On the other side, one must remember that the process of construction of a prescribed curriculum is also complex. Political, economic, and cultural forces shape the process of defining a national conception of education and select the voices that are or are not heard in the elaboration of official curriculum documents at a particular historical moment.

This chapter will try to describe how these dynamic processes have developed in the last two decades in Brazil, beginning with some information about the present coverage of ECE services in the country and about their historical origins and evolution.

59.2 The Coverage of ECE Services in Brazil

In Brazil, the number of children in ECE is growing, and a large proportion of 4- and 5-year-olds now go to preschool. The new compulsory education definition includes the 4–5 age group and proposes the year 2016 as a dateline for universal coverage of preschool-aged children. For the younger group, going to a crèche is already a daily experience for more than 2.5 million Brazilian children (Table 59.1). The percentage of enrollment is higher for the two and a half and 3 years old than for babies and toddlers.

The opportunity to enroll a child in a crèche is very different for children from diverse social origins. Table 59.2 shows some of the inequalities that prevail for access to ECE services for different groups of the Brazilian population.

ECE services can be public and private. A large proportion of crèche services are offered by private nonprofit institutions (community, religious, and philanthropic)

Table 59.1 Number and percentage of 0/3 and 4/5 children enrolled in ECE – (Brazil 2010, Demographic Census 2010)

Age group	Population	Enrolled in ECE	% Enrolled in ECE
0–3	10,938,914	2,575,954	23.55
4 and 5	5,801,583	4,647,011	80.09

Table 59.2 Percentage of enrollment in ECE for 0/3 children, by different population groups – Brazil 2009 (Campos et al. 2013, p. 78)

Population group	Percentage at ECE	Population group	Percentage at ECE
Black[a]	16.7	White	20.2
Rural	8.9	Urban	20.5
North region	8.3	South region	24.2
20% poorer	12.2	20% richer	36.3

[a]Brazilian statistics use the following ethnic/racial categories: white, black, yellow, brown, and indigenous. Individuals classify themselves (or their children) for the researchers. In Table 59.3 the category black includes also children classified as brown.

that are financed by public resources. This is a model favored by many municipalities, because its costs are generally lower than for the public institutions. Teachers working in the private nonprofit sector have lower salaries, work longer daily hours, and have a lower level of qualification than teachers employed by the public institutions (Campos et al. 2012, p. 166–173). Different municipalities and distinct private institutions adopt various kinds of organization for the ECE services they provide. Some services use their own building, but many preschools are part of schools that also offer other levels of education (fundamental and secondary). There are ECE services that receive children between 0 and 5 years old in the same center and do not make a distinction between crèche and preschool. Some centers receive children for a period of 8–10 h a day and in others children stay for 4 or 6 h a day. In Brazil, by law all public education is free of charge so parents do not have to pay for public ECE services. In the private sector, parents can pay very different fees, according to the geographical region or the kind of neighborhood where the institution is located. Some private companies provide vouchers for their employees to pay for ECE private services.

59.3 Curriculum and Assessment in the Official Documents

59.3.1 Historical Roots

Since the turn of the century, the first kindergartens were organized in the urban centers, receiving mostly middle-class children. North American influence, that promoted active methods, was strong in this phase; USA educated teachers were responsible for some of the first public preschools in São Paulo, according to Kishimoto (1988). At the same period, the first day care centers – called crèches or nurseries – were organized for the small children of woman workers, at some industries, and by philanthropic institutions, aimed at impoverished mothers. These institutions adopted very different approaches to child rearing, mainly custodial and based in the prevention of infant mortality (Kuhlmann 1991). During the military regime (1964–1984), the theory of the cultural deprivation and the proposal of a compensatory curriculum developed in the USA were adopted in several early

childhood federal programs, aiming at poor children. This approach was also followed by state and municipal preschool systems; the curriculum was designed to prepare children for the primary school, where high rates of repetition and dropout prevailed for a significant proportion of children from poor backgrounds. The active curriculum was preserved in a few private schools and in some experimental public schools at the end of the years 1960s, when they were closed by the military regime.

59.3.2 Political Democratization: A New Constitution and a New Educational Law

The democratization process that followed the end of the military regime in the 1980s provoked important consequences for the social policies in general and for the educational system in particular. Several social movements fought for a Bill of Rights for children and adolescents and for more comprehensive educational rights. Feminists and popular community groups demanded day care services for women workers' small children. For the first time in many decades, the educational problems in the country were part of the public agenda, discussed in the mass media, and object of new studies and proposals. The Federal Constitution approved by Congress in 1988 defined a new status for early childhood education. This was considered as the first part of basic education, also including fundamental and secondary education. Early childhood education included not only preschools but also crèches for 0–3 years old: therefore, crèches had to migrate from social assistance and health areas to the educational system and to be adapted to the educational legislation. The Statute of Child and Adolescent was approved in 1990, providing a detailed definition of their rights, becoming an outstanding mark in Brazilian legal framework. Before its approval, the legislation on "minor's" rights was disperse and represented a very weak regulation that allowed for constant episodes of violence against children and adolescents. Between 1989 and 1996, there was an intense process of mobilization and discussion in the country about the new National Education Law. It was approved in the end of 1996, and this long period of discussion led to changes in the original plans laid out by the social movements and the educators' mobilizations. The ECE new structure was maintained, despite economic decision makers' growing opposition. Other important changes were defined: early childhood and fundamental education teachers were required to have a college education diploma,[2] and a new financing system was defined for municipal and state public schools. This financing system aimed at the fundamental schools, for students aged 7–14, was reformed 10 years later in order to include ECE and secondary schools. Table 59.3 presents a list of these legal documents.

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[2] The teachers' formation at the college level was adopted as a goal, but afterwards it was accepted that teachers up to the fifth grade of fundamental school could be qualified at teacher's formation courses at the secondary level.

Table 59.3 Federal legislation concerning ECE policies – Brazil, 1988–2013

	Documents	Authors
1988	Constituição Federal (Federal Constitution)	National Congress
1989	Estatuto da Criança e do Adolescente (ECA) (Statute of Child and Adolescent)	National Congress
1996	Lei de Diretrizes e Bases da Educação Nacional (LDBEN) (National Education Law)	National Congress
1996/2013	Amendments to	National Congress
	Federal Constitution	
	National Education Law	
1996/2013	Resolutions	Ministry of Education (MEC)
		National Board of Education (CNE)

The National Education Law also defined a general framework for basic education curricula and assessment. The law allows for a relative autonomy for local education systems options on curriculum and assessment, but there must be a national common basis that all systems must adopt (including the private schools). The National Board of Education is the official agency responsible for defining the curricula's national common basis. The National Institute for Pedagogical Studies (INEP), at the Ministry of Education, is the official agency responsible for the centralized external assessment system that evaluates students' proficiency at the fundamental and secondary level.

The ECE General Coordination, at the Ministry of Education (MEC), designed a new orientation for educational policies, teacher education, curriculum, quality criteria, and assessment right after the new Constitution was in place. Initially, these orientations were also supported by the commitments assumed at the Education for All Jomtien Conference. A series of seminars, studies, and documents were promoted, aiming at the municipal ECE institutions, public, private, and private nonprofit sustained with public resources. These initiatives were carried out in a participative way, engaging universities, research institutions, teachers' representatives, nongovernmental organizations (NGOs), private foundations, and international agencies in order to promote changes in ECE realities around the country. Between 1993 and 1996, a series of six documents was published by the MEC: a proposal for ECE policy, a survey about the existing services in Brazil, proposals for teachers education, an ECE bibliography on articles and studies published between 1980 and 1995 in the country, quality criteria for crèches, and finally, a review of existing pedagogical programs and curricula for ECE at the state and municipal levels. It was in this new context that curriculum and assessment for ECE started to be discussed, in Brazil, at the turn of the twenty-first century. The most important official documents about curriculum and assessment for ECE, produced from 1995 on, will be summarized in the next sections of this chapter. They are classified by their content and listed on Tables 59.5, 59.6, and 59.7, for more clarity.

59.3.3 Official National Curriculum Documents for ECE, 1998/2009

In this period, three important curriculum documents were produced at the national level: the first one, the National Curriculum Framework for Early Childhood Education (Brazil 1998a, b) was prepared by the ECE General Coordination, at the Basic Education Department of the MEC; the two others were elaborated at the National Board of Education (CNE), linked to the MEC (Brazil 1999, 2009c). The first curriculum document does not carry a legal obligation for the local education systems, but the documents approved at the CNE are obligatory for all Brazilian schools, public and private (Table 59.4).

59.3.3.1 National Curriculum Framework for Early Childhood Education

Two years after the approval of the National Education Law, the MEC published the first national curriculum for ECE. It was part of a series of curriculum documents for the three levels of basic education: ECE, fundamental and secondary. These documents were prepared by groups of specialists, from the universities and from a few research centers located at some private schools respected for their pedagogical orientation. The Spanish author Cesar Coll was invited to Brazil as a consultant. The fundamental and secondary curricula adopted a general methodological approach

Table 59.4 Official curriculum documents for ECE – Brazil, 1998/2009

	Documents	Authors
1998b	Referencial Curricular Nacional para a Educação Infantil (RCNEI) (national curriculum framework for early childhood education)	Ministry of Education (MEC) Basic Education Department (SEB) ECE General Coordination (COEDI)
1999	Diretrizes Curriculares Nacionais para a Educação Infantil (1999) (national curriculum guidelines for early childhood education)	Ministry of Education (MEC) National Board of Education (CNE)
2009c	Diretrizes Curriculares Nacionais para a Educação Infantil (2009) (national curriculum guidelines for early childhood education)	Ministry of Education (MEC) National Board of Education (CNE)
2012	Educação infantil e práticas promotoras de igualdade racial (early childhood education and practices that promote racial equality)	Silva-Jr., Bento and Carvalho (eds.)

based on constructivism[3] and introduced an innovation, the "transversal themes," that were described as a means to deal with interdisciplinary contents, such as ethnic and racial diversity, natural environment preservation, ethics and human relations, sexual education, and consumer education. The existing disciplines that compose the fundamental and the secondary curricula must cover these themes as well as their specific contents. The curriculum that was designed for ECE is presented in three volumes (Brazil 1998b). The first one contains the key conceptions that give a theoretical and ideological basis for the curriculum: the conceptions of child, education, institution, and professional. The second volume deals with personal formation: identity and autonomy. The last volume presents seven areas that compose the knowledge of the world: movement, music, visual arts, oral and written language, nature and society, and mathematics. In each topic there are guidelines for the practical work that should be done with the two age groups: 0–3 and 4–6. The volumes are illustrated with children's drawings and many pictures of children and teachers at diverse settings engaged in various activities. There is an extended bibliography for each volume that includes references of 14 countries curriculum documents. Among the consultants who helped with suggestions for the document are the names of some international specialists: Ana Teberosky, Gilles Brougère, and Jean Hébrard. The first draft of this document was sent to individual specialists and teachers around the country, who received small individual payments to make critical revisions of it. The authors received 230 critical revisions. After its publication, the MEC commissioned a training program for teachers and school staff in order to help the implementation of the curriculum at the local ECE systems. The three volumes document was sent to all Brazilian teachers and schools.

The publication of this curriculum document provoked extremes reactions by different groups in the country. At the academic level, the overall reaction was very negative. Cerisara (2005, first published in 1999) analyzed a sample of 26 critical revisions that were sent to the MEC; the author comments on the formal and content aspects that were the objects of criticism in the papers, such as the language used, the structure of the document, the organization of the curriculum by content areas, the specification of "goals, contents, assessment and didactic orientations" (Cerisara 2005, p. 34). Other critical remarks were made about the conceptions of play and movement and the separation between the 0–3 and the 4–6 age groups in the structure of the document. At the final part of her review, Cerisara acknowledges that the final version of the official document took into consideration many of these critiques.

There are many reasons that could explain this negative reception. First, the document was prepared by a government that was mainly dominated by a political party that was identified by many academics as having a neoliberal project for the country. The more to the left Workers Party was in the opposition, and some of the criti-

[3] Pedagogical approach based on Piaget's cognitive developmental theory: children actively participate in their own learning, "constructing" knowledge. In Latin America, Emilia Ferreiro, an Argentinian psychologist that worked with Piaget and lives in Mexico, is very well known by her research on preschool-aged children first hypothesis and conceptions about written language; her research work has contributed to the adoption of "constructivist" approaches to the primary school curriculum in the region.

cism that was made on the curriculum had a partisan nature. Second, the Reggio Emilia experience (see Giuidici and Cagliari, this volume, pedagogics section) became known among educators, and many groups favored its conception of an emergent curriculum and did not accept a more structured pedagogical model for ECE. Another perspective was inspired by the ideas of the Brazilian educator Paulo Freire: a curriculum should have its basis in the local popular culture and should be constructed by the educators and the community themselves, taking in consideration their social reality. More recently, the sociology of childhood has made an impact in the academic area and helped to support the ideal of more relaxed and open programs, which favor free play and the development of the culture of childhood. On the other hand, this was the first time that an official document, that presents a good quality and contains sound orientation for teachers to use in their daily practices with small children, was produced in Brazil. Many private schools began to adopt this curriculum, some public systems also did the same, and up to now it is the official curriculum document best known around the country, according to a recent survey (Brazil 2009b).

59.3.3.2 National Curriculum Guidelines for Early Childhood Education (1999 and 2009)

The National Education Law created a new National Board of Education, composed by two chambers: one for basic education and another for superior education. One of the functions of the Basic Education Chamber was to elaborate national curriculum guidelines for each of the three basic education levels. These general guidelines must guarantee a common basis for the Brazilian education. For this reason, they are very synthetic and limited to the general philosophy and principles that must be respected by all local systems, giving space for the specific needs of different geographical, cultural, and social realities to be contemplated in the local curricula (Table 59.5).

The first national curriculum guidelines for ECE document were organized according to three principles: ethical (autonomy, responsibility, solidarity, respect for the common good, for the natural environment, and for different cultures, identities, and singularities), political (citizenship, rights to criticism, and respect for democracy), and esthetical (sensibility, creativity, ludic orientation, and free expression in art and culture manifestations). The document stresses the importance of integrating education and care; it adopts dialogue and interactions as structuring axis for the curriculum. This interesting approach did not become very well known or understood at the time. It was published some time after the National Curriculum Framework for Early Childhood Education, which was more widely disseminated in the country.

Around 2000 new laws impacted the organization of basic education: children now have to start first grade at the age of 6, instead of 7; preschool includes children from 4 to 5 years old and not from 4 to 6 as before; the fundamental education level is now composed of nine grades instead of eight; and education is compulsory from age 4 to 17. Thus, it was necessary to prepare new general curriculum guidelines,

published by the CNE in 2009, after an intense debate with different groups in the country. The 36-page document adopts the three principles defined in the former document (ethical, political, and esthetical), but it is more detailed and contains more specific norms for various aspects of ECE organization and operation than the former. The document defines two structural axis for the pedagogical practices: interactions and play. These should lead to various experiences proportionated for children, in different areas of development and expression. Such experiences must be integrated in educational practices. There are also some guidelines for assessment: the findings based upon assessment cannot lead to grade repetition; the data have to be based on observation of children in daily situations; data collection should employ a variety of forms; the findings have to be communicated to the families.

So far, reactions to this document have been very positive. One possible reason is that the first versions were discussed in various forums: state congresses, municipal councils, scientific associations, ECE Forum,[4] teachers unions, social movements, and NGOs, among other representative groups. Another explanation is that it is a synthetic document, containing general orientations for ECE, but which does not translate these principles into specific methodologies, leaving that task for the local systems and for the individual ECE centers. The document also avoids some polemic issues, for instance, literacy for preschoolers; it only says that children should have experiences with oral and written languages. An important aspect is the special attention given to social, ethnic, and cultural diversity, focusing discriminated groups like rural and indigenous[5] children. These matters are being ever more present in recent curriculum documents in Brazil.

59.3.3.3 Pedagogical Practices for Racial Equality

Resulting from initiatives taken by social movements, NGOs and academic groups that fight for racial equality in Brazil, the Ministry of Education took part in the publication of two documents focusing on ethnic and racial diversity in the ECE curriculum. They were developed at the NGO CEERT (Center for studies on work relations and inequalities), with the collaboration of other institutions (Silva and Bento 2011; Silva et al. 2012). Both focus on “pedagogical practices that promote racial equality,” giving practical examples from different experiences developed at municipal ECE centers in various regions of Brazil. The first one has a more general approach, with information about international conferences, national legislation,

[4] Civil society mobilizations for ECE are now represented in the local ECE forums, which are part of the Brazilian ECE Inter-forum Movement. They are independent associations that congregate professionals, students, academicals, NGOs representatives, and community leaders. They meet regularly to discuss relevant ECE matters. They organize ECE seminars and participate in different public councils.

[5] The Constitution defines the right for the indigenous people to have education in their own language; presently many schools in the indigenous territories have their own teachers that speak their language and who are prepared in special formation programs. Preschool is not compulsory for indigenous children.

and documents. It is not included in the official MEC website. The second document (see also Table 59.5) gives more attention to the curriculum, with many suggestions to teachers and administrators on space organization, art materials, books, and toys that help to foster racial equality at ECE settings. It is beautifully illustrated and contains many teachers' statements about their positive experiences dealing with small children racial and ethnic identities. There are also books and materials for the indigenous education, produced by many different organizations in the country.

59.4 Curriculum at the Local Education Systems: Results from Two Official Surveys (1996/2009)

Along all these years, many states and municipalities developed their own curriculum proposals or adopted curriculum orientations and materials produced by private consultant organizations or by NGOs. The MEC commissioned two surveys on these local curriculum documents, the first one in 1996 and the second one at 2009 (Table 59.5).

The survey Pedagogical Programs and Curricula for Early Childhood Education (Brazil 1996) analyzed a sample of 45 pedagogical proposals for ECE, collected from states[6] and municipalities from all regions, following a detailed methodological approach specially designed for this project. The authors pointed out that most proposals presented the following problems: they did not consider the child's cultural universe; they adopted an exclusively cognitive approach and the organization of separate content areas, with a major focus on the alphabetization process; they dichotomized learning and development; they valued children's play activities solely as a means to instruction; the transition to the primary school was understood as the adoption of the traditional primary school pedagogical model for younger

Table 59.5 Official surveys on local curriculum documents for ECE – Brazil, 1996/2009

	Documents	Authors
1996	Propostas pedagógicas e currículo em educação infantil (pedagogical programs and curricula for early childhood education)	Ministry of Education (MEC)
		Basic Education Department (SEB)
		ECE General Coordination (COEDI)
2009	Mapeamento e análise das propostas pedagógicas municipais para a educação infantil no Brasil (survey and analysis of municipal pedagogical programs for early childhood education in Brazil)	Ministry of Education (MEC)/
		Federal University of Rio Grande do Sul (UFRGS)

[6] At that time, states were responsible for part of the public preschool services; at the end of the 1990s years, most of them handed over this task for the municipalities. This change was induced by the new national financing system implemented from 1998 on.

children; they did not have an integrated view on care and education aspects in the curriculum. Nevertheless, the review recognized that some proposals presented a very different orientation, adopting a more integrated conception of childhood, valuing both play and learning, and taking in consideration the developmental needs of small children.

In 2009, the Ministry of Education commissioned a new survey on the municipal curricula (Brazil 2009b). This study covered 584 municipalities; 370 of them sent their curriculum documents to be examined. An intentional sample of 48 documents was defined as the corpus for the study. The main results point out the great diversity observed among the documents. Nevertheless it is possible to recognize the presence of some conceptions that became known from the bibliography and the academic discourse, such as children as sociohistorical beings, having their own rights and "producing culture."[7] Even so, the analysis found out that children from 0 to 3 are almost invisible in the documents: 77 % of the curriculum proposals neither mention this age group nor take in account their developmental characteristics. The authors who are mostly quoted are Vygotsky and Piaget; many Brazilian authors are also quoted, and 11 % of the documents do not mention any author. Among the national curriculum documents, the most quoted is the National Curriculum Framework for Early Childhood Education, by 25 % of the sample. The analysis identified 44 % of the documents as being organized by content areas, some of them defined by the traditional disciplines: Portuguese, mathematics, and science, among others. Some of the documents propose a pedagogical model based on thematic projects. Some big changes observed in this sample, compared to the one that was analyzed in the 1996 review, were the importance attributed to play and the absence of the previous focus on alphabetization. Almost all documents mention the importance of linking education and care, but conceptions of care can be very diverse, many of them focusing only on the hygiene and nutrition aspects. Assessment of children is not covered by the survey. The study reveals important tendencies that are present in the groups that either developed these documents in the municipal education departments or commissioned this task to external consultants. Many of these consultants come from the local public universities.

Alongside these initiatives, there are many NGOs and private organizations that are active around the country, giving consultancy to municipalities, offering in-service training for teachers, publishing pedagogical texts and materials, and divulging their own curriculum proposals to the public and nonprofit private crèches and preschools. The majority of these nongovernmental groups adopt more objective and detailed pedagogical models for teachers' daily work with small children.

Both surveys did not cover the products of a growing educational market where "pedagogical packages" are sold to municipalities and individual public and private schools. These "packages" may contain textbooks and exercise sheets, teacher's manuals, and assessment instruments, some of them based on a very traditional model of education. Nascimento (2012) investigated this reality in the municipalities of the State of São Paulo. She found out that 29 municipalities, among the 147 that answered the questionnaires sent by mail, used this kind of materials in their

[7] This expression can be interpreted as a reference to some thesis from the sociology of childhood.

ECE centers. All pedagogical packages were focused on the preschool curriculum and were not used for crèches. The two surveys did not cover the private ECE centers; they compose a very heterogeneous group. Some of them develop important pedagogical experiences, either following a specific curriculum philosophy, like Rudolph Steiner's or Freinet's, or combining more than one theory. Others follow more traditional models or are part of religious institutions that also offer fundamental and secondary education. But a large proportion of private ECE centers are small institutions that use adapted spaces and do not have a clear curriculum option.

59.5 Official Documents on Quality Criteria for ECE

During all these years, several national official documents were prepared defining quality criteria for early childhood education systems and institutions. The definition of quality criteria can be considered as a first step in the development of accreditation and assessment systems. These documents are listed in Table 59.6.

Table 59.6 Official documents on quality criteria for ECE – Brazil, 1995/2009

	Documents	Authors
1995 and 2009	Critérios para um atendimento em creches que respeite os direitos fundamentais das crianças (criteria for day care services that respect children's fundamental rights)	Campos and Rosemberg/ Ministry of Education (MEC) Basic Education Department (SEB) ECE General Coordination (COEDI)
1998	Subsídios para credenciamento e funcionamento de instituições de educação infantil (2 vol.) (basis for accreditation and operation of early childhood education institutions)	Ministry of Education (MEC) Basic Education Department (SEB) ECE General Coordination (COEDI)
2008	Parâmetros nacionais de qualidade para a educação infantil (2 vol.) (national quality parameters for early childhood education)	Ministry of Education (MEC) Basic Education Department (SEB) ECE General Coordination (COEDI)
2008	Parâmetros básicos de infraestrutura para instituições de educação infantil (2 vol.) (basic infrastructure parameters for early childhood education institutions)	Ministry of Education (MEC) Basic Education Department (SEB) ECE General Coordination (COEDI)
2009	Orientações sobre convênios entre secretarias municipais de educação e instituições comunitárias, confessionais ou filantrópicas sem fins lucrativos para a oferta de educação infantil (guidelines for contracts between municipal education departments and nonprofit institutions (community, religious or philanthropic) for provision of early childhood education services)	Ministry of Education (MEC) Basic Education Department (SEB) ECE General Coordination (COEDI)

59.5.1 Criteria for Day Care Services that Respect Children's Fundamental Rights

This document was based on an action research project coordinated by a team of researchers from the Carlos Chagas Foundation, who worked together with researchers and educators at the city of Belo Horizonte, the state of Minas Gerais capital, located in the southeast region of Brazil. The document's first drafts were discussed by a large group of specialists, and the final version was adopted by the MEC as an official orientation for the care and education of small children at ECE centers. The 40-page document has two parts: the first is focused on the individual service, and the second aims at the municipal or institutional administration. The language used in the definition of the quality criteria is very simple and contains concrete examples of positive practices that can be adopted in the daily routines with children. The criteria are presented in an affirmative way, such as follows: "This crèche respects children": "Our children have a right to play; to individual attention; to a welcoming, safe and stimulating environment; to be in contact with nature; to hygiene and health; to healthy nutrition; to develop their curiosity, imagination and expression; to movements in ample spaces; to protection, affection and friendship; to express their feelings; to a special attention during their first few days/weeks when a child starts to go to the day care center; to their cultural, racial and religious identity" (Campos and Rosemberg 2009, p. 13). Each of the quality dimensions offer 10–20 concrete examples of positive practices. Although this document was not prepared with the intention of being understood as a curriculum for ECE, it was widely used as such, in the absence of a more detailed proposal at the time. It is still valued by educators and institutions, and a new 350,000 edition was published in 2009 by the MEC and sent to all ECE public centers in the country.

59.5.2 Basis for Accreditation and Operation of Early Childhood Education Institutions

The next important document that was organized and published by the MEC focused on the role of the state and municipal Educational Boards, which are composed by representatives of educational institutions, public and private. These Boards are responsible for accreditation and monitoring of schools at their respective education systems.[8] The document was discussed with various groups in the country before its final version was completed (Brazil 1998a). It contains a model of legislation to be adopted at the local level, with norms and some quality standards set for buildings,

[8] Each state and municipality can organize their own education system; secondary schools are the responsibility of states, and fundamental schools can be part either of municipal or of state education systems. When a municipality does not have its own system, crèches and schools must be regulated by the State Board of Education.

equipment, and number of children per teacher at each age group, among others topics.

59.5.3 National Quality Parameters for Early Childhood Education and Basic Infrastructure Parameters for Early Childhood Education Institutions

These two documents were prepared by the ECE General Coordination at the MEC as general guides to be followed by local education systems. The first of them summarizes the conceptions of child and of education that are adopted for ECE quality criteria definition and presents the standards already set for ECE centers and governmental policies. The second contains guidelines for ECE infrastructure: how to design new centers or to reform existing ones and what kinds of equipment and materials should be provided for crèches and preschools. As an example of preschool building, an ECE center architectural plan designed for the Belo Horizonte municipality is reproduced at the end of this document's second volume (Brazil 2008a, b).

59.5.4 Guidelines for Contracts Between Municipal Education Departments and Nonprofit Institutions

In Brazil public ECE services can be offered at public administered centers or at private nonprofit centers supported by municipalities. There are different forms of financial support given by municipalities: some are monthly per child allowances; some can be material resources, for instance, food or pedagogical materials; and some others are municipal teachers or other staff that are paid for by the municipality and work at the private centers. This document offers legal advice and general guidelines for these contracts and includes a contract model as a suggestion for the local administrations (Brazil 2009d).

59.6 Official Documents for ECE Assessment

Student assessment, in Brazil, has a history of being used as an instrument to exclude significant numbers of children from education. For many decades of the twentieth century, grade repetition in the first years of primary school represented an important cause of school dropout. Percentages of 40 % or 50 % of repetition at the first grade were not unusual at schools receiving children from poor backgrounds. Children were subject to repetition even at preschool, before entering first grade.

Table 59.7 Official documents for ECE assessment – Brazil, 2009/2012

	Documents	Authors
2009	Indicadores da qualidade na educação infantil (early childhood education quality indicators)	Ministry of Education (MEC)
		Basic Education Department (SEB)
		ECE General Coordination (COEDI)/
		Ação Educativa/UNICEF/
		UNDIME/ORSA
2012	Educação infantil: subsídios para construção de uma sistemática de avaliação (early childhood education: basis for development of an assessment system)	Ministry of Education (MEC)
		Work Group on ECE Assessment

For this reason, the National Education Law determines that children cannot be assessed by preschools as a condition for entering first grade. Assessment in ECE remained an issue that was not very much researched or discussed until recent years. Table 59.7 contains two documents produced by the MEC on this matter.

59.6.1 Early Childhood Education Quality Indicators

This important initiative was initially developed by a group of institutions and later on supported by the MEC. It was part of an alternative project that had as its objective the development of an auto-evaluation methodology that could be used by individual schools to improve the general quality of their work. The first document was aimed at fundamental and secondary school and was prepared by the NGO Ação Educativa, from São Paulo, in partnership with other organizations.

A group composed by the Brazilian ECE Inter Forums Movement, UNICEF, Ação Educativa, and other organizations planned a similar document for ECE – Early Childhood Education Quality Indicators – and afterwards obtained the support from the MEC and the Association of Municipal Secretaries of Education. It was prepared by a representative group of specialists and was widely discussed; its first version was tested in diverse settings in the country. It contains seven dimensions of quality, each one with its own specific indicators: institutional planning; multiple experiences and languages; interactions; health promotion; spaces, materials, and furnishing; staff qualification and working conditions; cooperation with families; and participation in the social protection network (Brazil 2009e). A survey on its use by municipal administrations in the country found out that almost half of all municipalities answered the online questionnaire; 30 % of the answers indicated that they were using the document, some following the proposed methodology of center auto-evaluation and others using it as guidelines for supervision and external monitoring (Brazil n.d., p. 43–47).

59.6.2 *Early Childhood Education: Basis for Development of an Assessment System*

In 2012, the MEC created a work group with the mission of discussing and making a proposal for the evaluation of ECE centers. The final version of this document (Brazil 2012) was sent to the National Institute of Pedagogical Studies (INEP), the national agency responsible for the Brazilian basic education assessment system. This document summarizes the official policies and the assessment orientations that are adopted in the MEC documents and proposes a general framework for the construction of a national ECE assessment system.

The document distinguishes between “assessment at ECE” from “assessment of ECE.” The first is the process conducted by schools and teachers in the pedagogical work developed with small children. It must be based on observation and different forms of documentation on the way children participate and express themselves in the daily life of ECE services. The participation of families and children in this process is welcome. Assessment of ECE is an institutional evaluation; it can be an auto-assessment or an external assessment. It can focus either on individual centers, a specific program, or the ECE policies. The document states: “What is in question is the role of the State in relation to children rights, obligations and guarantees to a good quality ECE” (p. 17). The first drafts of this document were discussed at various meetings; its final version reflects a relative consensus of different groups about what should and what should not be accepted for a national ECE assessment system. The document makes a clear option for the evaluation of the “conditions offered” to children by ECE services and not for an external system that assess children, as the ones already in place at other levels of education.

59.7 The Curriculum Observed in Brazilian ECE Centers Real Life

As mentioned before, in Brazil there is a huge distance between what is defined by law and by official documents and what can be observed on the level of actual infrastructure conditions and pedagogical practices at crèches and preschools. For this reason, it is important to consider what research findings based on observation of crèches and preschools show about the actual curriculum practiced at ECE centers in the country. A review by Campos et al. (2006) covered the empirical studies on the quality of ECE published between 1996 and 2003.[9] The sources were the main Brazilian educational journals and papers presented at the most important Brazilian education scientific association meeting, the National Association of Graduate Programs and Research on Education (ANPEd) Annual Congress. The corpus contains 50 articles and 18 papers presented at the ANPEd ECE workgroup sessions.

[9] This study was conducted for the Early Childhood Policy Review Project sponsored by UNESCO and OECD, with the collaboration of the Brazilian MEC (Brazil 2009a).

These texts were selected for their relevance to education quality, priority being given to papers that presented empirical data on ECE services. The quality dimensions considered for analysis were teacher formation, curriculum, working conditions and educational practices, and relationships with families. The review findings can be summarized as follows:

> In the four issues surveyed, conditions in day care centers are always most precarious, both regarding staff training and material infrastructure, with rigid routines almost exclusively based on actions oriented toward food intake, hygiene, and restraint of children. In comparison, conditions observed in preschools are better as regards staff training and material infrastructure, but routines are equally not very flexible and focused on school activities. In the two types of institutions there are significant difficulties in communication with families, which are usually seen in a negative and biased way by part of day care center and preschool staffs. (Campos et al. 2006, p. 27)

It was not until 2010 that a more broad and objective picture of the quality of pedagogical practices in crèches and preschools in Brazil was presented by a survey coordinated by a team of researchers from Carlos Chagas Foundation (Campos 2010; Campos et al. 2011). The project was commissioned by the MEC, with a grant from the Inter-American Development Bank (IADB). A total of 147 ECE institutions were evaluated. In each capital, a sample of the main types of ECE institutions was selected by a randomized sampling procedure. Environment quality scales – the ITERS-R and ECERS-R – were used to assess groups aged 0–3 and 4–5. The study also used questionnaires for ECE teachers, supervisors and principals, and a school profile questionnaire. In three capitals the samples included private for profit institutions; 36.7 % of the 147 ECE centers were located in schools that also offered other levels of education, such as fundamental, secondary, or adult education. Each of the local researchers visited five or six institutions, staying for 3–4 days in each. The ECERs-R and ITERS-R scales were translated for Brazilian Portuguese, and their layout was adapted for this project. Some of the results are reproduced in the following figures.[10]

Figure 59.1 reveals that only two subscales, Personal Care Routines and Interaction, obtained scores over three points. The score for the subscale Activities was the lowest: 1.9. Figure 59.2 shows the scores for the aspects evaluated in Activities.

The results in Fig. 59.2 suggest that children have very limited experiences in the preschools classrooms. The low scores also indicate that they do not have access to sufficient and adequate pedagogical materials and toys in a daily basis, and meaningful areas are almost absent in the preschools actual curricula. Scores for Program Structure were also low; these results indicate that children are organized in a whole group most of the time and have little autonomy to choose from different activities and participate in small group work or play. Data obtained for crèches, with the application of ITERS-R, show a similar pattern, as can be observed in Fig. 59.3.

[10] Figures reproduced from Bhering (2010).

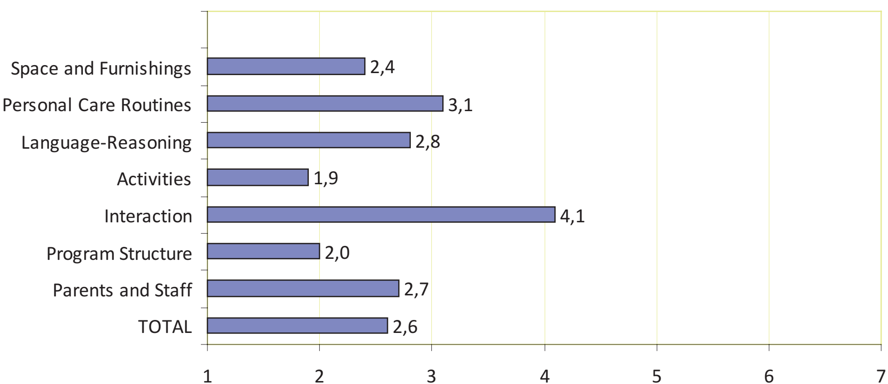

Fig. 59.1 Overall mean and means for subscales – ECERS-R– preschools, age group 4–5

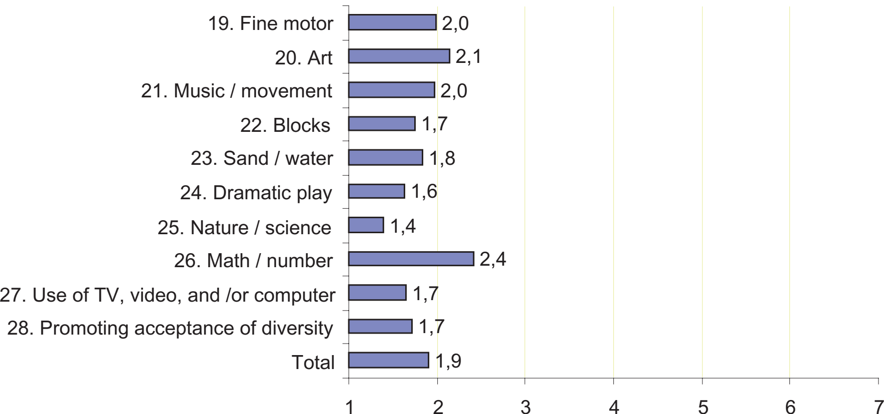

Fig. 59.2 Means for subscale activities – ECERS-R – preschools, age group 4–5

Figure 59.3 reveals that the lowest score is for the subscale Activities, as obtained for preschools. All subscales, with the exception of Interactions, show scores lower than 3 points. Figure 59.4 shows the aspects included in the subscale Activities

The scores in Fig. 59.4 reveal a very poor context for small children's development at institutions where they usually stay for long periods of time, 5 days per week. It should be noted that these scores indicate that almost no material was available for these curriculum areas, like toys, books, and equipment related to each of these aspects. The findings also show that both ECERS-R and ITERS-R scores are highest for Interaction. As other researches that used the ITERS-R with small samples of ECE institutions in the country also obtained similar results, the findings call for further studies in order to obtain more in-depth data about the kind of interac-

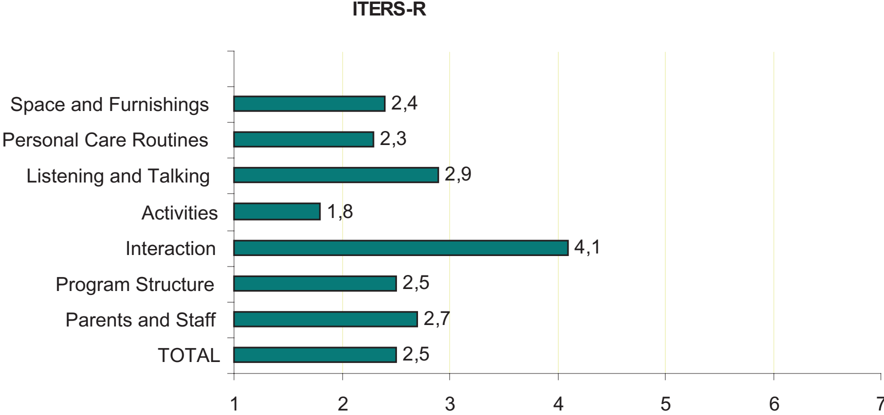

Fig. 59.3 Overall mean and means for subscales – ITERS-R – crèches, age group 0–3

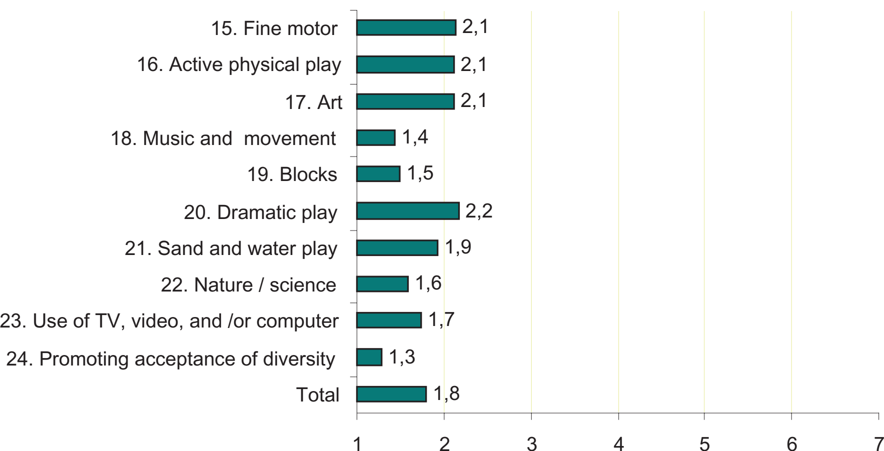

Fig. 59.4 Means for subscale activities – ITERS-R – crèches, age group 0–3

tions that prevail at ECE Brazilian institutions. The comparison between mean scores for the six capitals shows that preschools from one of the least developed regions of Brazil (Northeast) obtained the lowest values; the mean scores for crèches were lower for capitals from the northeast, north, and center west regions. These differences reveal significant social and economic inequalities between different regions of the country. In the least developed regions, there are less financial and technical resources for education, teachers receive lower salaries, and the political context is more backward than in the more industrialized and developed regions.

59.8 The Assessment Practices Observed in Brazilian ECE Centers Real Life

Two reviews, published in Portugal, describe findings from individual studies on assessment practices at ECE systems and centers in Brazil. Both acknowledge that there is a lack of more research on this subject in the country. Oliveira and Guimarães (2012) covered 22 Master dissertations and 6 PhD thesis that focused ECE assessment, presented between 1996 and 2011 at Brazilian universities; 18 of them had information about teacher conceptions and practices at ECE centers. They found out that many teachers favor traditional classificatory children assessment models. Even so, the reviewed studies describe a growing use of portfolios, with teachers trying to follow a more formative evaluation model. In order to do this, they have to face problems like the high number of children in the classroom; many portfolios fail to focus on the individual child and are limited to teachers' general planning for the class. Micarello and Amaral (2012) examined a very similar sample of studies, developed between 1996 and 2012. Most reviewed studies focused preschools; they show that the most used instruments for registering the children's progress are teachers' notebooks, diaries, and portfolios. Another chapter at the same book describes the system used at a municipal ECE network, at the interior of the state of São Paulo, where the Department of Education has a standardized instrument for evaluation of children that all teachers must adopt. The schools send those information to the department, at fixed periods of the year (Garms and Santos 2012).

The picture that emerges from these few studies shows that assessment of children at ECE institutions has been a somewhat rare object of research in Brazil. It is also an aspect that is not being sufficiently addressed by the national official orientations or by most local educational authorities. The available data suggests that this is a subject that most teachers have to decide for themselves; as Micarello and Amaral point out, it is the elementary education model of assessment that tends to occupy this vacant space.

59.9 Final Words

This paper reveals how distant reality can be from the general principles presented in the official curriculum documents for ECE. In general, specialists and researchers are very much aware of this reality. Many questions have been raised about the different factors that contribute to maintaining this situation: teacher's education model, local education administrations, insufficient financial resources, lacking pedagogical supervision, too few toys and materials, or the lack of children's direct access to available toys and materials. The more polemic of all questions is the lack of detailed ECE curriculum documents with concrete orientations that allow translation of general principles into examples of teachers' daily practices with children. Some international studies indicate that the last argument has some research

evidence in its favor. The document Starting Strong II, prepared by OECD (2006), presents a review of different countries' quality improvement and assurance systems. It compares different philosophies and approaches to ECE curriculum, taking into account their diverse social and cultural realities. Considering the need for national pedagogical frameworks, the authors argue that "without such guidelines, inexperienced or untrained staff may easily revert to direct instruction as their default mode or (…) adopt a laissez faire approach" (OECD 2006, p. 134). When it comes to early literacy and numeracy, or general knowledge, the document points out that "these areas can be taken for granted in more homogeneous societies, but become, in multi-cultural societies an issue of equal opportunity for children from low-income and immigrant backgrounds" (OECD 2006, pp. 136–137). The third version of Starting Strong (OECD 2012) confirms those findings. A research brief named "Curriculum matters" mentions the following research results presented in an article from Siraj-Blatchford et al. (2004):

> In infant-toddler settings with a weak pedagogical framework, young children may miss out on stimulating environments that are of high importance in the early years. At the programme level, guidelines for practice in the form of a pedagogical or curriculum framework help staff to clarify their pedagogical aims, keep progression in mind, provide a structure for the child's day, and focus observation on the most important aspects of child development. (OCDE 2012, p. 83)

Teacher's initial and in-service formation is another important matter of concern. The desired profile for ECE teachers cannot be attained with the existing teachers colleges' curricula and the present adopted criteria for teacher's admission at ECE centers. First, the undergraduate courses attended by most ECE teachers are at private superior institutions of low quality. Students must pay for these courses and usually combine work and study to be able to get their diplomas. Second, the Brazilian curriculum for teachers' colleges and teachers' formation at universities is the same for a teacher who is going to work at a crèche, at a preschool, or at the first five grades of the fundamental school (and even at adult literacy courses). So, when a teacher starts to work for the first time at ECE, she or he is not sufficiently prepared for her or his responsibilities and practical tasks. At most municipalities, there is not an experience period for new teachers: when they are admitted by the public system, they usually become responsible for a group of children or a classroom without any further tutoring. The third aspect to be considered has to do with the lack of periodical teacher's assessment at the public ECE centers. Once a teacher is admitted, there are some legal rights conquered by the teachers unions that make it very difficult or prevent altogether the municipal administrations of dispensing those that do not develop good quality practices with small children.

The OECD document points out the importance of a specialized teacher's training curriculum that focus on ECE and on child development, for "not only the level of education but also the content of the staff's education" is important for ECE quality improvement (OECD 2012, p. 147). Many municipalities in Brazil are aware of these problems. They are preparing their own curricular documents; organizing in-service training for teachers, supervisors, and administrators; and hiring pedagogical counselors for each center, and a small number of them are adopting some kind

of external assessment for their systems. For some of these municipal administrations, the challenges are immense: the social demand for crèches is growing and becoming a source of intense political debate; new financing resources are needed, but other social areas also have their own urgent needs, such as health care, and priorities must be adopted.

The second National Education Plan (NEP), discussed at the National Congress in Brasilia for 2 years, was finally approved in 2014. The first NEP was defined for the period from 2001 to 2011 and has not achieved many of its goals concerning ECE. The present NEP sets the goal of 50 % coverage for 0–3 aged children in crèches and 100 % for 4–5 aged children at preschools. It proposes a significant increase in the percentage of the country GNP dedicated to education financing. What remains to be considered is how these ambitious goals are going to be met in a context of growing economic problems and rising demands for other social policies. On the other side, the general basis for a good quality ECE system has been set and has obtained a significant consensus among practitioners, policy makers, social movements, and academics. In the years 2000, at several times, these general orientations have been menaced by legislators, local governments, or other groups; at these moments, it was possible to mobilize several stakeholders in order to oppose those initiatives and reinforce the ECE conception and legal framework defined since the 1988 democratic Constitution.

The panorama presented in this chapter indicates that issues related to ECE curriculum have been seriously addressed by official initiatives in the last two decades. Assessment of children and assessment of services are matters more recently debated, and a more detailed orientation has still to be defined. But many urgent problems must be addressed if Brazilians decide to shorten the distance between what is written and what is practiced in the daily life of ECE institutions. The adoption of more effective enforcing mechanisms to ensure that regulations are followed by the local systems and the individual services is very important to bridge the gap. Nevertheless it is also true that ECE present situation is very dynamic and diverse. Much has been done since a new Constitution was approved, 25 years ago. So, it seems, there is still hope for a more positive future for Brazilian small children education.

References

Bertram, T., & Pascal, C. (2002) *Early years education: An international perspective*. London: INCA. http://www.inca.org.uk

Bhering, E. (2010). *Early childhood education in Brazil: A qualitative and quantitative assessment study*. Greece: ECERS 2010 Meeting, Presentation.

Brazil. (1996). Ministry of Education. *Propostas pedagógicas e currículo em educação infantil* [Pedagogical programs and curricula for early childhood education]. Brasília: MEC/SEB.

Brazil. (1998a). Ministry of Education. *Subsídios para credenciamento e funcionamento de instituições de educação infantil* [Subsidies for accreditation and operation of early childhood education institutions]. Brasília: MEC/SEB/COEDI. (2 vols.)

Brazil. (1998b). Ministry of Education. *Referencial curricular nacional para a educação infantil* [National curriculum framework for early childhood education]. Brasília: MEC/SEB.

Brazil. (1999). Ministry of Education. National Board of Education. *Diretrizes curriculares nacionais para a educação infantil* [National curriculum guidelines for early childhood education]. Brasília: MEC/CNE.

Brazil. (2008a). Ministry of Education. *Parâmetros nacionais de qualidade para a Educação Infantil* [National quality parameters for early childhood education]. Brasília: MEC/SEB. (2 vols.) http://portal.mec.gov.br/seb/arquivos/pdf/Educinf/eduinfparqualvol1.pdf http://portal.mec.gov.br/seb/arquivos/pdf/Educinf/eduinfparqualvol2.pdf

Brazil. (2008b). Ministry of Education. *Parâmetros básicos de infraestrutura para instituições de Educação Infantil* [Basic infrastructure parameters for early childhood education institutions]. Brasília: MEC/SEB. (2 vols.) http://portal.mec.gov.br/seb/arquivos/pdf/Educinf/miolo_infraestr.pdf http://portal.mec.gov.br/seb/arquivos/pdf/Educinf/eduinfparinfestencarte.pdf

Brazil. (2009a). Ministry of Education. *Política de educação infantil no Brasil. Relatório de avaliação.* [Brazil's early childhood education policies. Assessment Report]. Brasília: MEC/SEB/UNESCO.

Brazil. (2009b). Ministry of Education & Federal University of Rio Grande do Sul. *Mapeamento e análise das propostas pedagógicas municipais para a educação infantil no Brasil [Survey and analysis of municipal pedagogical programs for early childhood education in Brazil]*. Brasília: MEC.

Brazil. (2009c). Ministry of Education. *Diretrizes curriculares nacionais para a educação infantil* [National curriculum guidelines for early childhood education]. Brasília: MEC/CNE http://portal.mec.gov.br.

Brazil. (2009d). Ministry of Education. *Orientações sobre convênios entre secretarias municipais de educação e instituições comunitárias, confessionais ou filantrópicas sem fins lucrativos para a oferta de educação infantil* [Guidelines for contracts between municipal education secretaries and non-profit institutions (community, religious or philanthropic) for provision of early childhood education services]. Brasília: MEC/SEB/COEDI.

Brazil. (2009e). Ministry of Education. *Indicadores da qualidade na educação infantil* [Early childhood education quality indicators]. Brasília: MEC/SEB/Ação Educativa/UNICEF/UNDIME/ORSA.

Brazil. (2010). IBGE. Brazilian Institute of Geography and Statistics. *Censo Demográfico 2010*. [Demographic Census 2010]. Rio de Janeiro: IBGE. ftp.//ftp.ibge.gov.br

Brazil (2011). IPEA. Institute for Applied Economic Research. Informações adicionais. Educação [Additional information. Education]. *Políticas Sociais: acompanhamento e análise*. (19). Brasília: IPEA. www.ipea.gov.br

Brazil. (2012). Ministry of Education. Work group on ECE assessment. *Educação Infantil: Subsídios para construção de uma sistemática de avaliação* [Early childhood education: basis for development of an assessment system]. Brasília: MEC http://portal.mec.gov.br.

Brazil. (n.d.). Ministry of Education. *Monitoramento do uso dos indicadores da qualidade na educação infantil* [Uses of the Early childhood education quality indicators follow up]. Brasília: MEC/UNICEF/Ação Educativa http://portal.mec.gov.br.

Campos, M. M. (Coord.) (2010). *Educação Infantil no Brasil: Avaliação qualitativa e quantitativa. Relatório Final* [Early childhood education in Brazil: a qualitative and quantitative assessment. Final Report]. São Paulo: Fundação Carlos Chagas/IDB/ME. www.fcc.org.br/pesquisa/eixostematicos/educacaoinfantil/pdf/relatorio_final.pdf

Campos, M. M., & Rosemberg, F. (2009). *Critérios para um atendimento em creches que respeite os direitos fundamentais das crianças* [Criteria for day care services that respect children's fundamental rights] (2nd ed. http://portal.mec.gov.br). Brasília: MEC/SEB.

Campos, M. M., Fullgraf, J., & Wiggers, V. (2006). Brazilian early childhood education quality: Some research results. São Paulo: *Cadernos de Pesquisa*, *36* (127), 87–128. www.scielo.br/pdf/cp/v36n127/en_a0536127.pdf

Campos, M. M., Esposito, Y., Bhering, E., Gimenes, N., & Abuchaim, B. (2011). Quality of early childhood education: A study in six Brazilian state capitals. São Paulo: *Cadernos de Pesquisa*, *41* (142), 20–54. www.scielo.br/pdf/cp/v41n142/en_v41n142a03.pdf

Campos, M. M., Esposito, Y., Bhering, E., Gimenes, N., Abuchaim, B., Fernandes, F., & Ribeiro, B. (2012). *A gestão da educação infantil no Brasil. Relatório Final.* [The managing of early childhood education in Brazil. Final Report.]. São Paulo: Fundação Victor Civita/Fundação Carlos Chagas.

Campos, M. M., Esposito, Y., & Gimenes, N. (2013). Acesso e qualidade na educação infantil [Access and quality in early childhood education]. *In Todos pela Educação. De olho nas metas 2012* (pp. 66–81). São Paulo: Todos pela Educação/Moderna www.todospelaeducacao.org.br.

Cerisara, A. B. (2005). A produção acadêmica na área da educação infantil com base na análise de pareceres sobre o Referencial Curricular Nacional da Educação Infantil [The academic production on early childhood education from reviews on the National Curriculum Framework for Early Childhood Education]. In A. L. Faria & M. S. Palhares (Eds.), *Educação infantil pós-LDB: rumos e desafios* (5th ed., 19–50). Campinas: Autores Associados.

Garms, G. M. Z., & Santos, M. O. V. (2012). Concepções e práticas de avaliação na educação infantil brasileira.[Assessment conceptions and practices in Brazilian early childhood education] In M. J. Cardona & C. M. Guimarães (Eds.), *Avaliação na educação de infância* (133–149). Viseu: Psicosoma.

Gimeno-Sacristán, J. (2008). *O currículo: uma reflexão sobre a prática* [Curriculum: a reflection on the practice]. Porto Alegre: Artmed.

Kishimoto, T. M. (1988). *A pré-escola em São Paulo (1877 a 1940)* [Preschool in São Paulo, 1877 to 1940]. São Paulo: Loyola.

Kuhlmann M., Jr. (1991). Instituições pré-escolares assistencialistas no Brasil (1899–1922) [Assistance institutions for preschool children in Brazil, 1899–1922]. São Paulo: *Cadernos de Pesquisa*, (78), 17–26.

Micarello, H., & Amaral, M. C. F. (2012). Dilemas e possibilidades da avaliação da/na educação infantil. In M. J. Cardona & C. M. Guimarães (Eds.), *Avaliação na educação de infância* (171–187). Viseu: Psicosoma.

Moyles, J., & Papatheodorou, T. (2012). Cultural perspectives on curricula. Introduction. In T. Papatheodorou & J. Moyles (Eds.), *Cross-cultural perspectives on early childhood* (111–114). London: Sage.

Nascimento, M. L. (2012). As políticas públicas de educação infantil e a utilização de sistemas apostilados no cotidiano de creches e pré-escolas públicas [Early childhood education public policies and the adoption of "booklets" on creches and preschools]. Rio de Janeiro: *Revista Brasileira de Educação, 17*(49), 59–80.

OECD. (2006). *Starting Strong II: Early childhood education and care*. Paris: OECD Publishing www.oecd.org/newsroom/37425999.pdf.

OECD. (2012). *Starting strong III: A quality toolbox for early childhood education and care*. Paris: OECD Publishing http://dx.doi.org/10.1787/9789264123564-en.

Oliveira, D. R., & Guimarães, C. M. (2012). Estudos sobre a avaliação na/da educação de infância: tendências das pesquisas e das práticas brasileiras (1996–2011). [Studies on assessment of/in small children education: tendencies in Brazilian researches and practices (1996-2011)] In M. J. Cardona & C. M. Guimarães (Eds.), *Avaliação na educação de infância* (97–113). Viseu: Psicosoma.

Silva Jr., H., & Bento, M. A. S. (Eds.). (2011). *Práticas pedagógicas para a igualdade racial na educação infantil* [Pedagogical practices for racial equality at early childhood education]. São Paulo: CEERT www.ceert.org.br.

Silva Jr., H., Bento, M. A. S., & Carvalho, S. P. (Eds.). (2012). *Educação infantil e práticas promotoras de igualdade racial* [Early childhood education and practices that promote racial equality]. São Paulo: CEERT/Instituto Avisa lá http://portal.mec.gov.br.

Siraj-Blatchford, I. et al. (2004). Effective pre-school and primary education. *Primary Practice*, *37*, 28–31.

Chapter 60
Review and Reflection on the Curriculum Reform of Early Childhood Education in China

Jiaxiong Zhu and Jie Zhang

Abstract Under the background of rapid socioeconomic changes, early childhood education in China has made great progress during the kindergarten curriculum reform from the 1980s to the present. This paper reviews the curriculum reform and explicates the strong influence of Western early childhood education theories and thoughts on the reform. Although Chinese early childhood curriculum has learned a lot from the Western educational ideas, Chinese people found a lot of challenges in the curriculum reform because there are conflicts between Chinese traditional culture, political system and Western educational ideas. While rethinking the influences of Western theories and thoughts on the reforms, the paper proposes to ponder over several issues, such as value-universal vs. value related, grand theory vs. local knowledge, quality of education vs. equity in education, academic research vs. practical feasibility, and so on. The paper points out that discussion about the future of kindergarten curriculum reform in China should be based on not only an overview of curriculum reform history but also derive from observation on the development of Chinese economy, politics, society, and culture. Now we are excited to find that the government, researchers, and educators have realized some problems and begun to change their action.

Keywords Early childhood education • Education in China • Curriculum reform • Western educational Ideas

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60.1 Introduction

As Chinese economy, society, and culture are developing rapidly, early childhood education in China is also in the midst of a fundamental change. Contemporary early childhood education is becoming more diverse in its forms, funding sources, and educational approaches and is aligning itself with the increasingly open and diversified society. In this paper, we will describe the main dimensions of change, rethink the reform initiatives, and analyze current trends in Chinese early childhood education. Our perspectives in this paper are based largely on our examination of the relevant research literature, on our research experience (especially on Jiaxiong Zhu's contribution over the last 30 years as a scholar and expert in the field of Chinese early childhood education), and on our interaction with providers of Chinese preschool services. They have also been influenced by our communications with many scholars from China and other countries. As well as providing an introduction to the contemporary state of early childhood education in China, we will share our thoughts, concerns, and perspectives with readers.

60.2 A Brief Introduction to the Current State of Early Childhood Education Service in China

Since the establishment of the first kindergarten in China in 1903, responsibility for young children's care and education has been gradually shifting from the home to early childhood facilities. In today's China, childcare and early education has become more available because the government increases investment and gives more attention on its development. According to the Chinese Ministry of Education, about 62.3 % of children between the ages of 3 and 6 were being cared for and educated in early childhood education facilities in the year of 2011. Particularly in urban areas, a lot of children as young as 2 or 3 years of age can spend their whole day in nurseries and kindergartens while their parents work. In addition, because of China's "one child" policy (which lasted for more than three decades, from 1980 to 2015), these institutions are serving a major socialization function. As a result, formal early childhood education plays an important role in Chinese society as well as in children's development. In China, education and care for children between the ages of 3 and 6 are primarily provided in kindergartens (full-day programs serving children from age 3 to age 6), although in rural areas there are some 1-year or half-year pre-primary classrooms in elementary schools serving children in the year prior to first grade. Informal early childhood programs such as family childcare and mobile schools are also available in some areas of the country. Nurseries, on the other hand, serve children younger than 3 and are not considered educational institutions under the supervision of educational authorities. Consequently, this discussion of early childhood education in China will focus on kindergartens and not on nurseries.

60.3 Early Childhood Curriculum Reform in China: From the 1980s to the Present

The most important element of early childhood education reform in China is the curriculum reform. In other words, the reform in contents and approaches of China's early childhood education are most dramatic and crucial. In China, there have been three major areas of early childhood curriculum reform, in the 1920s–1930s, in the 1950s, and from the 1980s to the present time. From the 1980s, China started to carry out the Reform and Open-up Policy, which greatly modified traditional education concepts. Foreign educational theories, such as those of Dewey, Montessori, Bronfenbrenner, Bruner, and especially Piaget and Vygotsky, began to spread widely in China, and the thoughts of recent modern Chinese educationists were brought to the fore again. These ideas challenged the early childhood education system that had existed for more than 30 years. The early childhood curriculum reform began with spontaneous experiments in different parts of the country, gradually expanding from a single subject to the whole curriculum, progressing from city to village, and actively propelling the early childhood curriculum reform on a large scale (Zhu 2002a). The most influential measure of this reform is the "Kindergarten Work Regulations and Procedures," issued by the National Education Committee (the former Ministry of Education) in 1989. The regulations reflect the original aim of the reform, that is, that early childhood education should be oriented to the world, to the future, and to modernization. This document was immediately and widely disseminated throughout the country, and reform was implemented at all levels of administration and in all kindergartens. According to this document, early childhood curriculum should shift from an emphasis on teaching knowledge and skills to an emphasis on the development of children and the acquisition of abilities, from an emphasis on the result of educational activity to an emphasis on the process of activity, and from an emphasis on the uniform curriculum standards to an emphasis on diversified and autonomous curriculum development and implementation. Through administrative policies, the reform content was implemented to each level of administrative organizations and each kindergarten. The regulations adopted theories and practices from different cultures and presented progressive ideas and practices to early childhood educators in China. However, it has been difficult for practitioners to fully embrace this progressive ideology so long as powerful and deep-rooted cultural traditions run counter to modern scientific and democratic ideas (Wang and Mao 1996). For example, the traditional values of obeying authorities and upholding unity are contrary to the goal of establishing a unique and democratic relationship between a teacher and each individual child. In addition, the lack of practical guidelines left many teachers not knowing how to implement the regulations.

To solve these issues, the Ministry of Education (2001) issued the Guidance for Kindergarten Education (trial version) in 2001. The Guidance takes into consideration the gap between progressive ideas and reality and offers compromise solutions by stating some specific guidelines and contents in five different curriculum domains, Health, Language, Science, Art, and Sociability domains, for curriculum

implementation. Besides, although kindergartens are not forced to conduct assessments on children's development, they are still encouraged to conduct educational activity evaluations, and reflecting on curriculum and activities via assessing children's reactions and development with different methods. According to the Guidance, and in order to be consistent with the philosophy of curriculum reform, when evaluations or assessments refer to child development, they should shift from an only emphasis on children's acquisition of skills and knowledge to their development on abilities, emotions, and sociability and from assessing with a same standard to paying attention to children's individual differences.

The reform movement is ongoing. Curriculum approaches are becoming more diverse and aligned with the increasingly open and diversified society. Different curricula such as the Project Approach, Reggio Emilia, and Montessori have been widely adopted and localized (Li and Li 2003). As a result, many new curricula have been developed at the province, city, town, or preschool level. For example, the Integrated Theme-based Curriculum in Shanghai represents a localized progressive early childhood education approach (Zhu 2002b). Many kindergartens were required to develop their own school-based curricula by the local administration department no matter whether they could do it or not. However, many teachers still complain that it is very difficult for them to put the Guidance for Kindergarten Education (trial version) into practice. Mainly aiming to solve this problem, in the end of 2012, the Ministry of Education of China issued the "Guideline for Learning and Development of 3–6 Aged Children," which is developed with the help of the United Nations Children's Fund. Based on the philosophy of protecting children's rights and through developing the standards of children's learning and development, this document aims to reach consensus on expectations about preschool children's learning, help teachers and parents to educate more purposefully, improve children's learning, get all children ready for entering elementary school, promote preschool education fairness, and develop appropriate evaluation tools. Now teachers all over the country have been studying this document and learning how to relate it with their curriculum design and implementation via different kinds of training.

Shortly, over the last 30 years, the Chinese EC curriculum has undergone a lot of changes, especially in the developed cities. Although great progress has been made in early childhood education, there are still many issues and problems facing educators and policy makers in China, such as early childhood education in rural or remote areas, cultural changes and their effects on early childhood education, early childhood curriculum reform, teacher professional development, and so on. While acknowledging the successful and positive ECE progress resulted from the curriculum reform, some scholars and educators have been reflecting on the curriculum reform. The critiques mainly focus on the issue of culturally appropriate of curriculum reform, among which the appropriation of borrowing Western educational ideas and models is a key topic.

60.4 Conflicts between Chinese Traditional Culture, Political System and Imported Western Educational Ideas

60.4.1 Western EC Curriculum Ideas Strongly Affected Chinese Early Childhood Curriculum Reform

Obviously, the early childhood curriculum reform in China from the 1980s has been deeply influenced by the Western educational ideas. Just as what Professor Hua at East China Normal University explained, the Guidelines borrowed heavily from ideas from abroad (Tobin et al. 2009, p. 83):

> Let's be clear, the basic idea of preschool education reform is meant to assimilate international experiences. While in the drafting stage, ideas from different parts of the world were widely discussed such as the Project Approach, Reggio, Developmentally Appropriate Practice, Vygotsky's Zone of Proximal Development, and Multiple Intelligences, there is no question that this modification bears the traces of having assimilated these ideas as well as many key ideas from Japan. However, none of these theories and ideas was explicitly named in the 2001 guidelines. Instead, all of these were integrated under the concepts of "respecting children" and "children's life-long learning"(Tobin et al. 2009, p. 83).

Although none of Western theories and ideas are mentioned in the guidelines, many Western pedagogical theories especially the progressive educational ideas have been introduced to Chinese educators, as well as different kinds of Western curriculum models including the Project Approach, the Montessori curriculum, Reggio Emilia, High/Scope, the Whole Language Approach, and especially DAP (Developmental Appropriate Practice). Many kindergarten directors and teachers have tried to imitate or adapt these models. Although finally some of them have failed to imitate (Li and Li 2003), most people strongly believe that borrowing those "advanced" ideas and practice will be a benefit to produce the kind of creative, individualistic, entrepreneurial citizens needed by China's new economy.

60.4.2 A Hybrid of Three Cultures in Chinese Early Childhood Curriculum Reform

Consequently, there are three distinct cultural threads in the process of early childhood curriculum reform in China – traditional culture, communist culture, and Western culture – which have combined to profoundly shape Chinese people's lives and also different aspects of Chinese early childhood education (Wang and Spodek 2000). Thus, the contemporary early childhood curriculum in China can be seen as reflecting a hybrid of these three cultural threads (Zhu and Wang 2005). Traditional Chinese culture has greatly influenced Asian countries from ancient times. Chinese people are more group oriented, or social unit oriented as opposed to individual oriented, and more extrinsically motivated as opposed to intrinsically motivated (Liu 2003; Tobin et al. 1989). Chinese people also tend to value drilling,

memorizing and discipline rather than creativity, understanding, and freedom (Chan1996; Cheng1996). Confucianism has greatly influenced Chinese educational ideas. In the context of globalization, it may be good for Chinese people to modify their traditional culture, but not to change their own culture totally. For example, in China, the emphasis, traditionally, in language development has been on enunciation, diction, memorization, and self-confidence in speaking and performing. Chinese children learn in preschools how to deliver long, rehearsed speeches flawlessly and belt out songs with many verses (Tobin et al. 1989). Americans, in contrast, tend to view words as the key to promoting individuality, autonomy, problem solving, friendship, and cognitive development in children. In American preschools children are taught the rules and conventions of self-expression and free speech (Cazden 1988). In the process of EC curriculum reform, many Chinese kindergarten teachers tried to change their language-teaching program from emphasizing enunciation and memorization to self-expression and free speech, but they were used to using old strategies and methods based on their own culture. Also, most parents valued enunciation and memorization rather than self-expression and free speech. Even though teachers could discuss the new "Western" thinking about language learning, they still used the traditional methods to teach children language.

The influence of this hybrid on early childhood education has been selective, dynamic, and changing. First, each of the three cultural threads has shaped different aspects of early childhood education. While the influence of the communist culture is evident in practical aspects of kindergarten education, such as organization, administration, and curricular goals and content, traditional culture has had a profound influence on the ideological and philosophical bases of kindergarten, including views of the young child, views of learning and development, and views of appropriate teacher-child relationships.

Sometimes one cultural thread counteracts another. For example, individuality is one of the main goals of the new ECE curriculum. It emphasizes individual differences, individual needs, individual choices, individual expression, etc. But this might pose a threat to the communist social order. So the values of unity, collectiveness, and a subject-based curriculum model, which are traditional in Chinese culture, run counter to these curricula that are built on a culture of individualism. McClelland (1961) has pointed out that the achievement-oriented ego style that is a prerequisite of economic development tends to encourage selfishness and thus poses a threat to social cohesion if it is not corrected by an emphasis on "other directedness" and "collectivity" in the education system.

The pattern of influence has changed over time. In the post-Mao era (1976–), European-American culture has emerged as an important cultural source and has exerted an increasingly powerful influence. The progressive ideology regarding children, educational values, and the curriculum has been a strong force in early childhood education reform in recent years. Meanwhile, the communist culture's control and the influence of traditional culture on early childhood education have been waning ideologically and philosophically (Li 2007). But there have been no major practical changes, especially in the most developing areas.

60.5 Corresponding Challenges in China Are Faced While Implementing the Current Curriculum

With the complex three cultural threads, Chinese people found a lot of challenges when reforming the current early childhood curriculum. Li's (2002) analysis of implanting a borrowed curriculum in Hong Kong also applies to such efforts in China. Li summarized six factors that limit the success of implanting these successful programs: the teacher-student ratio, the quality of the teacher, the resources, the parents' expectations, the educational system, and the sociocultural environment. Obviously in China development is very unbalanced throughout the country, as are developments in early childhood education. That is, contemporary early childhood education in Mainland China is becoming diverse in its forms, funding sources, and educational approaches and is aligning itself with the increasingly open and diversified society since it is strongly influenced by sociocultural changes and conditions. These factors not only challenge the multi-level governance and decentralization of curriculum implementing but also bring many conflicts when only obeying the Western theory. The main conflicts are as follows.

60.5.1 Contradiction Between Curriculum Implementation and Great ECE Resource Disparities Caused by Regional and Economic Differences

Preschool education is not compulsory in China. Only a very small percentage of the total national expenditure on education is used for ECE, and most of it is contributed to the high-developed regions. In China, many young children still have no access to attend 3-year ECE programs even 1-year preschool. Those children are mainly in rural areas, especially in the Western remote areas. Due to the huge regional and economic differences, there are great ECE resource disparities between China's coastal and inland areas, well-developed and developing regions, and urban cities and rural villages. Some of the abovementioned successful Western-style programs, such as the Project Approach and Reggio Emilia pedagogy, require considerable educational resources and a low teacher-student ratio to support the children's wide range of exploration and discovery. Likely, the successful implementation of current curriculum ideas also needs a ton of supportive educational resources, but rural and remote areas have lagged behind in their available resources for early childhood education. They lack financial resources because of the poverty and uneven distribution of the limited educational fees. They have a shortage of qualified teachers due to scarce resources for local preschool teacher education and training, low pay, and a harsh environment. In those areas, most kindergarten teachers have only high school diplomas at best and hardly have a chance to obtain specialized professional training. They also have a lack of parent support because many rural parents work in big cities as migrant workers, leaving their children in the

countryside. As a result, the curriculum can be well implemented in some high-quality kindergartens of well-developed coastal cities but rarely can be used in rural kindergartens located in the interior developing areas.

60.5.2 *Inconsistency Between Curriculum Philosophy and the School Examination System*

In China, school education is closely linked with the examination system, which emphasizes much on commanding academic knowledge. Students' performance at the college entrance exam determines their future fate to a certain degree. In such a situation, many parents anxiously associate their children's future examination success with early childhood education, which is caused by Chinese culture as well as China's current social status (such as a high competition in the labor market). Influenced by the Western education philosophy, the current early childhood education curriculum emphasizes much on meeting children's interests and needs and also the process of education rather than the result. Therefore, the ideas and practice of the current curriculum cannot easily gain acceptance from parents and the society, especially from the low socioeconomic families who are eager to change their current status. Obviously, this situation will affect the whole course of the curriculum implementation and relative assessments. So many Chinese parents' high expectations and demands for academic achievement also challenge these student-centered and child development-based curricula. As a result, assessments in many kindergartens are also challenged by parents' expectations and have to pay much attention on knowledge, skills, and results. Actually, Chinese government has not issued a specific children's development assessment guidance for kindergartens. But in the end of 2012, the Ministry of Education issued the Guidance of 3–6-year-old Children's Learning and Development. Although the Ministry emphasizes that the Guidance is mainly for adults' observation and education on children not just for assessment, it appears that many teachers and parents are still most interested in helping children achieving the knowledge and skill objects mentioned in this document. So it's quite difficult to persuade teachers and parents change their ideas or practice in the social cultural background of school examination system.

60.5.3 *Contradictions Between High Requirements of the Curriculum Reform and Teachers' Low Professional Level*

Generally speaking, the professional level of preschool teachers in China is not high enough to meet the requirements of the current curriculum implementation, as well as the assessment conduction which emphasizes on children's abilities, learning

process, individual development levels, interests, and needs. In addition, the Guideline is relatively generalized and not specific enough, which does not give clear and concrete statements on how to act in practice. Therefore, even in the well-developed areas with high-level preschool faculty, such as Beijing and Shanghai, there is also much misunderstanding about the reform ideas among teachers. This situation brought many difficulties during the process of the curriculum implementation. At the same time, the professional level and training methods of the teacher training institutions have many problems as well. At present, China is undergoing a massive urbanization process. A large number of farmers and their children have moved into cities from rural areas. That brings huge pressure to preschool education, especially in the terms of cultivating enough qualified teachers. One solution is to train persons without ECE professional background to be ones who can implement the current curriculum in a short time, but obviously it will be a great challenge.

60.6 Reflection on the Early Childhood Curriculum Reform: Appropriation of Borrowed EC Curriculum Ideas and Models

Based on the above discussion, it can be easily found that nowadays Chinese curriculum development meets a lot of new problems and challenges. Although Chinese EC curriculum reform has made great progress via learning from the Western education, we think it is time to rethink the influences of borrowed theories and thoughts on the reforms. When rethinking, here we will ponder over several issues, such as value-universal vs. value-related, grand theory vs. local knowledge, quality of education vs. equity in education, and academic research vs. practical feasibility.

60.6.1 Value-Universal vs. Value-Related: EC Curriculum Reform in China Should Be Sensitive to Chinese Culture

The early childhood curriculum reform in China should not depend too much on European-American ideas. There are obvious differences between China and the West. Educational approaches have a cultural character: Western ideas and approaches have their cultural values, and Chinese early childhood education has its own values. Following recent research in China, Tobin (2007) concluded that the government was using the reform of early childhood education as a tool for producing a labor force able to compete more effectively in the global economy. “Many American early childhood educators would no doubt welcome the spread of constructivism, learning centers, self-expression, and the project approach in Chinese

preschools. But as an educational anthropologist I worry about how these approaches will be integrated with Chinese cultural values and be made responsive to the concerns and conditions of local Chinese communities. Many countries in Africa, Latin America, and Asia that are much poorer than Turkey and China have much less ability to stand up to the pressure to introduce a Western approach to early childhood education. Help from North Americans in developing their systems of early childhood education is welcomed by many poor countries, but it is important that they do so on their own terms, in ways that respect their local cultures" (Tobin 2007, p. 142). Actually there is no high-quality curriculum that can be effectively adopted in all different cultures, and it is important for us to look into and think about the culturally embedded nature of these successful curricula and identify these cultural factors in the process of appropriating and localizing any borrowed curriculum. It is very important that while indigenizing ideas from the west, our curriculum reform should reflect on our own culture's merit and try to preserve it and be sensitive to its demand. Actually, this issue has been noticed by the government over time. Correspondingly, child development assessment for curriculum implementation and improvement should also consider the cultural background. We should not just think of assessment from the view of psychology.

60.6.2 Grand Theory vs. Local Knowledge: EC Curriculum Reform in China Should Be Sensitive to Chinese Multi-level Social Ecology

When borrowing the Western theories and practice, people usually think it is the most "advanced" and "correct" ideas. This kind of view regards early childhood education as being objective, universal, and value-neutral but neglects the contextual difference and cultural diversity. So all kindergartens are hoped to use the "correct" ideas and put it into practice. But China is a big country, and there are obvious differences between Eastern and Western, rich and poor, and urban and rural areas. Many sociocultural or ecological theories have enlightened us that we should not pay too much attention to the Western theories as a single quality standard. We should consider the serious disparity of early childhood education in different areas in China. We need to focus on all groups in different areas and create equitable social, cultural, economic, and political relationships among them. Early childhood curriculum reform including assessment inform in China should acknowledge these differences between different groups in different areas and develop different curricula for them (Zhu 2004). For example, in some poor areas, many disadvantaged young children from low-income families are eager to learn, but their parents have no ability to teach them some basic knowledge. What we need to do is to give them more basic educational opportunities including reading, writing, and calculating via play and other appropriate approaches. Some curricula, such as the Project Approach and Montessori, are too expensive to afford in these contexts and may not be suitable for those children.

60.6.3 Quality of Education vs. Equity in Education: EC Curriculum Reform in China Should Be Sensitive to Some Social Problem Solving

Another issue is that Chinese people hope that Chinese early childhood education reaches the high-standard quality by borrowing the Western ideas and practice. So lots of resources including money are invested to those good kindergarten by the government, aiming supporting the development of high-qualified kindergartens which will be as good as the Western preschools. But at the same time, many children in many remote areas actually have no opportunities to go to preschool. In this kind of situation, we would like to argue that prevalence access to early childhood education may be the most urgent task for the government to consider, not investing public resources to urban qualified kindergarten to using the Western educational approaches or ask the few rural kindergartens work hard to keep pace in the ones in cities in the terms of Western "quality." Meanwhile, China is making great progress economically. The Reform and Open-up Policy has brought significant advances in the past 20 years, but new problems crop up when old ones get solved. We never expected that the levels of one-parent families, child abuse, sexual discrimination, and ethnic diversity would increase so quickly. Early childhood curriculum reform in China should be sensitive to the need to solve these social problems. We need to be concerned about children's basic rights including equal entitlement to enjoy public early childhood services and to fair and just treatment. We need to think of ways of solving social problems such as gender discrimination, child abuse, racial discrimination, as well as those associated with the "only one child" policy.

60.6.4 Academic Research vs. Practical Feasibility: EC Curriculum Reform in China Should Match EC Teachers' Professional Level

The majority of Chinese EC teachers were accustomed to the curriculum and way of teaching which were adapted from the USSR (from 1950 to the 1980s) and did not grasp the essence of child-oriented educational theory or the practical application of child-oriented activities. The early childhood curriculum reform planned to change the knowledge and skill focused, subject-based teaching mode, and to promote an integrated-day approach at kindergartens, but it failed to shake the core of old curriculum and teaching approaches, in which the goal was prescribed by teachers as training and preparation for assessment. A number of approaches and practices were promoted in this reform, but many of them were not successful, especially in the developing areas. Even now, we are still far from having achieved ideal approaches to planning. After the curriculum reform, early childhood teachers know more new theories and ideas about education and teaching, but such knowledge

does not automatically bring changes in educational practices. New perceptions do not necessarily lead to new ways of behaving. When teachers face complicated and varied pedagogical contexts, it can be very difficult to make sure that their teaching is meaningful. However, after the curriculum reform, many early childhood teachers think that it is not easy to be a teacher and that to be a good teacher is even more difficult. Although there are teaching methods, there is no method which is suitable for all circumstances. Anecdotal evidence suggests that some early childhood teachers even complain that teachers who could teach well in the past now do not know how to teach, while the teachers who did not know how to teach in the past have now become more happy-go-lucky. Sometimes teachers should teach, sometimes not; sometimes they should intensify, sometimes induce, sometimes insist and control, and sometimes wait patiently. To know when to teach, what to teach, and why to teach is much more difficult than to simply advocate teaching or constructing. To know how to decide when teachers should constrain children, or how to insist on obedience without disturbing children's independent development, is much more difficult than only considering constraint or cooperation. Aiming to make teaching meaningful can be an important standard when evaluating whether or not teachers should teach and how they should teach. How to make children's learning and teachers' teaching meaningful might be one of the most important things for early childhood teachers to think of. The teachers need to be concerned about the practical rather than the theoretical effectiveness of the curriculum. They recognize that they need to make authentic connections between the learning tasks they plan and the activities which children themselves initiate. However, it is very difficult to achieve this connection. Teachers need not only to reflect on past and ongoing behaviors but also on the process of reflection. Then they can improve themselves. The early childhood curriculum reform in China should match EC teachers' professional level and help them to solve the practical problem. Otherwise, it will be meaningless even though the curriculum may appear to be valuable.

60.7 Some Developmental Trends in Current Chinese Early Childhood Curriculum Reform

Obviously, the future of kindergarten curriculum reform in China should be based on not only an overview of curriculum reform history and influences of Western theories and thoughts but also an observation on the development of Chinese economy, politics, society, and culture, such as imbalance of economic development among different regions, the shortage of resources especially the funding and the qualified teachers, diverse cultures, multiple languages, methodology of decolonization, and localized knowledge, etc. Now we are excited to find that the government, researchers, and educators have realized some problems and begun to change their action. Some of the developmental trends are as follows.

60.7.1 Pay More Attention to Preserve Chinese Own Traditional Culture

Chinese government has noticed the importance of preserving and developing Chinese own culture. Some local governments even issued some documents to embrace the traditional local culture into education concluding the early childhood education. But at the same time, we would like to urge policy makers and educators in China, as they engage with globally circulating ideas, to value more highly their own indigenous ideas and practices, and not be in a rush to replace them.

60.7.2 Pay More Attention to Early Childhood Education in Rural and Remote Areas

China has a vast territory, many minority groups, and a wide range of economic development levels. Historically, rural and remote areas have lagged behind in their educational resources and educational quality. Since the enactment of the market economy and open-door policy in the early 1980s, the gap between these areas and developed areas has been widening. While the cities and towns along the east coast are enjoying the rapid spread of modern conveniences, some areas in the west and southwest are still dealing with hunger. In recent years, the government has been pushing for a Western-style, forward-looking economic reform aiming to jump-start economic development in these areas. Early childhood education in backward areas has also received great attention. Due to the limited resources in these areas, the state and local governments concentrate on establishing pre-primary classes in local elementary schools. Built on the existing elementary education infrastructure, pre-primary classes are set up to provide full-day or half-day early education programs for children in the year prior to first grade. This approach greatly expands much-needed early education in rural or remote areas. However, because the programs are put in elementary schools, the pedagogy and curriculum are often simply a lighter version of first grade. Although it helps prepare young children for elementary education, the practices of elementary education – long class sessions and rigid discipline requirements – are often risky for young children's development. These areas are in urgent need of teacher training, pedagogy, and curriculum that are tailored to pre-primary classes.

In 2011 the Chinese government has issued the "National Outline for Medium and Long-term Education Reform and Development (2010–2020)," which briefly lays out the direction of Chinese education for the next 10 years. This outline has been more than a year in the making, with a large amount of public consultations, online consultations, and a series of expert roundtables, where both the Minister of Education and the Prime Minister of China have participated. The National Outline put forward the objective of popularizing preschool education by the end of 2020 in China. It proposed that China should strengthen the government's responsibilities

on preschool education development (including planning, investment, and supervision); set up a universal, flexible, and public ECE service system; help rural, poor, and remote areas to develop their preschool education; and ensure the education rights of disadvantaged children. According to the idea of this outline, we believe that the implementation strategies of current curriculum should be adjusted. That is to say, apart from further promoting the current curriculum implementation, the government should develop different curricula for rural and remote areas, especially providing comparatively high-structured curricula which will be easily understood and operated by teachers, even those without longtime professional training.

60.7.3 Positive Promotion of Teachers' Professional Development

It is acknowledged that teacher training is crucial to the success of curriculum reform. The current reform aims to modify curricula to enable them to be diversified and flexible enough to suit local and individual programs' needs. However, many directors and many teachers of kindergartens who are used to the traditional subject-based curriculum and teacher-centered pedagogy are experiencing great difficulties in implementing the new curriculum, pedagogies, and assessment. There are some fundamental problems in teacher training. First, students majored in early childhood education have relatively low academic qualifications. Although new programs require 2-year or 4-year college degrees, many in-service teachers have only the equivalent of a secondary level education. Low academic training hinders teachers' understanding and adoption of the new curricula and pedagogies. Second, too much emphasis still tends to be placed on skills rather than on pedagogy in many early childhood teacher education programs.[1] Traditionally, students in early childhood training courses spend most of their time improving or perfecting their art skills – drawing, singing, and dancing – which are deemed important skills for successful kindergarten teachers. Much less attention and effort have been put into developing understanding of pedagogical principles, such as "to understand and support children's interests," "to observe and assess children's development of abilities," and so on. Although more and more programs are correcting this unbalanced focus, the continuing influence of the traditional view and many kindergartens' traditional preference for skills still affects teacher training. Third, there is too little classroom practice in teacher training, especially in 4-year university programs. For example, some universities require only 8–10 weeks of student teaching in their 4-year programs. A lack of experience in the classroom means that these future teachers are ill prepared. In addition, many faculty members in early childhood teacher education programs do not have solid teaching experience in kindergarten. This greatly limits their ability to help their students to apply theories to their teaching practice. Finally,

[1] In China, the main content of curricula for students majored in early childhood education are decided and arranged by colleges or schools themselves.

there is a severe lack of programs for training teachers for rural areas, which usually have a low quality of teacher to begin with due to scarce resources for local preschool teacher education, low pay, and a harsh environment. In those areas, most kindergarten teachers have only high school diplomas at best and hardly have a chance to obtain specialized professional training. The lack of support and professional development even causes an already distressing situation to deteriorate.

All of these problems need to be dealt with urgently by governments and training institutes in order to improve the quality of teachers and eventually to improve early childhood education in China. Actually, the government is now beginning to pay more attention to guide and improve teachers' professional development. More money has been invested in teacher training, and the training programs put more emphasis on teachers' practice such as teachers' daily interaction with children rather than on theories. On November 3 2011, the State Council of China issued five policies and measures for early childhood education, one of which is "to strengthen the construction of preschool teaching staff." The concrete measures include to determine a reasonable child-teacher ratio, gradually cultivate adequate faculty for public kindergartens, improve the preschool teacher training system, build high-quality normal schools and majors for preschool teacher education, provide national training to 10,000 selected kindergarten directors and elite teachers during 3 years, and extend the training at the local level to all of directors and teachers during 5 years. From December of 2011, the Ministry of Education has officially launched the national kindergarten teacher training program which is supported by the government's special funding and selected qualified domestic educational institutions. During the first year, about 600 selected kindergarten teachers attended this training program. Later more and more teachers are or will be involved in this training program. This training program has been undoubtedly playing a positive role for improving the professional level of Chinese kindergarten teachers and changing the status of the implementation of existing curriculum in China. However, most trainings are still focusing on introducing some Western theories. In this case, few scholars including us put forward the opinion that different teachers should have different kinds of professional training. Actually, some strategies for teacher training have been used by some local administrations as the following: establishing abundant curriculum resources and encouraging teachers to use for high-quality kindergartens, focusing more on practice in the context rather on theory in in-service training by using case study, teaching research rooted on kindergarten, documenting children's and teacher's behavior to reflect teacher's teaching, etc. Thus, teachers can be sensitive to the different cultures and contexts while implementing the curriculum.

For kindergartens in developing areas and/or rural areas, providing curriculum resources, even high structured curriculum, which are easy to access and easy to use, preschool teacher education and training for them is not mainly impractically focused on helping teachers to construct tacit knowledge via their own introspection. Instead, the main concern is placed at helping most teachers to successfully complete basic teaching tasks and achieve basic competencies.

60.8 Conclusion

It is clear that early childhood education curriculum in China including assessment is strongly influenced by sociocultural changes and conditions. ECE in China reflects the hybrid of traditional, communist, and Western cultures. China should consider the complex cultural background, keep rethinking what has happened in the past years, and continue to promote reform in early childhood curriculum. Likewise, when constructing and implementing early childhood education curriculum and assessment system, it's too ideal for every country to only consider development psychological theories. Every country should consider its sociocultural background as an important factor. If we had the opportunity to advise policy makers and educators in the West, our suggestion would be to become more aware of the implicit cultural values in ideas about early childhood curriculum and assessment which we tend to think of as universal and to be open to exposure to unfamiliar ideas from abroad. We believe we need to learn from and complement each other. We believe one day China will be also a producer of educational approaches not just a consumer of the Western ideas. For instance, Chinese teachers are quite good at planning and implementing effective instruction with a large group, which may inspire some Western educators. Another instance is, while Chinese educators are trying to emphasize less on knowledge, skills, and learning results in curriculum and assessment, some Western educators may shift from only caring about the learning process to paying more attention to the results. In this situation, China may provide some good experiences.

References

Cazden, C. (1988). *Classroom discourse*. Portsmouth: Heinemann.

Chan, J. (1996). Chinese intelligence. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 93–108). Hong Kong: Oxford University Press.

Cheng, K. M. (1996). *The quality of primary education: A case study of Zhejiang Province, China*. Paris: International Institute for Educational Planning.

Li, H. (2002). Reforming the early childhood curriculum in Hong Kong (in Chinese). *Hong Kong Journal of Early Childhood, 1*(1), 44–49.

Li, H. (2007). Universalism or relativism : Rethinking Chinese early childhood education reform from a cultural perspective (in Chinese). In J. Zhu (Ed.), *Chinese perspectives on early childhood education* (pp. 54–77). Shanghai: East China Normal University Press.

Li, H., & Li, P. (2003). Lessons from implanting Reggio Emilia and Montessori curriculum in China (in Chinese). *Preschool Education, 9*, 4–5.

Liu, Q. (2003). Understanding difference culture patterns or orientations between East and West. *Investigationes Linguisticae, 49*, 20–28.

McClelland, D. (1961). *The achieving society*. Princeton: Van Nostrand.

Ministry of Education of the Peoples Republic of China. (2001). The Guidance for Kindergarten Education (trial version). Retrieved June 5, 2008 from the website of Ministry of Education of the Peoples Republic of China: http://www.moe.edu.cn/edoas/website18/92/info692.htm

Tobin, J. (2007). An ethnographic perspective on quality in early childhood education. In J. Zhu (Ed.), *Global perspectives on early childhood education* (pp. 131–143). Shanghai: East China Normal University Press.
Tobin, J., Wu, D., & Davidson, D. (1989). *Preschool in three cultures: Japan, China, and the United States*. New Haven: Yale University Press.
Tobin, J., Hsueh, Y., & Karasawa, M. (2009). *Preschool in three cultures revisited*. Chicago/London: The University of Chicago Press.
Wang, J., & Mao, S. (1996). Culture and the kindergarten curriculum in the People's Republic of China. *Early Child Development and Care, 123*, 143–156.
Wang, X. C., & Spodek, B. (2000). Early childhood education in China: A hybrid of traditional, communist, and western culture. Paper presented at the annual meeting of the National Association For The Education Of Young Children. Atlanta, GA.
Zhu, J. (2002a). Early childhood care and education in P. R. China. Paper presented at 2002 KEDI-UNESCO Bangkok Joint Seminar and Study Tour on Early Childhood Care and Education. Seoul Korea.
Zhu, J. (2002b). *Early childhood curriculum reform in Shanghai kindergartens: Case studies*. Singapore: Keynote address at the OMEP/ICEC Asia Pacific Early Childhood Conference.
Zhu, J. (2004). Reflection on the two-decade reform in early childhood curriculum in Mainland China, Hong Kong. *Hong Kong Journal of Early Childhood, 3*(2), 5–8.
Zhu, J., & Wang, X. C. (2005). Early childhood education and research in China. In B. Spodek (Ed.), *International perspectives on research in arly childhood education contemporary* (pp. 55–77). Charlotte: Information Age Publishing.

Chapter 61
Constructing Early Childhood Curriculum and Assessing Young Children in Israel's Mosaic of Cultures

David Brody

Abstract When the nation of Israel was declared in 1948, a strong culture of formal education was already in place, including preschool education. The early Zionist ideals of return to the ancestral homeland and the revival of the ancient Hebrew language were driving forces behind the early moves to establish preschool frameworks for the children of the early pioneers. Traditions such as Froebel influenced a play-based curriculum. With the state's founding, the Jewish population tripled within 10 years, due to massive immigration of European Holocaust survivors and Jews from Arab nations who had been expelled. The public schools took on the task of socializing the immigrant children through an early childhood curriculum based heavily on learning Hebrew and instilling cultural values. During the first decade of the state, the school system was divided into sectorial factions: Jewish, Arab, and Christian. A common secular and academic curriculum was established, allowing for young children to learn their own language and religious traditions. Over the past 30 years, curriculum initiatives cut across these sectorial divisions, focusing on specific areas such as art, family, music, science, safety, and language development. In addition, a comprehensive assessment program was offered to the teachers as a means tracking children's progress. In the last 10 years, the Ministry of Education developed core curriculums for major domains: literacy, math, technology and science, and physical education. A recent educational reform requires evaluating children's competencies according to core domains. As a result, the strong socialist tradition of unionism has come to the fore, with teachers expressing organized opposition both to the core curriculum and the assessment expectations at the expense of the play-based program which has been the basis of Israeli early childhood education since its inception. These dynamic social forces will continue to determine the nature of curriculum and assessment in Israel into the future.

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61.1 Introduction

The education of young children has been an important feature of the Jewish state long before it declared independence in 1948 as a Jewish state with equal rights for all of its citizens regardless of religion, race, or creed. This chapter begins with a brief description of the historical foundations that are a basis of the current early childhood delivery system. Because the population of Israel is composed of a mosaic of nationalities, language groups, and religions, it is appropriate to investigate the particular characteristics of the early childhood curriculum for each of these sectors. In this chapter curriculum is defined as an enterprise that shapes the content of what is taught in the preschools and kindergartens, particularly those under the aegis of the Ministry of Education (MOE). Pedagogic methodology is also included in our definition of curriculum, and these methods are often subsumed within any formally published and distributed material that delineates content. Following this analysis of the development of the early childhood curriculum over time and in the different sectors, I explore the very recent development of child assessment within this complex of cultural heterogeneity. Assessment is defined in this chapter as a formal endeavor to evaluate children's development in the various domains and their learning of specified content. Formal assessment has been promoted by the MOE only during the last 10 years. Compared to the rich history of early childhood curriculum that has flourished for more than a hundred years, assessment is less well articulated. Therefore, the section on assessment is considerably shorter than that devoted to curriculum. Neither curriculum nor assessment in Israeli early childhood education has benefited from rigorous research. In order to formulate an accurate picture of these topics, I have turned to experts and those in positions of authority through interviews. These personal accounts form a substantive portion of the material presented here, backed up by published documents when available. The result is as comprehensive an analysis as could be attained given the dearth of published material. The Ministry of Industry Trade and Labor is responsible for the care and education of children ages 0 until age 3, and the MOE is responsible for ages 3–6. Children enter grade 1 at age 6–7, after a full year of "obligatory kindergarten." I will refer to all programs of the MOE for ages 3–6 as kindergartens and will use the term daycare for programs dealing with children ages 0–2. These terms roughly correspond to the Hebrew and Arabic terminology in use today by Israeli early childhood educators from all sectors.

61.2 Israeli Early Childhood Education: An Historical Overview

Israeli early childhood education mirrors ideological and cultural developments of this young country that are imbued with Zionist ideology as well as Jewish tradition. In order to fully understand the structure and content of curriculum and assessment of early childhood education (ECE) in this society, we must first look briefly at the historical and societal context that spawned this unique educational system. Jewish tradition has always valued education, and boys traditionally began to study from the age of 3. During the nineteenth century, many of the ideas of European nationalism and the enlightenment were adopted and adapted by Jews, modernizing Jewish education, including providing formal instruction for girls (Grunwald 1975). These reformers were interested in integration with the general society, while at the same time some became intrigued with the idea of returning to a national state. Coupled with anti-semitism, discrimination against Jews, exclusion from the mainstream of European society, and eruptions of periodic violence, the ideal of peoplehood with its own land triggered the imagination of those who sought to establish a Jewish state in the ancient homeland of Palestine with its biblical ties and with its continuity of Jewish inhabitance over the centuries (Sacher 2010). The first Zionists arrived in Palestine in the late nineteenth century. These pioneers, well acquainted with European nationalist ideologies, viewed the establishment of schools as an important vehicle for realizing their ideological agenda of creating a new society with energetic Jews working the land in a Jewish state (Reichel 2009). One critical aspect of nation building was the decision of the early Zionists to revitalize the ancient Hebrew language (Stavans 2008). Attempts at establishing kindergartens were made by philanthropic organizations and individuals during the second half of the nineteenth century (Elboim-Dror 1990). The first kindergartens established by these pioneers emphasized Hebrew as the language of instruction. They were viewed by their founders as the ideal framework for nurturing the "new Jew" who would realize the ideals of Zionism (Reichel 2009). These educators were aware of current developments in ECE in Europe, and they saw Froebel's model (see Johansson, this volume in Pedagogies section) emphasizing the special needs of young children as an appropriate paradigm for their nascent educational enterprise (Snapir et al. 2012). The establishment of kindergartens based on the teaching of the Hebrew language was for the most part driven by a German philanthropic society, the Hilfsverein. This organization not only funded the teachers' salaries and built classroom buildings, it also established a teacher seminary (Rinott 1986) staffed by instructors whom they sent to Germany to study at the Froebel Institute, Pestalozzi-Frobel Haus. They were selected on the basis of their knowledge of Hebrew, facilitating a Zionist agenda as well as a commitment to educating young children according to the most current theories of the day. Snapir et al. (2012, p. 39) called this stage of the development of Israeli ECE "the period of the Hebrew child," which stresses character development and the acquisition of the revitalized ancient language.

Many of these early endeavors to establish kindergartens were initiated by young women from Europe with little training, and who had settled the land and were com-

mitted to educating the next generation of Zionist pioneers. They organized themselves into training cohorts and shared their knowledge of Hebrew as well as methods of teaching young children. This cooperative endeavor meshed well with the socialist ideals of the early Zionists. These kindergarten teachers generated their own curriculum and teaching materials where none existed, and they conducted summer courses to further their knowledge and practice. They also mediated with the philanthropic funding agents from Europe in order to gain support for opening new kindergarten classes. The kindergarten teachers' professional identity was so strong that they withdrew as a group from the General Teacher's Union and formed their own professional organization in 1928. In addition to managing their own professional development, they advocated for better conditions for the children they taught as well as for themselves (Snapir et al. 2012).

61.3 The Task of Immigrant Absorption

The establishment of the state in 1948 brought with it a steep increase in Jewish immigration. These new citizens included survivors from the Holocaust in Europe as well as Jews from Arab countries throughout the Middle East, all hoping for a better future in the new state of Israel (Hacohen 2003). Within a span of 3.5 years, the country's Jewish population doubled (Halamish 2008). Formerly organized by political Zionism movements, the schools were incorporated into a state-wide system under the authority of the new education ministry. In 1949 free and compulsory public kindergartens from age 5 were mandated by law (Tadmor-Shimony 2011). At this stage, the kindergarten teachers re-joined the General Teacher's Union, an act of solidarity to guarantee their rights as state employees. A supervisory apparatus was established as well. Modeled on the British system already in place during the British Mandate in Palestine (1920–1948), state inspectors were given authority over the hiring and curriculum implementation of all kindergarten teachers according to geographic area. Based on the progressive theories of Froebel and Montessori (see Gustafsson, this volume in Pedagogies section) that kindergarten education should maintain its integrity with a play-based curriculum, the kindergartens were physically situated in separate buildings spread throughout the communities. Enrollment was organized according to neighborhood with an attempt to extend the communal social structure by grouping children by neighborhood. During the first decade of the state (1948–1958), the agenda of the entire school system, including the kindergartens, was integration of the immigrants in the new Israeli society, a task that involved inculcating the Hebrew language and Zionist ideals of the new State. The model of "the melting pot" was in vogue, attempting to obliterate the many Diaspora cultures of the various immigrant groups, in favor of a well-articulated unified national Zionist culture. This agenda continued trends from the pre-state period, such as reframing of the traditional Jewish holiday narratives to put forth a nationalistic and militaristic modality that was considered necessary in the face of incessant threats from neighboring Muslim countries (Furman 1999). Early curriculum efforts to support the new national culture focused on songs, children's

poetry, and stories, as well as oral language. Following this initial period of immigrant absorption, the early childhood curriculum underwent three major transformations, each lasting a decade or more. These include a focus on compensatory education, followed by the development of well-articulated published curriculums based on subject matter disciplines, and lastly, the formulation of core curriculums with academic standardization. Each of these will be explicated below.

61.4 Compensatory Education

The massive influx of Jews from the European and Arab countries resulted in social stratification, with Jews from Western (European) countries who were often among the veteran citizens occupying the upper echelons of society and the Eastern Jews and newer groups filling the ranks of the lower classes (Hacohen 2003). Jewish immigrants from Arab countries on the average had a lower level of education than their European counterparts and the Jewish population already living in the country (Cohen 2009). Children of Middle Eastern heritage were characterized by their low achievement in the schools (Smilansky and Shephatiah 1977). In order to remedy this situation, from the 1960s, the Ministry of Education (MOE) committed to an egalitarian social agenda and focused attention on these weak populations. They labeled the children of Eastern backgrounds with the nonjudgmental term "in need of nurturance."

Higher ratios of staff to children were set up in the towns and urban neighborhoods where these disadvantaged populations were concentrated and special curriculums were set up to bridge the achievement gap (Paz 1990). In elementary and junior high schools, an integration program was established that included bussing children across the cities to achieve an ethnic and social-class balance within the schools. This program was not implemented in the kindergartens, which remained geographically based in the residential neighborhoods, and therefore ethnically segregated. However, a new approach called "intensive education" was introduced in the kindergartens to prepare these children for first grade. This approach used formal instruction at the expense of play and took the form of teacher-led activities particularly in small groups, the use of didactic games and worksheets, and a regime of structured daily routines. Preparation for first grade was seen as the major goal of the kindergarten. At this stage ethnic background was often identified with academic ability and achievement. This compensatory education campaign was not as successful as its champions expected, and the movement gave way to other agendas, the first of which was an approach that promoted curriculum based on specific subject matter, as will be described in the next section.

61.5 Discipline-Driven Curriculum

Curriculum in Israeli preschools is largely determined by successive heads of the preschool division of the MOE. Over the last three decades, these changes have been marked by the creation and implementation of central documents that reflect a particular approach to curriculum. The first such critical document was the

Curriculum Framework for the Preschool published in 1994 (Limor and Sela 1994). This document divided the curriculum according to basic skills including thinking, language, health education, physical education, and safety. It further broke down the curriculum into disciplines including math, the arts, literature, science, and social studies. In a syllabus format, goals were assigned to each discipline, and they were sequenced by their complexity instead of by age. This Curriculum Framework was viewed as the theoretical basis for written programs and teacher guides focused on specific subject matter, such as peace, Jerusalem, environment, family, famous artists, music appreciation, gender equality, and disability awareness. In addition, basic academic content was addressed through teacher guides and programs focusing on oral and written language, math concepts, bible stories, and science. While the Curriculum Framework was mandatory for all public kindergartens, the specific content programs were discretionary and based on the choices made by area inspectors and individual teachers (Nir Yaniv 1992). This period saw the flourishing of discipline-driven curriculum initiatives and the publication of numerous teacher guides and prepared materials, each focusing on different subject matter.

61.6 Standards as the New Curriculum

While the MOE continued to support the development and publishing of specific subject matter curriculums, in the first decade of the twenty-first century, a different direction was established by a new head of the preschool division. Based on the poor performance of Israeli school children on the international achievement tests, the PISA and the TIMMS, the preschool division at that point decided to create core curriculums in literacy, math, science, the arts, physical education and movement, and life skills. To promote the creation of each of these documents, the ministry established writing teams composed of pedagogic experts in the field, kindergarten teachers, and academics (scientific advisors) who functioned as subject matter experts. These core curriculum documents lay out a theoretical base, and more importantly they delineate the knowledge and skills that children are expected to acquire prior to their entry into first grade. Furthermore, they specify which skills need to be addressed by age level. Of all of these documents, the one which received the most attention was the literacy program, Foundations toward Reading and Writing (Sverdlov 2007). All kindergarten teachers in the country underwent intensive training to ensure implementation. Both academics at the teacher training college and many kindergarten teachers objected to what they perceived as the rigidity of the standards-based program, expressing concern over the seemingly formalization of the play-based curriculum which had until then been the foundation of Israeli early childhood education. These critics were also concerned that the teacher would not only be obligated to formal pre-reading instruction but also to maintaining detailed records on individual children's progress according to program standards. Like its literacy counterpart, the math program also received considerable attention from the preschool division, as teachers were required to undergo training; however, this core curriculum met with less resistance than the language literacy document. One reason for this difference is

the robustness with which the state inspectors embraced the literacy curriculum and the strength of their commitment to its implementation, as opposed to the mathematics curriculum which was perhaps less well understood and not deemed as crucial to the education of preschoolers. A third major shift in curricular emphasis that found expression in the production of a critical document was the recent publication of the booklet entitled Guidelines of the Preschool Teacher (Sverdlov et al. 2010). Unlike its predecessors, this document represents an integrative approach. It emphasizes well-being as the primary goal of the preschools and outlines the essential components of the "optimal environment" for achieving the goal. This ecological outlook adapts a sociocultural perspective on the preschool classroom and takes into account the multicultural aspects of the social milieu in which the children are being raised. According to Sima Hadad Ma Yafit, the current head of the early childhood division, this document addresses an overemphasis on the benchmarks of the core curriculum documents. The message of this document is that teachers should be looking at the child holistically instead of fracturing his development into discrete domains. Esther Barocas, the national coordinator for pedagogy, explained that the entire framework for in-service training was shifted from a focus on discrete disciplines to an integrative approach. Whereas in the past, trainers would offer courses focused on one domain such as math or language arts, and the current approach encourages teacher trainers to work together with their colleagues from different disciplines to promote integrative learning that incorporates multiple learning domains. Some examples of this integrative approach are three topics that were developed in the new framework: respect for others, religious tradition, and language.

61.7 Sectoral Concerns

Israeli society is a mosaic of cultures. According to the Central Bureau of Statistics, in 2010, 76% of the population at that time was Jewish, 17% Muslim, 2% Christian, and 1.6% Druze/Arab, including Muslims, Druze, Cherkasian, and Christians, and 3% were a conglomerate of smaller religious sects (CBS 2010). Since the enactment of the State Education Law in 1953, separate educational sectors were established: the secular Jewish division and the national-religious Jewish faction. The independent Jewish sector representing the ultra-Orthodox had been established earlier and remained intact. The Arab sector including Muslims, Christian, Bedouin, and Druze came under the auspices of the secular division (Hacohen 2003; Iram and Schmida, 1998). Parents are free to choose a kindergarten and subsequently an elementary, junior high, and high school according to these sectoral divisions. An additional faction that has found voice in expressing its own curricular needs is the kibbutz movement, which represents Jews who have elected to live in communal settlements. The sector is primarily secular with a small religious element as well. While the major early childhood curriculum trends described above have applied to all sectors, there have been particular adaptations by stakeholders in these different sectors within the MOE.

The ability of various ethnic and religious factions to influence the early childhood curriculum is related to two issues. Firstly, it is the desire of the MOE to

address the particular needs of various cultural communities in order to achieve the best education for all Israeli citizens. For example, the adaptations for the Arab-speaking community that includes Muslims, Christians, and Druze emanate from this democratic tendency. A second issue has to do with political power and influence. As the national government is formed through coalition politics after each national election, political factions driven by religious sensibilities often demand control of the schooling for their own population. Thus the national-religious and the ultra-Orthodox factions have each obtain influence over their own educational networks within the publicly funded schools. The kibbutz movement has maintained ideological control over its own schools by taking advantage of a clause in the State Education Law that enables schools to control up to 25% of the curriculum, if the parents agree to such a plan (Staner 1966). As long as they maintained economic independence, the kibbutz movement was able to establish and supervise its own daycare centers and kindergartens. Each of these sectors will be discussed below in the following order: the mainstream secular, the national-religious, the ultra-Orthodox, the Arab-speaking community, and the kibbutz movement.

61.8 Mainstream Secular

Most of the Jewish population in Israel identifies itself as secular. Parents in this mainstream group typically choose the secular schools as fitting their lifestyle and worldview. The secular kindergartens are viewed as the norm in terms of curriculum and assessment. Jewish tradition plays a minor role in these programs, with some attention given to the Jewish holidays and to bible stories. The requirements of other sectors are addressed within the MOE through coordinators, such as the national-religious state inspector and the head inspector for the Arab-speaking communities. The ultra-Orthodox Jewish sector has a parallel but separate supervisory mechanism within the MOE. The kibbutz sector comes under the auspices of the regular supervisors in the MOE, while at the same time they maintain their own advisory body that develops curriculum and supports the teachers through in-service training, as well as maintaining their own teacher training colleges. Following is a description of the particular adaptations and adjustments made by these various sectors.

61.9 The National-Religious Sector

The national-religious sector in Israel consists of approximately 12% of the Jewish population (Bystrov and Soffer 2012). This term, national-religious, reflects pro-Zionist values, service in the army, and a religious lifestyle that includes observance of Jewish law within the framework of living in a modern society. Since the early 1970s, this movement has largely driven the ideological initiatives to create settlements in all areas of the land of Israel (Liebman 1998). These ideologies of Zionism,

religious practice, and the spread of Israeli settlement have found expression in particular curricular endeavors such as a strong Zionist emphasis. These national-religious schools are the home of the "modern Orthodox" religious movement. Families that identify with this religious approach choose these kindergartens because of the alignment with their personal value system and religious lifestyle. In addition, some secular parents select these kindergartens in order to instill Jewish values in a noncoercive and accepting atmosphere. The government made a policy of placing in these schools the children of recent Ethiopian immigrants because of their religious commitment. The kindergarten curriculum reflects these traditional values in a variety of ways. For example, the day begins with a group prayer experience, and bible stories are told several times a week. At certain points throughout the year, the teachers create a bible corner for sociodramatic play related to these stories, and art work around the room often features pictures of the biblical narrative. The cycle of Jewish holidays is part and parcel of both the secular and religious schools. In both sectors the classrooms are decorated with holiday icons and symbols, holiday songs are sung, the holiday narrative is told, and special holiday foods are prepared. Some holidays also feature evening events for the children's families as part of the preholiday celebrations. The religious kindergartens place additional emphasis on these holidays by deepening the historical narrative and by providing experiences related to religious customs from the home and synagogue. The national supervisor for the religious sector also promotes special programs for these kindergartens. The broader national-religious education authority has focused on strengthening the Jewish identity of the students from kindergarten to high school by focusing each year on a different famous rabbinic leader as the theme for the year. This program is adapted to the kindergartens with curriculum materials about the rabbi, such as stories about his life, values, and accomplishments. Esther Hatav, the national state inspector for the national-religious kindergartens, has promoted other agenda as well. Because of the dearth of quality children's literature that reflects the modern Orthodox lifestyle, she has overseen the production of several such books. In addition, she has spearheaded in-service training to improve bible teaching in these kindergartens with a special emphasis on experiential learning and the choice of stories that are developmentally appropriate.

As the supervision of these kindergartens is organized on a sectoral basis, the state inspectors promote these religious elements in the curriculum through the in-service training and the curriculum materials that they distribute to their teachers. The basis of the curriculum in these kindergartens is the core curriculums established by the MOE. These various guides are used by the national-religious system without adaptation. The assessment instrument, Mabatim, (see below) is also used by this sector, as an instrument for identifying children with behavioral and/or learning difficulties. The state religious inspectors work closely with their secular counterparts in the MOE and support curriculum initiatives which are generated in that sector as well. To summarize, the national-religious sector is most interested in the spiritual and social aspects of the curriculum, stressing bible and holiday content alongside the general secular curriculum initiatives.

61.10 Independent Ultra-Orthodox

The ultra-Orthodox Jewish community in Israeli is thought to compose 12% of the Jewish population (Ettinger 2011). This group is characterized by a lifestyle that conforms strictly to the traditional religious sources and to the values that emanate from them (Erhard and Erhard Weiss 2007; Golos et al. 2011). Commitment to the study of religious texts is a component of this culture. This sector is multifaceted, consisting of many different communities representing various approaches including Hasidim, Habad, and others (Grilak 2002; Heilman and Friedman 1991). The MOE allows this sector to function independently with its own curriculum and supervision. The early childhood framework for the ultra-Orthodox consists of approximately 3800 classes, and the majority of which are divided by gender from age 3. Typically women teach the girls and men teach the boys. For the girls, the program follows that of the modern religious and secular sectors in terms of subjects such as math, literacy, music, physical education, and science and is a play-based program. For the boys, the program focuses mainly on reading skills in preparation for bible study and reading of other holy texts in Hebrew by age 5. Their program consists mainly of formal teaching, rehearsal of the letters and sounds, and practice in pre-reading and actual reading. The teachers of both the girls and boys tell a bible story every day and stress values such as religious observance as a way of life. Shoshanna Weiss, the national inspector for early childhood in the ultra-Orthodox sector, prepares for her teachers a holiday curriculum that integrates traditional values while paying attention to the various domains of development. In addition, she has spearheaded the adaptation of many of the core curriculum publications from the MOE, in order that these programs align with ultra-Orthodox values. Such adaptations include linguistic style as well as integration of values. Religious activities are used as concrete examples of the concepts being taught. Over the last 5 years, Weiss noted changes in the openness of both male and female kindergarten teachers to undergo training in these curriculums. For example, there is a pilot program for integrating current trends in the teaching of literacy with the traditional methods used by the male teachers to prepare the boys for reading the holy texts. Yiddish is the mother tongue of some of the children in this sector. Story books in Yiddish have been written for these children, as part of this initiative to advance their literacy. The kindergarten teachers use the same assessment tool, Mabatim, (see below) as used in the other sectors, without adaptation. The emphasis is on mapping the needs of children, and identifying those with difficulties, in order to advance them and to refer them for extra help when indicated. This sector demonstrates the ability of the Israeli early childhood system to address the cultural and spiritual needs of a community with discrete educational goals. In this case, the goals focus on values of religious practice and bible study as central features of their particular lifestyle.

61.11 The Arab Sector

The Arab sector of the public education system consists of 3300 classes, of which two thirds belong to the state secular authority and one third belong to the independent "recognized" faction. Included in the independent faction are religious Muslim kindergartens as well as private Christian missionary schools where the language of instruction is Arabic. Although these kindergartens are staffed by secular graduates of Israeli colleges, Christian theology is taught. The curriculum in the state-affiliated classes parallels that of the secular Jewish preschools with the exception of holiday curriculum. Depending on the population in the kindergarten, the children celebrate both Christian and Muslim holidays and are involved in different activities around these religious events. No curriculum material is available to support the teachers in their efforts to address this aspect of their program. However, the preschool division of the MOE is currently producing a curriculum guide in Arabic that focuses on holidays and traditions in three Arab religious communities: Muslim, Druze, and Christian. These officially recognized kindergartens in the Arab sector operate under the auspices of the national head of the preschool division of the MOE, and their needs are addressed by a national coordinator for early childhood education in the Arab sector, a position currently held by Fatmah Kasem. In this role she is responsible for the pedagogy and the content of the program. In a lengthy interview, Kasem explained that the pedagogic trainers, the state inspectors, and the teachers themselves work with Arabic translations of Hebrew teacher guides and the published core curriculums. She claims that these guides have been poorly translated, with little consideration for adaptation to Arab culture and society. Kasem pointed out the unique needs of the Arab communities in terms of curriculum content, emphasizing issues that are particular to her community. The first problem relates to the structure of the traditional Arab family that is based on the extended family paradigm. She would like to see more attention paid to professional development that supports work with all members of the multigenerational family. Another issue is the nature of spoken and written Arabic, which are two very different language registers. Literary Arabic is considered the only suitable written language and is used in children's books as well. Spoken Arabic uses a different phonology, morphology, syntax, and vocabulary than the literary form. Thus when teachers read to the children, they are using a very different form of the language than what the children hear in normal conversation. This phenomenon, referred to as diglossia by linguists, is a familiar problem for educators in the Arab sector (Amara 1991; Ben Rafael 1994; Spolsky and Shohamy 1999) and has yet to be adequately addressed in the early childhood curriculum. The MOE has sought to provide curriculum materials in the Arabic language for this sector and has begun to pay attention to the distinct religious culture represented by this community.

61.12 The Kibbutz Movement

The kibbutz movement has been an integral and important part of the history of the country long before its independence in 1948. Since the establishment of the first kibbutz in 1910, the kibbutzim are unique communal settlements that originally were based on a socialist and communist ethic of equality for all its members. They were organized as communal agricultural villages, and for many years, the members arranged functions such as cooking, laundry, and childcare communally. For many decades, the children lived in children's homes and were cared for by specially trained childcare workers who filled many of the parental roles. Their educational system was viewed as an integral part of this idealized society that the members were attempting to create. According to Dror (2004), kibbutz education was based on principles of progressive education following Dewey, Rousseau, and others with unique adaptations to fit their ideological framework. In the last two decades, the kibbutzim have undergone social and economic changes, including privatization. While certain communal aspects remain, for the most part, children now sleep and live with their parents instead of in the children's homes (Nir 1997). Although the percentage of Israelis who live on kibbutz has dropped from 7.5% in 1948 to 2% today, their influence stretches far beyond their numbers, and this relates to their ideological commitment to nation building and to creating an ideal society within the new nation (Rayman 1981; Shapira 2008).

There are certain unique aspects to the early childhood framework in the kibbutzim. Whereas in the cities, the care of children from birth to age 3 is under the authority of the Ministry of Industry Trade and Labor and from ages 3 to 6 under the MOE; on the kibbutz, there is pedagogic continuity from birth through elementary school. While the children are separated by age cohorts, there is an early childhood coordinator on each kibbutz who is responsible for this connection between the age groups. The ratio of adults to children in the kibbutz framework is considerably lower than that found in the cities. Over the years the kibbutz early childhood educators have developed a psycho-pedagogic approach that includes three elements: developmental psychology, educational ecology, and a systems approach. In terms of developmental psychology, the child is given the space to develop as an individual, and various theories of child development are used to influence practice. The ecological approach takes into consideration the various circles of influence in the child's life: the family, the community, and the culture. Whereas in the city, integration may be encouraged between children of different backgrounds, the kibbutz prefers for children to establish their own identity through cultural continuity between their home culture and that of their surroundings, and they support integration at a later age. Becoming a member of the kibbutz community is an important ideology in this sector. Therefore, daily walks around the kibbutz have been encouraged in order to give the children an opportunity to learn about their own community, and members of the kibbutz are invited to visit the early childhood groups to

tell about their work. Regarding the systems approach, the early childhood group is understood through an analysis of the various social systems: the children among peers, the adults with the children, the parents with the children, and the "rest of the world" which includes all other social influences from the outside (Plotnik & Eshel 2007). Various domains of development are integrated through a holistic approach. While curriculum consideration is given to subject matter such as literacy and math concepts, these are addressed in a naturalistic manner through the child's response to a rich learning environment (ibid).

Gideon Levin and Malka Haas are two kibbutz educators who have each developed their own approaches to early childhood education. In the past, their philosophies and methods were widely taught and adopted by early childhood educators in the kibbutz movement. Levin's humanistic-democratic approach premises that the freely chosen activities of the child should determine the kindergarten program. He coined a Hebrew term for his style of early childhood education, which he called *hagan hazorem*, "the flowing kindergarten" (Dayan 2001). In this context, the task of the child is to learn through freely chosen play opportunities within a stimulating environment that has been thoughtfully set up by the teachers (Levin 1989). The role of the teacher is not only to take responsibility for the learning environment but also to intervene as a participant in the child's activities. During his productive years as a spokesperson for the centrality of child in the curriculum, from the 1950s until his death in 2004, Levin stood out in contrast to other Israeli early childhood leaders who emphasized the centrality of subject matter.

Haas, a member of Kibbutz Sde Eliahu, was primarily interested in a dynamic holistic approach to early childhood education from birth. She developed an ecological view that included the family, the community, and the culture as critical elements in the child's development. She considered integrating these elements to be a "pedagogic art," and the kindergarten for her is "life inclusive" (Haas and Gavish 2008). Her major contributions are in the domains of children's art and in the development of the active play yard equipped with cast-off artifacts from everyday life. She has developed unique methods of working with children and art materials, claiming that their artistic expression is both legitimate and crucial to their development (Fishbein 2000).

The kibbutz educational system is highly regarded, and often parents from nearby suburbs and towns enroll their children in a kibbutz kindergarten because of the special values that serve as the foundation of the program as well as the bucolic atmosphere and low teacher-child ratios. While developing unique curriculum and practice suitable to their ideology, the kibbutz movement has served as an incubator of early childhood innovation over the years. These initiatives have spread beyond the boundaries of these idealistic agricultural settlements to early childhood settings in the cities. However, at the same time, the influence of the MOE has been felt in the kibbutz kindergartens, as economic need has resulted in a loss of curriculum independence in recent years.

61.13 Special Initiatives

Two special initiatives will be described below, because they exemplify the unique responses of the MOE to particular Israeli social problems and to the need to involve teachers in curriculum innovation.

61.14 New Beginnings

Income gaps are an acute problem in Israel, with over one third of the children living below the poverty line in 2011 (Meyers-Brookdale-JDC 2013). In the last decade, the Israeli Government established the Shmid Commission to investigate the issue of children and youth at risk. The findings published in 2007 included the recommendation to invest government resources in early childhood, as a systematic approach to dealing with this problem. Three target populations were identified as having particularly high incidences of children at risk in this order: Israeli-Arabs, ultra-Orthodox Jews, and new immigrants. As a result the National Program for Children and Youth at Risk was established (Szabo-Lael and Hasin 2011).

The early childhood element of this program, called "New Beginnings," was designed to address the needs of young children at risk and is currently functioning in 160 localities. The approach is one that integrates services and resources from five ministries: education, health, welfare, internal security, and immigrant absorption. Each community that qualifies must identify and perform a multidisciplinary – health, education, welfare – mapping of the needs of their children and youth at risk. On this basis, the community then selects interventions that they feel are most suitable for their community. Programs in the approved "New Beginnings" catalog include those that have been successfully field-tested and, where available, evaluated, by the participating ministries and other agencies. Several of the programmatic options were developed within a comprehensive pilot program with Joint Israel Ashalim in six Arab-Israeli communities, rural and urban, including Bedouins, Muslim, Druze, and Christians. This program used a "community-based intervention model, with a wide scope, for the development of a number of services for preschoolers" (Szold Institute 2011). The Arabic version of the Ministry of Education's Mabatim observation tool (see below) was used to assess change in the children abilities in language, social-emotional, and general adaptation. Improvement was found in the language and social-emotional areas consistently across the six communities in the intervention, as compared to the control group in which improvements were not found (ibid). Another program example within the "New Beginnings" catalog includes a model for expanded developmental work with young ultra-Orthodox Jewish children. Here a community can choose to promote the introduction and building of active playgrounds to serve the sensorimotor needs of young children in community preschools. The "New Beginnings" initiative demands interagency coordination and commitment, between both local and national government

and nonprofit organizations. This cross agency and multidisciplinary approach is seen as an innovative response to an acute national issue that cuts across sectors. An outstanding feature of the program is the respect and tolerance for the local cultures of the populations that take an active role in designing appropriate interventions for their own communities. This program is situated within the public sector, in cooperation with the MOE. Because of its sensitivity to the workings of the formal educational system as well as to local needs, the "New Beginnings" program serves as a model of achieving curriculum innovation on a local level. This ecological approach could serve as a model to the MOE for future effective directions in curriculum development.

61.15 Experimental Kindergartens

In an effort to stimulate curriculum innovation, the MOE has established a program of experimental kindergartens. Any teacher may submit a proposal suggesting an original curriculum for her own kindergarten. The proposal must have a theoretical basis and the backing of an academic advisor and the regional state inspector. Once approved, the teacher receives funding for her experimental program for 2 years, during which time she implements the program with the guidance of the academic advisor. Chaya Nasatsky, the national coordinator of this program, explained that following this period, the teacher and her advisor offer an in-service course to other teachers, in order to implement her curriculum innovation among interested colleagues. The teacher continues to serve as an advisor to those who have chosen to adopt her experimental program in their own kindergartens. Some examples of experimental programs include a variety of curriculum areas: ecology, music, animals in the classroom, biblical psalms, gardening, and movement. While this initiative has sparked an impressive array of original programs in all domains of the curriculum, its influence among the wider audience of kindergarten teachers has fallen short of its goal. Perhaps one reason for this disappointing result is the demands made on the teachers by their state inspectors. Such pressure for conformance to standards as well as the inspector's wishes regarding child assessment often leaves little space for taking seriously the tempting innovations generated by the experimental kindergarten program.

61.16 Assessment by Mabatim

Early childhood education in Israel is built on a model of integrating children with special needs, whenever possible. As such, the kindergarten teachers require tools to identify the needs of each child within the heterogeneous grouping. In 2002, the Department of Early Childhood Education of the MOE published a comprehensive assessment instrument to enable teachers to accomplish this task. The instrument,

called Mabatim (viewpoints), is based on observations of the children in their natural preschool environment. Teachers are not expected to remove the child from his familiar environment in order to test with diagnostic tools; rather they are trained to observe the children playing in a variety of contexts in the kindergarten. The child is observed throughout the school year, at different times of the day in different types of activities, as she deals with normal social, emotional, and cognitive challenges. These include free play, structured whole group or small group activities, transitions, and gross motor activities outdoors. The main purpose of this assessment process is to help the teacher get to know the children by identifying their special characteristics, abilities, personality styles, limitations, and difficulties. A further goal is to adapt the physical and human learning environment to meet the needs of those children who are experiencing difficulties and to plan a program that is appropriate to the child's needs. Once these difficulties are identified in a formative evaluation, the teacher is expected to write an individual program for the children with special needs and to implement this program in her work with the child within the normal kindergarten framework. Parents are active partners in the assessment process, information is shared, and they are encouraged to take part in decision making. If the teacher feels that the child's needs cannot be met within the existing kindergarten program, she is expected to refer the child (with parental consent) to the psychologist or guidance counselor assigned to her kindergarten (Goldhirsh et al. 2002). In these cases, the teacher will bring information gathered in the observations to the meeting with the specialist and together work out a suitable intervention. If the child's needs cannot be met in the regular program, the child may be placed in a special needs setting. This early identification and intervention program is thought to bring several benefits including "prevention of the building up and worsening of existing conditions, prevention of negative social and emotional side effects, providing opportunities for actualizing potential which has yet to find expression in spontaneous kindergarten activities, prevention or reduction in severity of learning disabilities later in school" (Goldhirsh 2002, p. 3). The interpretation of the observational data is intended to distinguish between developmental characteristics of the child that need no intervention and developmental disabilities that require some type of intervention. According to Monica Winokur, one of the authors of the program, "the instrument is descriptive and not diagnostic. It provides a formative evaluation, with an eye on advancing each child according to his own needs." The handbook for teachers takes care to caution teachers against using the data collected on children to make a judgment about their learning needs. The document goes on to explain that the material collected in the various checklists should be brought to the appropriate trained professional: psychologist, guidance counselor, occupational therapist, or language clinician. Thus the teacher describes, and the professional diagnoses. The instrument is structured as a two-stage process. At the first stage, all pupils undergo a simplified observation schedule in order to create data for comparison. This basic screening includes the following domains: activity level, focus of attention, temperament, social behavior, tolerance for difficulties and disappointment, independence, vision and hearing, language, and cognitive and

sensorimotoric functioning. At the second stage, the teacher is encouraged to make further focused observations for particular children for whom she has identified difficulties. For this purpose, four observation tables are provided in the following domains: social/emotional, communication and language, sensorimotor, and cognitive. Each table is arranged for making frequency assessments for specific behaviors as well as a written summary of the child's responses to mediation in the specific domain under observation. Finally there is a form for written conclusions from the various observations made over time and in different domains.

Winokur explained that Mabatim is one element in a comprehensive assessment that teachers are expected to carry out in their kindergartens. She indicated that artifacts such as drawings, photographs, and audio recordings are important. Furthermore, teachers may utilize the lists of expected behaviors and learning outcomes in each of the core curriculum guides which the MOE has produced after the publication and implementation of Mabatim. These core curriculum guides specify expected outcomes by entry into first grade and therefore are not sequenced by age.

Kindergarten teachers rarely share their knowledge and assessment of the children with first grade teachers because their classes are isolated in separate structures spread throughout the neighborhoods rather than attached to the schools. The exception to this rule is an initiative involving the integration of kindergarten with first grade classes in the elementary schools, which began in the 1960s (Bashi 1991). These projects experienced limited popularity, often resulting in the first grade curriculum finding its way in the kindergartens instead of expanded play opportunities for the older children (Vidislovsky 1994). Over the last 10 years, most of the kindergarten teachers in the country have undergone a 30 h training course in the use of Mabatim. In addition, they have received training in the various core curriculums and their implementation. Such training also includes the use of the expected outcomes as an assessment tool. There are no objective studies measuring the extent to which these assessment tools are used. Anecdotal reports suggest that teachers conform to the expectation of their regional inspector regarding child assessment. The regional inspectors vary in their preference for the Mabatim tool and the outcome lists in the core curriculums. On the other hand, criticism has been voiced by academics in the early childhood departments of some colleges of education. These critics claim that an overuse of the assessment tools hampers the teacher's ability to function with the children. Some critics have suggested that if teachers were to fulfill their obligations toward monitoring children's behaviors as required, they would be doing nothing other than observing and filling out observation schedules and outcome performances. In order to enable teachers in the Arab sector to use the Mabatim assessment tool, it has been translated into Arabic and culturally adapted as well. Fatma Kesem, the coordinator of the Arab sector, reported that all her teachers use the instrument to their satisfaction. The Ashalim program (see above) doubled the hours of training that most teachers in this sector receive. Because obedience and compliance are valued traits in this culture, the Arab teachers have shown allegiance to the program in contrast to many of their Jewish counterparts who have objected to the heavy burden of its implementation.

61.17 Summary and Conclusions

Over the last hundred years, early childhood education has flourished in Israel. Driven by ideology, the early pioneers established a thriving enterprise based both on European influences and local innovation. Upon the founding of the state, compulsory kindergarten was mandated by law, thus providing legitimacy for the systems established much earlier. Over the years strong leadership of early childhood professionals led to the development of curriculum initiatives that took the form of published documents that obligated kindergarten teachers in all sectors. Each of these changes required teachers to readjust to the new approach whatever it may be. Some of the changes were more drastic than others, although they all involved a shift in pedagogic thinking. The appearance of a child assessment tool in the last decade was particularly jarring for many teachers, as it disrupted their normal mode of functioning in the kindergarten. Through training and practice, the use of the assessment tool has become widespread, though not necessarily well loved. Educational improvement is always difficult. In order to meet the challenges and demands of societal change, the early childhood infrastructure in Israel has proved both resilient and innovative, leading to significant advances through curriculum innovation and the promotion of a culture of assessment. The complexity of Israeli society is reflected in the many populations who live there. Even within one religious group or language cohort, there are many subdivisions representing strong cultural values that must be taken into account in the educational program. This chapter has shown how the recent history of the country, driven by ideology, has shaped the early childhood curriculum and how language, religous, and ethnic sensibilities have been a strong force in determining educational policy both at an official and at a grass roots level. Formal assessment has come to the fore also as a response to societal pressures to push forward the achievement of students who will compete in an international market. While early childhood leaders in the MOE have promoted formal assessment by investing significant resources in the development of the Mabatim instrument and in its implementation, resistance has been expressed among teachers who see the collection of data about children to interfere with their true educational work. On the other hand, pressure to teach and assess competencies in the literacy core curriculum have changed the face of the day-to-day workings of the kindergarten class, as teachers strive to conform to their supervisor's expectations. Thus the progressive play-based curriculum that has been in place in Israeli kindergartens since their inception has eroded in favor of a more academic program that reflects an integration of formal learning with play. Each of the sectors on the educational landscape has dealt with this tension according to its own set of values, and the MOE has revealed flexibility in respecting this multicultural symphony of pedagogic responses.

References

Amara, M. A. (1991). Sociolinguistic aspects of variation and change: A study of the language spoken in an Arab Village in Israel. Doctoral dissertation, Bar-Ilan University.

Basi, Y. (1991). *Yiul batei hasefer – ben teoria l'maaseh: dfus hitarvut v'totzotav [School improvement – between theory and practice: Types of interventions and their results]*. Jerusalem: Machon Van Leer.

Ben-Refael, E. (1994). *Language, identity and social division: The case of Israel*. Oxford: Clarendon.

Bystrov, E., & Soffer, A. (2012). *Israel: demography 2012–2030. On the way to a religious state*. Haifa: University of Haifa Press.

CBS. (2010). Statistical abstract of Israel 2010. Downloaded August, 2013. http://www.cbs.gov.il/reader/shnaton/templ_shnaton_e.html?num_tab=st02_02&CYear=2010.

Cohen, Y. (2009). Migration patterns to and from Israel. *Contemporary Jewry, 29*, 115–125.

Dayan, Y. (2001). *Mechanech acher [A different educator]*. Diyunon: Tel Aviv.

Dror, Y. (2004). The progressive and non-formal principles of Kibbutz education in Israel. *History of Education, 33*(3), 299–315.

Elboim-Dror, R. (1990). *Hahinuch Haivri B'ertz Yisrael, [Hebrew education in the land of Israel]*. Jerusalem: Yad Ben Zvi.

Erhard, R. L., & Erhard Weiss, D. (2007). The emergence of counseling in traditional cultures: Ultra-Orthodox Jewish and Arab communities in Israel. *International Journal Advanced Counseling, 29*, 149–158.

Ettinger, Y. (2011). Four surveys yield different totals for Haredi population, Haaretz. (April 21, 2011). Downloaded August, 2013 http://www.haaretz.com/print-edition/news/four-surveys-yield-different-totals-for-haredi-population-1.357117.

Fishbein, Y. (2000). Reayonot ishiim im miyasdot v'movilot b'hinuch l'gil harach, [personal interviews with founders and leaders in early childhood education]. *Hed Hagan, 64*(4), 4–11.

Furman, M. (1999). Army and war: Collective narratives of early childhood in contemporary Israel. In E. Lomsky-Feder & E. Ben-Ari (Eds.), *The Military and militarism in Israeli society* (pp. 141–168). Albany: State University of New York Press.

Goldhirsh, O., Wagner, A., & Winokur, M. (2002). Mabatim viewpoints. Jerusalem: Ministry of Education, Pedagogic Administration, Preschool Education Division. Downloaded August, 2013 http://cms.education.gov.il/EducationCMS/Units/PreSchool/Mediniyut/Haaracha/mabatim.htm

Golos, A., Sarid, M., Weill, M., Yochman, A., & Weintraub, N. (2011). The influence of environmental factors on the development of ultra-Orthodox preschool boys in Israel. *Occupational Therapy International, 18*(3), 142–151.

Grilak, M. (2002). *The ultra-Orthodox: Who really are we?* Jerusalem: Keter Publications.

Grunwald, K. (1975). Jewish schools under foreign flags in Ottoman Palestine. In M. Ma'oz (Ed.), *Studies on Palestine during the ttoman period* (pp. 165–174). Jerusalem: Magnes & Yad Izhak Ben-Zvi.

Haas, M., & Gavish, T. (2008). *Ima Terei, Ze Amiti (Mother look, it's real)*. Tel Aviv: Hakibbutz Hameuchad.

Hacohen, D. (2003). *Immigrants in turmoil: Mass immigration to Israel and its repercussion in the 1950s and after*. Syracuse: Syracuse University Press.

Halamish, A. (2008). Zionist immigration policy put to the test. *Journal of Modern Jewish Studies, 7*(2), 119–134.

Heilman, S. C., & Friedman, M. (1991). *The Haredim in Israel: Who are they and what do they want?* New York: Institute on American Jewish-Israeli Relations, American Jewish Committee.

Iram, Y., & Schmida, M. (1998). *The educational system of Israel*. Westport: Greenwood Press.

Levin, G. (1989). *Gan Acher (A different kindergarten)*. Kiryat Bialik: Ach Publishers.

Liebman, C. S. (1998). Modern Orthodoxy in Israel. *Judaism, 47*(4), 405–410.

Limor, D., & Sela, A. (1994). Curriculum Framework for the Preschool, Jerusalem: Ministry of Education, Pedagogic Administration, Preschool Education Division. Downloaded August, 2013 http://cms.education.gov.il/EducationCMS/Units/PreSchool/Mediniyut/TochniyotMisgeret/

Myers-JDC-Brookdale Institute. (2013). Facts and figures 2013: Poverty in Israel, Jerusalem: Meyers-JDC-Brookdate Institute. Downloaded August, 2013 http://brookdale.jdc.org.il/_Uploads/dbsAttachedFiles/Facts-and-Figures-2013--Poverty-in-Israel.pdf

Nir, H. (1997). *The Kibbutz movement: A history – volume 2: Crisis and achievement, 1939–1995*. Oxford: Oxford University Press.

Nir-Yaniv, N. (1992). Tochniot limudim b'ganei yeladim, (Curriculums in the kindergartens). *Hed Hagan, 57*(2), 126–131.

Paz, R. (1990). *Paths to empowerment: 10 years of early childhood work in Israel*. The Hague: Bernard van Leer Foundation.

Plotnik, R., & Eshel, M. (2007). *Safer hagan, [The kindergarten book]*. Tel Aviv: Hakibbutz Hameuhad.

Rayman, P. (1981). *The Kibbutz community and nation building*. Princeton/New York: Princeton University Press.

Reichel, N. (2009). The first 'Hebrew' teachers in Eretz Yisrael: Characteristics, difficulties and coping methods (1881–1914). *History of Education, 38*(1), 9–28.

Rinott, M. (1986). Capitulations: The case of German-Jewish Hilfsverein schools in Palestine, 1901–1914. In D. Kushner (Ed.), *Palestine in the late Ottoman period, political, social and economic transformation* (pp. 294–203). Jerusalem/Leiden: Yad Izhak Ben-Zvi & E.J. Brill.

Sachar, H. M. (2010). *A history of Israel: From the rise of Zionism to our time*. New York: Knopf.

Shapira, R. (2008). *Transforming kibbutz research*. Cleveland: New World.

Smilansky, S., & Shephatiah, L. (1977). *Socio-cultural integration and other characteristics of the human environment in the classroom, as related to achievement in grades one and two*. Jerusalem: Henrietta Szold Institute.

Snapir, M., Sitton, S., & Russo-Zimet, G. (2012). *The Israeli kindergarten in the twentieth century*. Kiryat Sde Boker: The Ben Gurion Institute for Research in Zionism and Israel.

Spolsky, B., & Shohamy, E. (1999). *The languages of Israel: Policy, ideology and practice*. Clevedon: Multilingual Matters.

Staner, R. (1966). *Dinei hinuch: Hikukhim, parshanut v'psika education laws: Enactment, interpretation, and rulings*. Jerusalem: Igra.

Stavans, I. (2008). *Resurrecting Hebrew*. New York: Schocken.

Sverdlov, A. (2007). *Tashtit likrat kriya v'ktiva (Foundations toward reading and writing)*. Jerusalem: Ministry of Education, Pedagogic Administration, Preschool Education Division.

Sverdlov, A., Goldhirsch, O., Barocas, E., Esther, R., Budnick, G., Biger, H., & Eilon, T. (2010). *Preschool educational practice: Guidelines for preschool teachers*. Jerusalem: Ministry of Education, Pedagogic Administration, Preschool Education Division.

Szabo-Lael, R., & Hasin, T. (2011). *At-risk children and youth: Results of the identification and mapping conducted by the national program for children and youth at risk*. Jerusalem: Myers-JDC-Brookdale Institute, Engelberg Center for Children and Youth.

Szold Institute. (2011). *Executive summary of "ECHAD Partnership" program evaluation*. Jerusalem: The Henrietta Szold Institute.

Tadmor-Shimony, T. (2011). Immigrant and veteran teachers of the 1948 generation: As socialization agents of the new state. *Israel Studies, 16*(3), 97–122.

Vidislovsky, M. (1994). Maamar logi-philosophie [A logical- philosophical treatise], translated by A. Tzemach. Tel Aviv: Hakibutz Hameuhad.

Chapter 62
Developments in Curriculum and Assessment in the Early Years in Australia

Susan Grieshaber

Abstract Recent curriculum and assessment developments in Australia have changed approaches to early childhood education in the before school and early years of school sectors (birth to 8 years). In before-school contexts where early childhood settings cater for children from birth to the age of 5, educators have been required to use a nationally mandated learning framework since January 2012. This includes play-based approaches to enact the learning framework, what is called "intentional teaching," and five outcome statements for educators to use to make judgments about children's progress in learning and development. This chapter describes and analyzes aspects of the mandated learning framework in the context of current curriculum and policy debates and in conjunction with prior approaches to curriculum and assessment used in early childhood education in Australia.

Keywords Intentional teaching • Play-based learning • Outcomes • Human capital theory • Equity

62.1 Introduction

Since 2007, major educational reform has been occurring in Australia in both the compulsory years and those before the compulsory years of schooling. These reforms include the development of an Australian Curriculum for students from foundation (the year before compulsory schooling) to the final year of secondary schooling (F–12). In the before-school sector, the Council of Australian Governments (COAG) has implemented extensive change based on a National Quality Framework for Early Childhood Education and Care (COAG 2009). The National Quality Framework includes a number of reforms such as universal access for all children aged 4 years to 15 hours per week of free early childhood education provided by a

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degree qualified early childhood teacher. It also includes the development of *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (the Framework) (Australian Government Department of Education, Employment and Workplace Relations for the Council of Australian Governments [DEEWR] 2009), which is a learning framework for children aged birth–5 years, and the National Quality Standard (NQS), which includes a quality assurance process aimed at the delivery of high-quality and nationally consistent early childhood education.

The purpose of this chapter is to analyze parts of the Australian birth – five learning framework (DEEWR 2009) in the context of current curriculum and policy debates. The analysis is informed by three constructs (Luke 2013): the growth in global competitiveness of educational systems in terms of human capital, productivity, and outcomes; how curriculum can contribute to creating a more equitable and just society for all; and national and regional "social cohesion, affiliation and security" (Luke 2013, p. 1). As they relate to curriculum, these constructs represent "new social and cultural formations of knowledge and power – always partial and contested…making and remaking what counts as knowledge, skill and competence, human cognition and sociocultural action" (Luke 2013, p. 2). The policies that result are evidence of the new formations of knowledge and power, and *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (DEEWR 2009) is no exception. While the Framework draws on "conclusive international evidence" (DEEWR 2009, p. 5), policies are as much about "values, moral and political judgments" as they are about evidence (Miller and Hevey 2012, p. 4). To Rizvi and Lingard (2010), policy making involves "major trade-offs between values" (p. 72). And, as Apple (2000) has noted, most curriculum development results from the interplay of tensions, struggles, and compromises. Predictably, the development of the Framework also involved debates about values and moral and political judgments (see Grieshaber 2013; Sumsion et al. 2009).

As the title indicates, *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (DEEWR 2009) is a learning framework and locates children's learning at the center of the framework. It was first published in 2009 but was not made mandatory until January 2012. The contents page indicates that the Framework has six major sections (a glossary and bibliography are also included):

Introduction (pp. 5–6)
A vision for children's learning (pp. 7–10)
Early childhood pedagogy (p. 11)
Principles (pp. 12–13)
Practice (pp. 14–18)
Learning outcomes for children birth to 5 years (pp. 19–44).

In what follows I comment about the *Introduction* in relation to the three constructs introduced above (human capital, equity, national and international affiliation) to identify some of the underlying tenets of the Framework. Following that, I analyze learning through play, intentional teaching, assessment, and learning outcomes. The Framework uses the term educators and describes them as "early childhood practitioners who work directly with children in early childhood settings"

(DEEWR 2009, p. 5). Significantly, this description does not take qualifications of educators into account: qualifications vary widely from masters' degrees and 4-year bachelor degrees (some are specialist early childhood degrees) to diplomas, certificates, and educators in the process of becoming qualified. While all educators who work with young children are required to use the Framework, how it is enacted is likely to vary widely because of the difference not only in the qualifications of educators but also because of their respective experience, and opportunities to engage in professional development.

62.2 Human Capital, Equity, and National and International Affiliation

The short *Introduction* of the Framework does a lot of political work. First, it locates the Framework firmly within the human capital, productivity, and outcomes agenda. Second, it emphasizes the importance of the Framework in creating a more equitable and just society for all; and third, it signals the importance of national and international affiliation.

First, educational reform in Australia is part of the productivity agenda adopted by the Labour government that was elected in 2007, which marked the end of 12 years of conservative politics; and which has been continued by the return of a conservative government in 2013. The aim of the productivity agenda is to strengthen the economy through investing in social and human capital and so increase national productivity over time (Council of Australian Governments [COAG] 2009). Human capital theorists have argued that investing in the early years brings greater returns than at any other phase of education (Heckman and Masterov 2005). This has been a compelling reason for governments around the world to invest in early childhood education. However, the evidence base for these claims often rests on several studies undertaken in the USA (e.g., High Scope Perry, the Abecedarian Project, and the Chicago Child-Parent Centers Study). These studies involved "high quality early interventions with poor and vulnerable children" (Penn 2010, p. 51). They were undertaken with specific samples and distinctive conditions, and assumptions are made that similar gains are possible in completely different contexts. One of the most persuasive factors is the estimates of the ratio of dollars saved to dollars spent in the long term: estimates from the Perry High Scope project claim that $7.16 is saved for every dollar spent (Penn 2010). Long-term predictions and generalizations are problematic given that these studies differed from each other in significant ways and that the most "favorable figures [dollars spent and saved] are generally used as a basis for extrapolation" (Penn 2010, p. 52). Generalizations such as these have influenced the COAG agenda of improving the quality of early childhood education in Australia through investment in human and social capital. For example, the COAG (2009) document investing in the early years – a National Early Childhood Development Strategy – cites Heckman and Masterov's claim that "Early disadvantage, if left

untouched, leads to academic and social difficulties later in life" (cited in COAG 2009, p. 3). Human capital theorists seek to avoid academic and social difficulties later in life that they say are caused by early disadvantage. However, cautions have been expressed about using such data to make generalizations and long-term predictions, even in the USA where the studies were conducted (Penn 2010).

One of the problems associated with making generalizations and long-term predictions from these studies is what has been categorized as constituting early disadvantage. In the Perry High Scope intervention project, for example, "'poor and vulnerable' overlap with race and class"; the importance of context has been "downplayed" and the "position of poor blacks and Hispanics in the United States" has been "largely ignored or misunderstood" (Penn 2010, p. 53). Structural issues such as race, class, and poverty have been overlooked in preference for privileging "micro-level interventions" (p. 53). Such approaches are characteristic of human capital theories, and questions of social justice and equity are not part of how human capital theories are conceptualized: "poverty is a problem only when it generates additional costs that could be avoided" (p. 53). To circumvent future costs associated with the poor and vulnerable (not race, class, and poverty), human capital theorists usually suggest "high quality targeted interventions for poor children to avert the worst consequences of poverty" (p. 53). In Australia, COAG (2009) has identified the advantages of providing early childhood programs that strengthen outcomes for children as including "improved cognitive and social development, better transitions to school and reduced need for remedial education…higher rates of school completion and employment and reduced criminal activity" (COAG 2009, p. 9). Thus the productivity agenda in Australia is designed to improve outcomes for children in the short and long term by investing in early childhood education. The theme of investing in human capital and the value to the nation is continued in the *Introduction* with a direct link made to the vision of the Council of Australian Governments (COAG), which is that "All children have the best start in life to create a better future for themselves and the nation" (DEEWR 2009, p. 5). Educators are also implicated as it is their role to "provide young children with opportunities to maximize their potential and develop a foundation for future success in learning" (p. 5). Part of that foundation for future success in learning includes transition to school, which is linked closely to the aim of the Framework: "to extend and enrich children's learning from birth to five years and through the transition to school" (DEEWR 2009, p. 5) (see also previous paragraph). The role of educators in providing children with opportunities to maximize their potential goes to the heart of another problem of human capital theories, which is the focus on individual success. Educators are directly implicated because human capital theory claims that "individuals can succeed – or rather, fail less often – if they are sufficiently primed when young" (Penn 2010, p. 59). In contrast to a holistic approach to social welfare adopted in Nordic countries, this neoliberal version of human capital theory focuses on "*individual* success and striving" (p. 61, emphasis in original). As well as educators being assigned responsibility for maximizing children's outcomes, human capital theory conceptualizes children themselves (and their families) as accountable for their success or otherwise from the opportunities provided.

Second, the *Introduction* of the Framework makes specific links to creating a more equitable and just society for all. All recent education reforms in Australia in both the before school and compulsory years of schooling are informed by the Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA] 2008). Goal 2 of this declaration is referred to in the *Introduction* and includes the idea that all young Australians should be supported to become "successful learners, confident and creative individuals, and active and informed citizens" (DEEWR 2009, p. 5). The Melbourne Declaration also provides a vision for Australian education and guides the implementation of changes associated with the education revolution:

> As a nation, Australia values the central role of education in building a democratic, equitable, and just society – a society that is prosperous, cohesive, and culturally diverse and that values Australia's Indigenous cultures as a key part in the nation's history, present and future (MCEETYA 2008, p. 4).

Thus the Melbourne Declaration (and the Framework) embodies the idea that education can transform society, making it more equitable and just. Further, the *Introduction* identifies the "critical role" that early childhood education has to play in "closing the gap in educational achievement between Indigenous and non-Indigenous Australians within a decade" (p. 6). Because early childhood education is pivotal to closing (not narrowing) the gap within a decade, the *Introduction* states that "a specific document that provides educators with additional guidance on ensuring cultural security for Aboriginal and Torres Strait Islander children and their families will be developed and made available to educators" (DEEWR 2009, p. 3). Education and specifically early childhood education is positioned by the Framework and the Melbourne Declaration as one way in which a democratic, equitable, and just society is to be achieved.

Third, the *Introduction* signals the importance of international and national social cohesion, affiliation, and security. The previous points about productivity, human capital, and a more equitable society also work to create national social cohesion through appeals to the "good" of the nation and creating opportunities for all Australians to be competent citizens. The expectation that educators will ensure cultural security in this way raises a whole set of additional challenges that require time and support for educators to engage in ongoing and extensive professional learning (see Phillips 2011). Ideas about national and international social cohesion and affiliation are reinforced by reference to the United Nations Convention on the Rights of the Child (the Convention), which situates the Framework in a global context:

> …all children have the right to an education that lays a foundation for the rest of their lives, maximizes their ability, and respects their family, cultural and other identities and languages. The Convention also recognizes children's right to play and be active participants in all matters affecting their lives (DEEWR 2009, p. 5).

There are similarities in this excerpt between aspects of human capital theory (education as a foundation for the rest of life, maximizing children's ability) and with creating a democratic and just society (respecting family, cultural and other identities and languages). And like the critical role early childhood education has to play in closing the gap in educational achievement between Indigenous and non-Indigenous Australians; educators using the Framework are required to "reinforce in their daily practice the principles laid out in the… Convention" (p. 5). So as well as improving outcomes for children (from a human capital perspective), educators have a role to play in creating a democratic, equitable, and just society through early childhood education. In addition, they are to uphold the principles of the Convention by enabling children to be active participants in all matters affecting their lives.

Here I note a key difference in regard to social justice between human capital approaches and understanding children as citizens in their own right, where they participate actively in matters affecting their lives (as per the Convention). A human capital approach (productivity, outcomes) focuses on the future outcomes of inequality and therefore the value of investing in the early years because of perceived future benefits, particularly for those families that are considered "disadvantaged." In other words, a human capital model is "premised on the identification, quantification and categorization of lack and the filling of that lack as an economic and social project" (Luke 1997, p. 11). In its various iterations, the human capital approach has progressively "renamed" social justice as access, shifted "concerns about specialized needs of equity groups to the need for behaviour management," reframed gender equity "in terms of a concern for boys' and men's' rights," and evidenced cultural diversity becoming "intellectual, linguistic, community, and family deficit, yet again" (p. 17). This has occurred in the name of the economy and productivity, where anything to do with democracy and social justice has been "re-articulated" and "subordinated" according to the perceived need to "compete successfully in the global economy" (Rizvi and Lingard 2010, p. 72).

Alternatively, a focus on children as active participants in their own right necessitates attention to children's present lives. It "stresses societal responsibility" for all children, with early childhood education only one "item of a complex package of 'children's endowment', which also includes parents' time to care, a more family-friendly workplace organization and so forth" (Saraceno 2011, p. 92). The Framework emphasizes the importance of both the human capital and children as citizens' approaches, and this is evident in the ways noted above as well as the use of the words "being" and "becoming" in the title and throughout the document.

In addition, although the Framework draws on both perspectives, I suggest that in the re-articulation and trade-offs that occurred among values and politics in the formulation of the final version of the document, the human capital perspective dominates. There are four reasons. First, the focus in the *Introduction* of the Framework is on becoming, or the future good of the nation in terms of the COAG vision and the Melbourne Declaration, respectively: providing all children with the "best start in life to create a better future for themselves and for the nation"; and for "All young Australians to become successful learners, confident and creative individuals [and] active and informed citizens" (DEEWR 2009, p. 5). Second, the

Introduction locates responsibility for realizing this becoming with (individual) educators, as they are to "provide young children with opportunities to maximize their potential and develop a foundation for future success in learning" (p. 5). Educators are also deeply implicated in the responsibility to ensure that children in "all early childhood settings experience quality teaching and learning" (p. 5). The third reason that I claim a human capital approach dominates the document is the "critical role" that early childhood education has to play in closing the gap between Indigenous and non-Indigenous Australians within a decade (part of the Melbourne Declaration). Realizing the COAG vision and the goals of the Melbourne Declaration thus relies significantly on educators working directly with children in early childhood settings. The focus on learning outcomes, which take up just over half the document, provides the final reason for the claim that a human capital perspective dominates the document.

To sum up this section, the *Introduction* establishes a strong connection between the Framework and government investment in early childhood education to improve outcomes (productivity) for children and the nation. It identifies the role of early childhood education in creating a democratic, equitable, and just society and signals the importance of national cohesion through documents such as the Melbourne Declaration. It uses the United Nations Convention on the Rights of the Child as a way of creating international affiliation through acknowledgment of children as active participants in all matters affecting their lives. In the remainder of the chapter, I discuss three aspects of the Framework: play-based learning, intentional teaching, and assessment (including the five outcome statements). This analysis is undertaken to show what now counts as knowledge, skill, and competence and how play-based learning, intentional teaching, and the approach to assessment are part of the new social and cultural formations of knowledge and power for early childhood education in Australia.

62.3 Play-Based Learning, Intentional Teaching, Assessment, and Learning Outcomes

This section begins with some introductory information about the structure of the Framework in order to further establish a context for the case being made. Following this, I discuss the ways in which the Framework departs from tradition, or the types of approaches that have previously characterized early childhood education in Australia; and then I draw on understandings of play-based learning, intentional teaching, and assessment (including the five outcome statements) to illustrate the new social and cultural formations of knowledge at work in these aspects of the Framework and some of the effects of these new formations.

62.4 Structure of the Framework

The section titled *A Vision for Children's Learning* is embraced in the overarching concepts of belonging, being, and becoming. Belonging is understood as "knowing where and with whom you belong" (p. 7); being is acknowledged as the importance of the present for children and not just the future, and becoming signifies the rapid and important changes that children experience in the early years. Children's learning is placed at the center of the document, which is made apparent in Fig. 62.1 (DEEWR 2009, p. 10, reproduced below); principles, practice, and learning outcomes surround the central element of children's learning, all of which are enveloped by the concepts of belonging, being, and becoming. Early childhood pedagogy is not included as an element of the Framework in Fig. 62.1. However, the explanation accompanying Fig. 62.1 states that the three interrelated elements of principles, practice, and learning outcomes are "fundamental to early childhood pedagogy and curriculum decision-making" (p. 9).

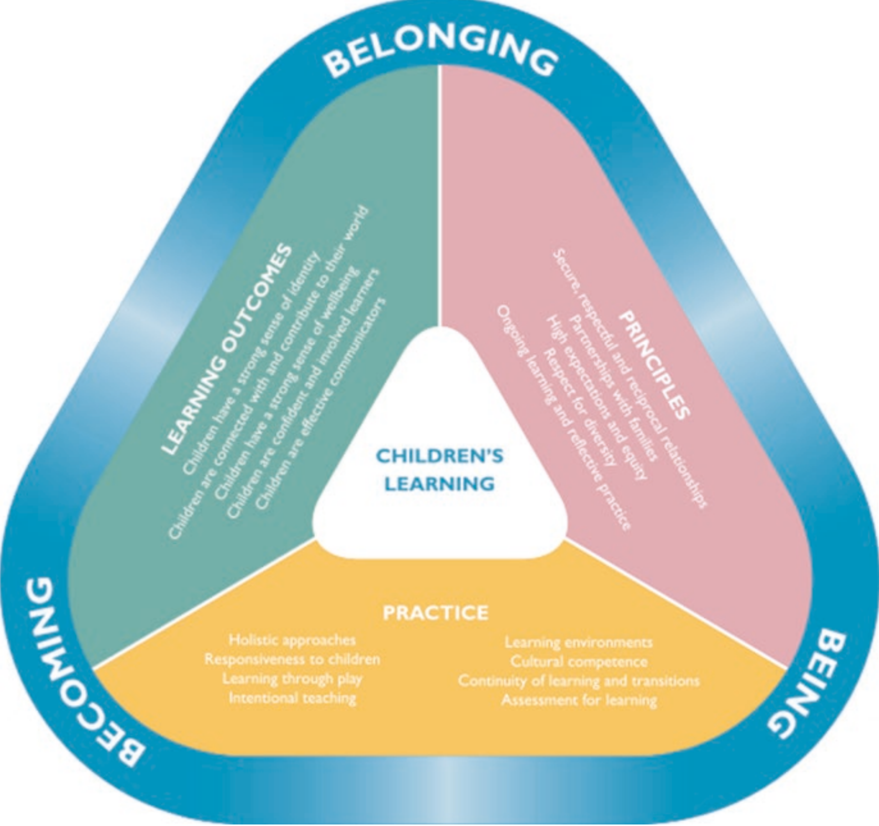

Fig. 62.1 Elements of the Early Years Learning Framework (reproduced from DEEWR 2009, p. 10)

As evident in Fig. 62.1, the three interconnected components of principles, practice, and learning outcomes surround the centrality of children's learning. The five principles are:

Secure, respectful, and reciprocal relationships
Partnerships with families
High expectations and equity
Respect for diversity
Ongoing learning and reflective practice (p. 10)

Principles 1, 2, and 5 are quite common in curriculum-related documents in early childhood education. However, this is the first time that early childhood educators in Australia have been made accountable for the curriculum and pedagogical importance of high expectations and equity, and respect for diversity in everyday classroom practice. These are significant changes and reflect the emphasis in the *Introduction* of the Framework on creating a more equitable and just society for all. They also require some educators to change not only their daily practices but also their conceptual understandings.

Eight components of practice complement the five principles and underpin daily practice:

Holistic approaches
Responsiveness to children
Learning through play
Intentional teaching (i.e., planned opportunities for "deliberate, purposeful and thoughtful" teaching to build children's knowledge; p. 5)
Learning environments
Cultural competence (e.g., "the ability [of educators] to understand, communicate with, and effectively interact with people across cultures," p. 16)
Continuity of learning and transitions
Assessment for learning (i.e., "gathering and analyzing information as evidence about what children know, can do and understand," using a variety of methods to "capture and validate the different pathways that children take toward achieving" the outcomes; p. 17).

Several of these components of practice are usual inclusions in any discussion of curriculum, teaching, and learning in early childhood education (e.g., learning environments, responsiveness to children, transitions). However, the understandings that are associated with learning through play, intentional teaching, and assessment for learning in the Framework, and the relative newness of the ideas that are embodied in these aspects of practice for early childhood educators in Australia necessitate further discussion because they are examples of new social and cultural formations of knowledge at work. There are close connections between the way in which learning through play, intentional teaching, and the outcomes has been conceptualized, and for this reason, I discuss each and identify the effects of these new social and cultural formations of knowledge and the challenges for educators in enacting these aspects of the Framework.

62.5 Play-Based Learning and Intentional Teaching

The Framework (DEEWR 2009) symbolizes several changes in approaches to early childhood education in Australia. While this is the first learning document for children before they begin compulsory schooling and the first to be mandated, it is also significant because it departs from the child development-oriented and emergent curriculum approaches that have been characteristic of early childhood education in Australia. Accordingly, the Framework emphasizes learning and child development, play-based learning and free play, intentional teaching, and emergent or child-centered approaches (Grieshaber 2010). Play-based learning is defined as providing "a context for learning through which children organize and make sense of their social worlds, as they engage actively with people, objects and representations" (DEEWR 2009, p. 6). Like learning through play, intentional teaching is one of the eight components of practice in the Framework. It is defined as involving "educators being deliberate, purposeful and thoughtful in their decisions and action. Intentional teaching is the opposite of teaching by rote or continuing with traditions simply because things have 'always' been done that way" (DEEWR 2009, p. 15). Direct links are made between the document and quality teaching and learning: "The Framework forms the foundation for ensuring that all early childhood settings experience quality teaching and learning" (p. 5). The combination of the overall emphasis on learning (a learning Framework), play-based learning, and intentional teaching highlights the importance placed on children's learning, how learning is to occur, and the role of educators in children's learning. It is this combination that is indicative of one aspect of the new social and cultural formations of knowledge in early childhood education in Australia.

Learning through play has a long association with early childhood education, but recent research has challenged the value of free or discovery play that is child initiated and lacks quality adult-child verbal interaction (e.g., Sylva et al. 2003). Early childhood educators have typically established the environment and listened, observed, and facilitated children's development (McArdle and McWilliam 2005).

Where free play is valued in early childhood educational settings, children experience extended periods of free play and can have little contact with teachers as "they are engaged in play or other activities chosen by themselves" (Pramling Samuelsson and Johansson 2009, p. 88). The view is that intervention from adults has the potential to interrupt the autonomy and independence that comes from the experience of free play. But recent discussion has challenged noninterventionist and reactive roles of adults (Johnson et al. 2005; Wood and Attfield 2005), and in effective preschool settings in England, the extent to which adults extended child-initiated activities was substantial. In nearly half of the child-initiated activities which included intellectual challenge, adult-child verbal interaction resulted in extending children's thinking (Siraj-Blatchford and Sylva 2004). These effective preschool settings also managed to achieve a balance between "teacher-initiated group work" and "freely chosen, yet potentially instructive, play activities" (p. 720). This research suggests that quality teaching and learning hinges on the balance between adult and

child-initiated play activities and that the quality of adult-child verbal interaction is what makes a difference in such interactions because of the potential to enhance children's thinking and extend their learning.

The point is well made by Wood (2007, p. 125) who provides the following example of children playing with water:

> …they [children] will not spontaneously learn the concept of floating and sinking, volume and mass without educative encounters with more knowledgeable others. In other words, play activities may stimulate learning-relevant processes, but may be content free, which juxtaposes the developmental against the educational rationale for play.

This example identifies the key differences between free play and play-based learning and highlights the importance of educators and more knowledgeable others in extending children's thinking and learning. It is this combination of play and learning that is endorsed by the Framework and that educators are required to deliver, irrespective of qualifications, experience, and professional development opportunities.

62.6 Assessment and Learning Outcomes

Assessment is a relatively new term for many early childhood educators in Australia. Prior to the development of the Framework (DEEWR 2009), educators might have talked about monitoring children's progress or undertaking evaluation, often in the context of child development (e.g., Queensland School Curriculum Council 1998). Monitoring progress is likely to have involved observing children and recording progress by mapping it against typical developmental patterns. The Framework requires a move from monitoring progress in developmental domains to assessing children's progress according to the five learning outcomes. Assessment for learning is one of the eight components of practice and is defined (as mentioned earlier) as the "process of gathering and analyzing information as evidence about what children know, can do and understand" (DEEWR 2009, p. 17). It is part of an ongoing process where educators support children and provide feedback to assist their learning, that is, as a continuing part of curriculum decision-making. It is formative, occurring many times as educators interact with children and make judgments about children's learning as part of the process of providing feedback aimed at enhancing learning.

The explanation and description of the learning outcomes take up just over half the document (25 of 47 pages). The five learning outcomes are:

Children have a strong sense of identity
Children are connected with and contribute to their world
Children have a strong sense of well-being
Children are confident and involved learners
Children are effective communicators (p. 19).

Table 62.1 Example of evidence and how educators promote learning from Outcome 1, key component: children feel safe, secure, and supported (DEEWR 2009, p. 21)

Outcome 1: Children feel safe, secure, and supported	
This is evident, for example, when children:	Educators promote this learning, for example, when they:
Build secure attachments with one and then more familiar educators	Acknowledge and respond sensitively to children's cues and signals
Use effective routines to help make predicted transitions smoothly	Respond sensitively to children's attempts to initiate interactions and conversations
Sense and respond to a feeling of belonging	Support children's secure attachment through consistent and warm nurturing relationships
Communicate their needs for comfort and assistance	See document for the remainder
See document for the remainder	

Each outcome lists a number of key components of learning, and these key components are "expanded to provide examples of evidence that educators may observe in children as they learn" (p. 19). The Framework also provides examples of practice as ways to "promote children's learning" (p. 19). For instance, Outcome 1: Children have a strong sense of identity, has four key components to signify what Outcome 1 encompasses:

Children feel safe, secure, and supported
Children develop their emerging autonomy, interdependence, resilience, and sense of agency
Children develop knowledgeable and confident self-identities
Children learn to interact in relation to others with care, empathy, and respect (p. 21).

Table 62.1 provides some excerpts from the Framework as examples of evidence and practice for Outcome 1.

A learning outcome approach identifies the end products (outcomes or outputs) of an education process rather than its inputs. It is based on the understanding that there are certain things that all students should learn and that outcomes provide observable evidence of what children know and can do (Spady 1993). The Framework defines a learning outcome as a "skill, knowledge or disposition that educators can actively promote in early childhood settings, in collaboration with children and families" (DEEWR 2009, p. 8). The idea of educators actively promoting skills, knowledge, and dispositions is consistent with the approach to intentional teaching adopted in the document. Over time, educators are expected to observe and interact with children to gather evidence of what they know and can do as an ongoing part of, and as a result of intentional teaching and play-based learning. To this end, educators are to "plan with each child and the outcomes in mind" (DEEWR 2009, p. 19). Planning with each child and the outcomes in mind requires that educators know individual children. They also require at least a working knowledge of the learning outcomes, and some understanding of what sort of "evidence" is needed

for children to be assessed as achieving a learning outcome. Knowledge of the learning outcomes, knowing how to assess children's progress, and knowing what evidence demonstrates that an outcome or key component has been achieved are all expectations of educators that have accompanied introducing and mandating the Framework. These expectations are illustrative of the new social and cultural formations of knowledge depicted in the Framework and are significant departures from monitoring children's progress in terms of developmental domains.

The learning outcomes provide general descriptions of children's achievements for all children from birth to the age of 5. Consistent with the nature of a framework (as opposed to a syllabus that specifies content and so forth), there are no defined or specified subject or content areas with which children are to engage; and no differentiation is made between younger and older children (e.g., birth–2, 3–5 years). Instead, concepts from subject areas can be integrated so that they are apparent in the learning outcomes that children achieve (Krieg 2011). Sometimes content in the Framework is identified using traditional names such as mathematics and science, which Krieg says "implies a multidisciplinary approach where actual problems are the focus for inquiry" (p. 48). The Framework makes no statements about the types of techniques to be used for making judgments about children's progress toward achieving the outcomes. It does state that assessment is ongoing; uses a variety of approaches to capture the "different pathways that children take toward achieving these outcomes" (DEEWR 2009, p. 17); is to be undertaken with children and their families; is inclusive, and is to be "culturally and linguistically relevant and responsive to the physical and intellectual capabilities of each child" (p. 17). Documents such as *Educators Belonging, Being and Becoming: Educators' Guide to the Early Years Learning Framework for Australia* (DEEWR 2010) provide more specific details and are available to support educators in decision making about play-based learning and intentional teaching, and assessment and learning outcomes.

62.7 Implications and Conclusions

There is a long history of privileging free play and emergent approaches in early childhood education in Australia. In such approaches, the maxim is to start with the child. In outcome-based education, outcomes are the starting point in that the first thing to be decided is the knowledge and skills that are to be demonstrated or achieved by the end of the process (Spady 1993). The Framework modifies this understanding of outcome-based education by requiring that educators plan with each child and the outcomes in mind, but in doing so makes new demands on educators and the work they undertake on a daily basis with young children. The learning outcomes are described as "broad and observable" (DEEWR 2009, p. 19). They are general statements of what children should know and what they should be able to do with what they know. No specific indicators of learning and development are provided, as the focus is not how well (quantitatively) children can meet the outcomes. Rather, it is supporting children's learning as they "progress towards the outcomes

in different and equally meaningful ways" (DEEWR 2009, p. 19). Perhaps presenting the learning outcomes as broad and observable is an attempt to avoid the temptation for educators to see the outcomes as lists of skills to be achieved, "ticked off," and not considered again. Likewise, the requirement for simultaneous focus on the child and the outcomes may relieve concern about children's play and learning being limited to achieving defined learning outcomes (see Wood 2007). However, there remains a tension between the notion of free play and the way in which outcomes can be used instrumentally to achieve specific educational ends (Wood 2009). This, as well as ways in which knowledge of children and the learning outcomes can be used to plan for children's learning, could be addressed in professional learning opportunities for educators. As part of the national early childhood strategy and the education reform taking place in Australia, *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (DEEWR 2009) mandates macro and micro changes to the landscape of early childhood education. These new social and cultural formations of knowledge are explicitly political because they are aimed at improving the global competitiveness of the Australian education system by investing in human capital, which in turn (theoretically) improves productivity and outcomes. They also uphold the principle of creating a more equitable and just society for all through education, beginning in the early years, and attempt to establish international and national affiliation and cohesion through identification with the principles of the United Nations Convention on the Rights of the Child (the Convention). The brief investigation of the explicit and implicit political nature of the *Introduction* of the Framework reveals tensions between social justice perspectives associated with human capital approaches and the understanding of children as citizens participating actively in matters affecting their lives, as expressed in the Convention. Most significantly, a human capital approach to social justice is prefaced solely on the notion of lack, disadvantage, or deficit, and the value of investing in the early years because of perceived future benefits that reduce the cost and effects to society of early disadvantage.

While these new social and cultural formations of knowledge are substantial from a policy perspective, they also produce changes to the daily work of educators because what counts as knowledge, skill, and competence as an early childhood educator has altered. Intentional teaching, play-based learning, and assessing progress using learning outcomes require different knowledge, skills, and competence from establishing the environment, listening, observing, facilitating children's development, and monitoring progress in developmental domains. The importance attributed to the combination of learning through play and intentional teaching highlights the role of educators in enhancing children's thinking and learning and the way in which learning is to occur. In assessing learning in conjunction with the learning outcomes, educators are now responsible for observing and interacting with children to gather evidence of what they know and can do as a result of intentional teaching and play-based learning. These new social and cultural formations of knowledge and power are aimed at changing the ways in which early childhood education operates in Australia in the years before compulsory schooling. They are ambitious and aspirational, and many factors influence if and how they will be

achieved. One of the most important is the provision of ongoing and high-quality professional learning support for the early childhood workforce.

References

Apple, M. (2000). *Official knowledge: Democratic education in a conservative age* (2nd ed.). New York: Routledge.

Council of Australian Governments (COAG). (2009). *Investing in the early years – a national early childhood development strategy*. Retrieved 12 May 2010 from http://www.coag.gov.au/coag_meeting_outcomes/2009-07-02/docs/national_ECD_strategy.pdf

Department of Education, Employment and Workplace Relations (DEEWR). (2009). *Belonging, being & becoming: The early years learning framework for Australia*. Department of Education, Employment and Workplace Relations.

Department of Education, Employment and Workplace Relations (DEEWR). (2010). *Educators belonging being & becoming: Educators'guide to the early years learning framework for Australia*. Canberra: Department of Education, Employment and Workplace Relations.

Grieshaber, S. (2010). Departures from tradition: The early years learning framework for Australia. *International Journal of Child Care and Education Policy, 4*(2), 33–44.

Grieshaber, S. (2013). Social justice visions and curriculum realities in the early years of education. In A. Luke, A. Woods, & K. Weir (Eds.), *Curriculum, syllabus design and equity: A primer and model* (pp. 103–115). New York/London: Routledge.

Heckman, J., & Masterov, D. (2005). *The productivity argument for investing in young children*. Accessed 20 May 2013 from http://jenni.uchicago.edu/human-equality/papers/heckman_final_all_wp_2007-03-22cjsb.pdf

Johnson, J. E., Christie, J. F., & Wardle, F. (2005). *Play, development and early education*. Boston: Pearson Education.

Krieg, S. (2011). The Australian early years learning framework: Learning what? *Contemporary Issues in Early Childhood, 12*(1), 46–55.

Luke, A. (1997). New narratives of human capital: Recent redirections in Australian educational policy. *Australian Educational Researcher, 24*(2), 1–21.

Luke, A. (2013). Introduction: The practical problem of curriculum making. In A. Luke, A. Woods, & K. Weir (Eds.), *Curriculum, syllabus design and equity: A primer and model* (pp. 1–5). New York/London: Routledge.

McArdle, F., & McWilliam, E. (2005). From balance to blasphemy: Shifting metaphors for researching early childhood education. *International Journal of Qualitative Studies in Education, 18*(3), 323–336.

Miller, L., & Hevey, D. (2012). Critical perspectives on early years policy. In L. Miller & D. Hevey (Eds.), *Policy issues in the early years* (pp. 1–10). London: Sage.

Ministerial Council on Education, Employment, Training and Youth Affairs MCEETYA. (2008). *Melbourne declaration on educational goals for young Australians*. Retrieved 14 April, 2013 from http://www.mceecdya.edu.au/verve/_resources/national_declaration_on_the_educational_goals_for_young_australians.pdf

Penn, H. (2010). Shaping the future: How human capital arguments about investment in early childhood are being mis(used) in poor countries. In N. Yelland (Ed.), *Contemporary perspectives on early childhood education* (pp. 49–65). Maidenhead: Open University Press.

Phillips, J. (2011). *Resisting contradictions: Non-indigenous pre-service teacher responses to critical Indigenous studies*. Unpublished PhD thesis. Queensland University of Technology. Brisbane, Australia.

Pramling Samuelsson, I., & Johansson, E. (2009). Why do children involve teachers in their play and learning. *European Early Childhood Education Research Journal, 17*(1), 77–94.

Queensland School Curriculum Council. (1998). *Preschool curriculum guidelines*. Brisbane: Queensland School Curriculum Council.
Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. London/New York: Routledge.
Saraceno, C. (2011). Childcare needs and childcare policies: A multidimensional issue. *Current Sociology, 59*(1), 78–96.
Siraj-Blatchford, I., & Sylva, K. (2004). Researching pedagogy in English pre-schools. *British Educational Research Journal, 30*(5), 712–730.
Spady, W. (1993). *Outcome based education*. Belconnen: Australian Curriculum Studies Association.
Sumsion, J., Barnes, S., Cheeseman, S., Harrison, L., Kennedy, A. M., & Stonehouse, A. (2009). Insider perspectives on developing belonging, being & becoming: The early years learning framework for Australia. *Australasian Journal of Early Childhood, 34*(4), 4–13.
Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., Taggart, B., & Elliott, K. (2003). *The effective provision of pre-school education (EPPE) project: Findings from the pre-school period (Research Brief No. RBX15–03)*. London: Department for Education and Skills.
Wood, E. (2007). Reconceptualising child-centred education: Contemporary directions in policy, theory and practice in early childhood. *Forum, 49*(1&2), 119–133.
Wood, E. (2009). Conceptualising a pedagogy of play: international perspectives from theory, policy and practice. In D. Kuschner (Ed.), *From children to red hatters®: Diverse images and issues of play. Play & culture studies* (Vol. 8, pp. 166–189). Lanham: University Press of America.
Wood, E., & Attfield, J. (2005). *Play, learning and the early childhood curriculum* (2nd ed.). London: Sage.

Chapter 63
Supporting the Application of Playful Learning and Playful Pedagogies in the Early Years Curriculum Through Observation, Interpretation, and Reflection

Pat Broadhead

Abstract This chapter examines developments in the English national curriculum for children from birth to 5 years and from the mid-1990s until 2012.

The chapter explores these different curricular iterations in relation to play, playful learning, and culturally informed playful pedagogies, including in relation to the final aspect, the perceived role of the adult in supporting playful learning and offering well-considered pedagogies. The place of adult observation of playful engagements has an especial focus. It links explicitly to long-term research undertaken by the author with practitioners. The research has underpinned the development of an observational tool known as the Social Play Continuum (SPC), described in the chapter. Its application has revealed high levels of intellectually challenging engagement in reciprocal play in early years settings. The capacities exhibited by young children far exceed those anticipated in assessment-related documentation. In particular, open-ended play spaces, which evolved in the research, have, seemingly, high potential for playful, cognitively challenging engagements.

The chapter concludes that, barring one exception no longer in use, the curricular iterations have paid little attention to playful learning and related cognitive challenge, learning, and achievement. As such therefore, assessment-related expectations in the English curriculum for young children appear to underestimate young children's capabilities.

Keywords Open-ended play • Observing and interpreting play • Playful pedagogies • Intellectually challenging play • Reciprocity

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63.1 Introduction

The early years curriculum and its related assessment procedures in England have moved through several iterations since the first government pronouncements were made in the mid-1980s. This was the period when the then Conservative Government began taking a wider and a particular interest in schools and in educational issues and when they also began determining the curriculum at all levels of state education. These levels included the early years, then defined as ages 3–5 years, although this would expand in the years to come to span birth to 5 years; primary education, for children aged 5–10 plus years; and secondary education for ages 11–16 or 18 years. The Education Reform Act (1988) was the first piece of government legislation to determine, firstly, the curriculum and, subsequently, in additional legislation, related forms of assessment for children aged 5−16 years. In due course both the curriculum and assessment requirements would cover the age group pre-5 years. The curriculum and assessment models in Northern Ireland, Wales, and Scotland are determined by their respective Parliaments and Assembly (Wales) and are not the subject of this chapter.

The first iteration of the early years curriculum in England came in 1996 and was entitled "Desirable Learning Outcomes." The emphasis on assessment was evident in the title (outcomes) but was not especially detailed. Subsequent curricula and assessment iterations followed and are outlined later in the chapter. These varied in content, length, and assessment-related demands until 2003 when the first formal assessment-related procedures were outlined in detail along with the related procedures for monitoring their completion, by early years educators.

Of particular interest to this chapter is the fact that in each of these iterations, the mention and status of playful engagement by children have varied as has also the place of educator observations of playful engagement and learning. The role of the adult has also been perceived differently across the iterations depending to a large extent on whether the government of the time felt that adults should "structure" the play or that children should lead their own learning through choice and self-direction; we shall see evidence of each across and within the iterations. Similarly, the place of observation, within the pedagogue's daily repertoire, has varied across these iterations, fluctuating, like play, in terms of comment, explanation, and expected focus in relation to both curriculum provision and assessment. The purpose of observation has also varied from being a tool to be employed to support the ticking of outcome-related boxes to an opportunity for educator insights in relation to children's interests and competence and in relation to the capacity of those observational insights to inform subsequent pedagogical decision-making. Both "play" and "observation," as shall be revealed, have been in and out of vogue with policy makers in England. As a consequence, educators have been subjected to a barrage of changes, both ideological and practical.

Throughout this period, I have undertaken joint research projects with early years practitioners/educators/pedagogues. The terms have become interchangeable within the English early years educational system although the term "pedagogue"

remains relatively underused. Qualified teachers do work in state-run early years settings, but there is also in England a large private sector that does not currently employ teachers. There is also a well-established voluntary and community sector which has been making provision for children and families since the mid-1960s. The ongoing research has related to the development and application of The Social Play Continuum (SPC). The SPC is essentially an observational tool to use to inform an understanding by researchers and pedagogues of children's thematic interests, ideas, explorations, and competences, as they play with peers in self-selected activities. The research has revealed how this information can be used by pedagogues as a basis for informed decision-making relating to pedagogical developments to support curriculum development and assessment activity. Therefore, for the purposes of this chapter, the term "curriculum" focuses substantially on the potential for, and of, children's playful activities in their early years settings, and it is this focus that is explored. Within the context of "assessment," the chapter looks particularly to the pedagogical use of close observation of children's playful engagements with peers in order to better understand the potential of play for young children's learning across the spectrum and the implications of this new knowledge for pedagogical decision-making.

In this chapter, I describe the development of the SPC, its rationale, and applications and pay particular attention to the aspects of play and of observing children at play. I explain its potential in relation to understanding some of the complexities of play in educational settings along with the pedagogical decision-making of the early years educator. The chapter then gives further detail on the iterations of the early years curriculum and assessment to examine the levels of attention given therein to play and to observationally based pedagogies. The chapter then returns to the more recent of the joint research into play to outline the development of open-ended play spaces in early years classrooms and the implications of these for developing culturally informed pedagogies and for curriculum planning and pupil assessment. Finally I consider the place of observation, interpretation, and professional reflection as curriculum and assessment-related activities, considering not only their potential for revealing individual competence in the playing child but also the need for assessment in the early years to relate also to the deepening of pedagogical knowledge relating more widely to how children learn and develop through playful encounters with their peers in appropriately resourced early years settings. My intention is to challenge the application of the majority of curriculum and assessment-related iterations that have been evident in England since the mid-1990s and to identify the strengths and potential of the only iteration to truly value the power and potential of educator observations of child-initiated, playful engagements and learning.

In particular, this chapter aims to argue the extensive potential of young children to learn through play, in educational settings, in the right conditions, and to examine how these conditions are framed for better or worse by policy and pedagogy. It may be useful at this point to add some further, brief contextual background to the English early years system as it draws attention to issues that are of concern internationally relating to introducing young children to formal educational settings at too early a point in their development. In England, since 1944, children have been

required to enter school at the start of the term after the term in which they would become 5 years old. It is even younger now in England, with young 4-year-olds often being found in the more formal setting of the school classroom as opposed to the more informal nursery or preschool settings. More recently, government policy makers have spoken of “bright 3-year-olds entering formal schooling in the reception classes.” The reception class is a particularly English phenomenon established to allow younger children to enter school where no nursery classes were available. Now the majority of schools have a reception class where the curriculum should be that of the early years but where the formality of teacher-directed tasks has prevailed to greater or lesser extents, largely dependent on the school and reception teachers’ beliefs about the value of play in the early years (Bennett and Kell 1989; Cleave and Brown 1991; Whitebread and Bingham 2011).

63.2 The Development of the Social Play Continuum (SPC)

The work drew initially on the publications of Parten (1933) and Charlesworth and Hartup (1967), both of whom had, from their own studies, presented a set of behavioral characteristics associated with the growth of sociability in playing and interacting peers. Sociability is evident in young children from the ages of about 2–3 years onward (Schaffer 1996), hence my focus on the early years age range in classroom-based settings. Each of their “lists” contained both communicative and cognitive behaviors, designed to shape observational studies; the communicative behaviors included both verbal and nonverbal engagements. Their work, particularly that of Charlesworth and Hartup, coincided with my own research questions at that time which were concerned to identify the potential that traditionally provided play materials in English early years settings had for promoting sociability and cooperation in 3- and 4-year-old children (Broadhead 1997). The materials were sand, water, large construction, small construction and small world, and role play. Event sampling was used on target children when they engaged with peers, in self-selected and self-directed play in a preschool, nursery setting. Adults were asked not to intervene in the observed play as it was the behaviors and responses of the children that were in focus. An underpinning rationale throughout the research has been that it is the engagement with both peers and artifacts that reveals, to the observer, children’s competences, thinking, and interests, more so, than solitary play. This early study revealed insights into the sociable and cooperative potential of these traditionally available play activities and resources. It also revealed the levels and types of reciprocal behaviors with which these young children were engaging, as they played with peers during 116 recorded play bouts. Transcripts revealed that the reciprocal engagements within the play bouts were characterized by differing levels of reciprocity and that the intensity of some engagements was far deeper and extended over longer periods than did others. This study argued that when play was cooperative (as opposed to being “social”), the play bouts contained combined action, activity-related interactive dialogue, problem setting and problem

solving, and high levels of concentration among interacting peers. It was argued that the potential for learning was evidenced in the exhibition of these behaviors. Drawing from these findings, the first "version" of the Social Play Continuum was presented with communicative and cognitive characteristics aligned with each of four stages of progression in levels of sociability as follows: Stage 1, parallel play; Stage 2, social play; Stage 3, highly social play; and Stage 4, cooperative play. (A further developed version of the SPC is presented a little later in the chapter.) The work was at this point aligning with Vygotskian theory (1978; 1986). In particular, this related to the four stages of the SPC as being resonant with the zone of proximal development (ZPD). These are the contiguous zones of potential learning to which, Vygotsky argued, children might move with support from expert others (Vygotsky 1978). I was interested in the extent to which those expert others might be peers in keeping with Reynolds and Jones' (1997) work when they explore the concept of children as master players. Aligned with the interpretation and application of Vygotskian theory was Saxe et al.'s (1993) work which added weight to "a sizable body of theoretical analysis and empirical evidence regarding the ways that children's peer interactions may influence their developing understanding" (p. 107). In keeping with Vygotskian theory, Daniels (1993) was also at this time arguing that adults could create the possibilities for development rather than the possibilities being defined within the biology of the child. Pedagogy was key, but this needed to be a pedagogy informed by knowledge of the child's cultural heritage and through the transmission of culture and experience via social interaction and communications with peers and with adults. The discussions relating to the ZPD have progressed exponentially over the years. Chaiklin (2003) examines these developments, emphasizing collaboratively orientated rather than independent development while also acknowledging the importance of a personal sense of meaning for the learner within the activity in aiding a zonal transition in personal development. This chapter asserts that both play within the early years curriculum and observation, as a key assessment tool, can contribute to the development of such a culturally informed and personally meaningful pedagogy. The research into sociability and cooperation then continued with older 4-year-old and 5-year-old children in a reception class setting (Broadhead 2001).

The four original "stages" of the SPC were redesignated as "domains" to avoid confusion in relation to the language of the emerging government curriculum. Parallel play was renamed "associative play" to more accurately reflect that some peer engagements were occurring. Also the language and actions were more clearly delineated to facilitate the observational tracking of reciprocity and its maintenance that were being evidenced in the children's engagements as data were collected and analyzed. Across the datasets, these older 4- and 5-year-olds were revealing themselves, within their self-selected playful engagements, to be functioning at high levels of intellectual, linguistic, and cooperative engagement as described in Broadhead (2001, p. 34):

Table 63.1 The characteristics of cooperative play and their exemplification

Higher-order characteristics of play in the cooperative domain	Exemplification from classroom observations of play
Initiating and sustaining verbal interactions	These were extended conversations between two or more peers relating to the play activity with which they were focused. The conversations may be intermittent, but continuous observation revealed that they were interconnected and would last throughout the play period
Initiating and responding to nonverbal interactions	Interacting peers would recognize and respond positively to facial expressions and body language. This might include smiles, laughter, nodding and shaking the head, frowns, and hand or arm gestures. Sometimes whole body movements might communicate ideas through nonverbal demonstration
Interpreting peers' actions	One example would be for one child to begin to move play materials to a new site and for others to recognize this as significant within the play. A child might begin to dismantle a design that a group had worked on and other children would accept this as a positive development and not as an act of destruction
Problem framing with different materials	One child might say: "This isn't working, we need something else," and others would respond by looking around or going in search of something better for the problem. Children might return with a range of materials, and they would then be tried out and commented upon in discussions
Problem solving with different materials	Here, the children would reach an agreement on which materials or resources best suited the solution needed. This could be a rapid decision or might take several minutes
Successfully entering ongoing play	This was accomplished by children who had learned that some strategies worked and some did not. Bursting into the play seldom worked. Watching from the sides, offering comments and positive nonverbal expressions, and offering useful materials or verbal suggestions usually achieved successful entry. The key seemed to be to take one's time, to show oneself as nonthreatening, and to be useful to the participating players, and these strategies had to be learned
Selecting and implementing an appropriate role of degree of involvement in ongoing activities	This often led on from successful entering of the play and might depend on the levels of familiarity between interacting peers. Children with well-established friendships and histories of playing together and sharing narratives achieved this with relative ease, almost hiding the levels of sophistication being exhibited as roles were allocated, selected, and invented. For newcomers, it was often easier to enter large group activities rather than where three or four tightly knit and very familiar peers were playing. The challenge was to blend, and again these were skills that had to be learned at opportune times of playful engagement

(continued)

Table 63.1 (continued)

Higher-order characteristics of play in the cooperative domain	Exemplification from classroom observations of play
Developing a shared sense of direction and goal orientation	In order for an observer to recognize and note this characteristic, it was usually necessary to observe extended play periods. Intentions might be evident at the outset with phrases like: "Let's make a. . .," but this could be misleading as goals might change through discussion and the introduction of new materials. Observations would reveal a strong sense of unity and collaboration when this characteristic was evident and also strong indications of deep thinking and reflection by individual children and collectively as they articulated and moved toward goal achievement
Empathizing	This seemed to be a function of well-established or developing friendships and familiarity. It might be manifest through a smile or a nod at a new idea or suggestion, offering an affirmation. It could be tenderness or consolation at some physical hurt or unpleasant remark from another child. It might come as reassurance if an adult stopped the activity and a child looked perturbed: "We can do it tomorrow can't we?" It was a mature acknowledgment by an empathizing child that an appropriate interjection was needed at that point in time. Often, when one child empathized, others would also join in as if being reminded that such a response was possible and helpful to sustain the play

See Broadhead 2001, p. 34 for the characteristics identified in the left-hand column. The descriptions in the right-hand column have been added for clarity in the chapter

Interestingly, none of these complex, reciprocal behaviors were evident as characteristic of this age group within the available curriculum documentation (DfEE 2000). Indeed they would not feature in any of the curriculum or assessment iterations, as the next section will show.

The SPC has been further refined through subsequent research (Broadhead 2004, 2006, 2009). The most notable addition was to complement the language and action sheet, used for observational purposes, with a second sheet. This sheet supported observer categorization of observed play bouts by specifying the characteristics of play at each of the four domains (associative, social, highly social, and cooperative play). The current version of the SPC is provided at this point for clarification. The behaviors and characteristics detailed above in Table 63.1 are now embedded within the descriptors detailed on the two "sides" of the SPC as it was developed to become an observational tool for identifying progression in play and for reflective consideration of how the surrounding pedagogy enhanced or restricted the potential for children to make progression through playful engagements (Fig. 63.1).

THE SOCIAL PLAY CONTINUUM – A TOOL FOR THE OBSERVATION AND UNDERSTANDING OF PLAYFUL LEARNING AND FOR THE DEVELOPMENT OF PLAYFUL PEDAGOGIES - SIDE 1

Observation start time:	Children entering play:
Area of provision:	Children leaving play:
Observation finish time:	

L* = *Language ***A* = *Action observed*** ***L/A* = *Language and Action Combined***
RL* = *Reciprocal language ***RA* = *Reciprocal Action*** ***Rl/RA* = *Reciprocal language and reciprocal action combined***

ASSOCIATIVE DOMAIN	SOCIAL DOMAIN	HIGHLY SOCIAL DOMAIN	COOPERATIVE DOMAIN
A: looks towards peers	**A:** Smiling	**RA:** Offering/accepting of objects evident	**RA:** Offering/accepting objects sustains/extends play theme
A: Watches play	**A:** Laughter	**RL**: Comment on own action/described intent with acknowledgement leading to extended exchange	**RL:** Explanations/descriptions utilised
A: Imitates play	**RA:** Eye contact made	**RL:** Dialogue a mix of activity related and non-related but a theme is evident	**RL:** Sustained dialogue is activity related and clear theme(s) emerge
A: Object offered, not accepted	**L:** Play noises, play voice	**RL:** Sporadic dialogue develops role play	**RL/RA:** New idea/material extends play and is sustained
A/L: Object taken, altercation	**A:** Object taken, no altercation	**RA/L:** Eye contact/laughter, (play noise) combined as behavioural cluster	**RL/RA:** Children display a shared understanding of goals
A: Parallel play period	**RA:** Object offered and received	**RA/RL:** Brief reciprocal sequences. e.g. giving/following instructions seeking/giving approval offering/accepting objects asking/answering questions	**RL:** Offering and accepting verbal help
L: Self-talk	**L/A:** Consent sought and object accessed	**RL/RA:** New ideas or materials have some impact	**RA:** Offering and accepting physical help
A/L: Comment on action directed at peer; peer does not respond	**L:** Approval sought, not given		**RL/RA:** Verbal and physical help combined
	RL: Approval sought and given		**RL/RA:** Problem identified and solved
	L: Instruction given, no response		**RL/RA:** Dramatic scenarios enacted linked to play theme(s)
	L/RA: Instruction given, positive response		
	L: Question asked, no response		
	RL: Question asked, response		
	L/RA: Comment on own action/described intent directed at peer, peer looks		
	RL: Comment on own action/described intent directed at peer , verbal response		

Emergent play themes noted:

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THE SOCIAL PLAY CONTINUUM – REFLECTING ON AND LOCATING THE OBSERVED PLAY –SIDE 2

Increasing levels of reciprocity and momentum →

Characteristics of associative play	Characteristics of social play	Characteristics of highly social play	Characteristics of cooperative play
Self talk does not elicit a response	May involve much movement indoors or outdoors	May involve movement or one location	Players remain predominantly in one location
No/very little dialogue	Children leave and join the play at frequent intervals	Group relatively stable with some entering or leaving	Shared understanding of goal orientation
No/very little eye contact	Associative players often nearby	Suggestions emerge which begin to extend ongoing play	Players remain until goals achieved; new goals identified
Seemingly little regard for proximity of peers	Little development of play ideas, often repetitive	New objects/materials brought to play but may not become integral to play	A highly imaginative use of ideas and materials as play themes are taken on board and explored
Limited periods of peer interaction	Little shared understanding of goal achievement	Sporadic evidence of shared understandings of goal orientation	Players seek additional resources to extend their play themes
Overtures ignored	Dialogue does not always relate to activity	Role play may be evident with some combined dramatic intent	Role play has clear dramatic aspects
	Play punctuated by periods of associative play	Interruptions/altercations may be evident when play returns to social	A relative absence of play noises
	Altercations evident when play returns to social	Adult intervention seldom sought	Absorption in task with extended levels of concentration
	Adult intervention may often be sought		Altercations are resolved in play as problem-solving activity
			Play achieves a finished product (where design is involved)
			Adult intervention not sought until completion

Comments and records (e.g. information about individual children, ideas for developing area of provision in focus and associated resources, location, extensions, adult intervention, class/group discussions).

Identify play domain (including 'moving towards'): Associative Social Highly Social Cooperative

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Fig. 63.1 The social play continuum

The ongoing research has shown that 4- and 5-year-olds have the potential to exhibit all of the behaviors and characteristics contained within the SPC, but that their potential to do this is substantially influenced by a wide range of pedagogical aspects and issues, many of which are significantly influenced by prevailing government policy. Because the research was undertaken jointly with educators, their interpretations and reflections gave considerable insights into these pedagogical features. Before examining some pedagogical features of the research further, it would be helpful to look more closely at the policy iterations that have framed the developing early years educational climate within which the research was taking place. It will become evident that playful learning and playful pedagogies were minimally featured in early years curriculum and assessment policy during this period. The messages that early years educators were receiving did not convey status for play and neither did they reveal any of the complex, high-order behaviors and engagements by interacting peers that the ongoing research was making evident. Iteration 3, as we shall see, did hold some potential for play.

63.3 Curriculum and Assessment Iterations in the Early Years in England

This section considers the four iterations of English early years curricular documents from 1996 until 2012 in relation to their engagement (or otherwise) with two particular aspects of early education that have long been recognized as central to good practice across the globe:

Perspectives on play in early years, as manifest in English curricular documents
The place of educator observation of children's play as depicted in those documents as a key part of the educator's repertoire

63.4 Iteration 1: Desirable Learning Outcomes for Children's Learning on Entering Compulsory Education (DfEE 1996)

This document was aimed at those working with children of pre-compulsory school age across the maintained (state) private, voluntary, and community sectors. It detailed the outcomes to be evident in young children's repertoires when they entered compulsory schooling, which might be recalled from discussion above could be children aged 4 or 5 years and could be very young 4-year-olds. This slim document makes only one very brief reference to "frequent observations" in relation to "progress and future learning needs." The document makes no references to play. A review was undertaken in 1999, and arising from extensive criticisms, a second iteration was developed.

63.5 Iteration 2: Curriculum Guidance for the Foundation Stage (DfEE 2000)

This was a more extensive and detailed curriculum document. It was aimed at those early years settings that received newly allocated government grant funding for 3- and 4-year-old children and for schools that had nursery aged children (3–4 years) and for 4- and 5-year-old children in the reception class. This document contains both guidance for practice and principles to underpin practice. It also contains very detailed developmental "stepping stones" and "outcome goals" for the children's attainment at the end of the foundation stage (5 years of age). These stepping stones and goals were elaborated within six areas of learning: personal social and emotional development; communication, language, and literacy; mathematical development; knowledge and understanding of the world; physical development; and creative development. The underpinning principles mentioned the importance of allowing children to determine learning activities for themselves. Some mention is made of observation: "practitioners must be able to observe and respond appropriately to children" (p. 11) with brief further expansion of two paragraphs on p.16 of the document. Play is briefly mentioned (p. 25) as "a key way in which young children learn with enjoyment and challenge." A distinction is drawn between "planned play" and "spontaneous play" with the former depicted in a way that gives it a seemingly higher status. Any further mentions of play or observation are incidental, and no further elaborations of either aspect are given as guidance to educators.

In 2003, the early years curriculum was augmented by the publication of the Foundation Stage Profile (DfES 2003). This provided detailed assessment scales for each of the six areas of learning. Local authorities were subsequently required to assign teams of early years advisors to monitor the assessments across settings, thus creating a culture of performativity and surveillance (David et al. 2010; Broadhead and Burt 2012). It was expected that teachers would build up the profile over a year although no mention is made of the place of observation of children's play within this process. Neither are children's self-initiated playful activities mentioned as potential sites for assessment. The assessment requirements were extensive and time-consuming with handmade notes eventually being replaced by computer-based tick boxes. It became apparent that many educators were formally assessing children in planned, staged assessment activities which took children away from playful engagements in order to ensure rapid completion by the assessing adult. Play was noted as diminishing in reception classrooms (David et al. 2010).

63.6 Iteration 3: The Early Years Foundation Stage (DfES 2007)

This emerged to replace the Curriculum Guidance for the Foundation Stage (2000) but the Foundation Stage Profile remained in place. Of the four iterations (one more was to follow), this publication gave the greatest emphasis both to play and to the place of observation and reflection as integral parts of the educator's role, on a day-to-day basis. It also covered the period birth to 5 years, a move that was much welcomed by the sector in respecting issues in relation both to the learning potential of very young children and issues of transition from home to school and from setting to setting and from preschool to school. It was supplemented by extensive national and local training programs and by a wide range of software that drew attention to the importance of high-quality play experiences and to the importance of making time to watch and learn from children's engagements with play activities and with teacher-directed activities. Just prior to the demise of the Labour Government, a supplementary document was published (DCSF 2009). This was perhaps the most comprehensive policy document ever issued by an English government to celebrate, explain, and illustrate the centrality of both play and observation within early years practice. Extensive examples of each are given. For the first time, the terms "playful learning" and "playful teaching" were used and explained. A cycle of "observe-assess-respond" was illustrated. The publication provided a richly illustrated alternative to the previous culture of "performativity and surveillance." However, its impact was short-lived. Although the document remained accessible on an independent website; the coalition government was quick to remove it from the government website and also replaced Iteration 3 with Iteration 4.

63.7 Iteration 4: Early Years Foundation Stage (DoE 2012)

This document and the prior consultation process introduced and heavily promoted the construct of "school readiness" for young children, a construct which has subsequently caused much debate and resistance within early years communities in England, both academic and practitioner based (Whitebread and Bingham 2011; see also Whitebread and Bingham, this Volume section on innovative and long lasting programmes). Iteration 4 was described on the government website as "a simpler framework." It reduced the number of early learning goals from 69 to 17. A progress check for 2-year-olds was introduced. The terms "playing and learning," "active learning," and "creating and thinking critically" are included as "learning characteristics," but no indication is given as to how the meanings of these terms are to be interpreted and applied. The curriculum is now divided into three prime areas (communication and language, physical development, and personal, social, and emotional development) and four specific areas: literacy, mathematics, understanding the world, and expressive arts and design, suggesting for many that differing levels

of status are implied from the separation into two groupings. The document speaks of "planned purposeful play" (paragraph 1.9). This goes on to state that as children become "older" (meaning toward 5 years of age), the balance of activities should be more adult led than child led, reiterating it seems the construct of school readiness being a prime purpose for early years education. In relation to the revised assessment profile, published in 2013, a range of web-based documents and web-based resources have been produced, but there is little information relating to observation and reflection as integral parts of pedagogical development or child-initiated activity within the assessment process. Four brief paragraphs can be located in the statutory guidance. There is brief mention of "child-initiated activity" but no mention of play within these paragraphs. A wide number of "learning journeys" are exemplified in the related web-based materials. These are predicated on assumptions that observations will be taking place and examples of observations are given, some of these drawn from playful activities. However, the thrust of these examples seems solely concerned with evidencing the identified and required 17 outcomes that the educator must assess. The assessment point is currently being debated as either when the child enters the reception classroom or, as is currently the case, toward the end of the reception year. There is no mention of integral links with pedagogical developments or of the complexity of playful learning. Such constructs are ignored within the examples. Play is presented as a site for assessment.

In summary, since 1996 when curricula and assessment-related documents relating to the early years of education were first published, it can be seen that the levels of emphasis within these policy statements on both "play" and "educator observation of play" have been relatively consistent. Apart from the document published in 2007, which held sway until 2011 (it was withdrawn prior to the publication of Iteration 4 in 2012), the other three iterations have made minimal references to both play and observation. None of these references were sufficient to convey an understanding of the need to grasp the complexities of play or to convey the potential that observing play could have in the development of playful pedagogies – itself a huge and unexplored complexity with educational provision in the early years. Only Iteration 3 – developed under the Labour Government and funded and implemented at national and local levels with teams of specialist early years advisors – entered into the complex worlds of understanding playful learning and recognizing that playful pedagogies grew from reflections upon well-constructed observations of children engaged in self-initiated play. This document also acknowledged that observing children and formulating understandings about what those observations have the potential to reveal is a complex and demanding task for educators that goes beyond "watching" and into the conceptualization of children's playful engagement in collaborative activity as learning and development.

Research relating to the development of the SPC has endeavored to reveal some of these complexities through data collection with educators (the people who know the children well) and through the analysis of naturalistic and spontaneous play activities in classroom settings.

63.8 A Further Development in the Research: The Emergence of "Open Ended Role Play" or "The Whatever You Want It to Be Place"

It was stated earlier that there would be consideration of the pedagogies of playful learning, as revealed through educator reflection during the ongoing research. This methodological opportunity led to a point of significant insight for the research as embodied in the above sub-title. This section needs to offer the reader a little more background into the use of the SPC to contextualize these revelations and the discussion around the importance of the development of playful pedagogies and the links therein with curriculum and assessment.

The research undertaken with five reception teachers (Broadhead 2004) had, as had other projects, utilized separate but simultaneous observations of play bouts with both the teacher and the researcher making use of the SPC. Post-observation reflection had followed on from the joint observations, and at this point the completion of Side 2 of the SPC was compared across each observer. Here, the observer is required to make a judgment as to in which of the four domains the play had been most substantially located. This allowed us to calculate the number of observations located in each of the four domains across all classrooms in relation to each of the observed areas of play (sand, water, etc.). This led to a shared interest across participating teachers and the researcher as to which of the observed play activities was stimulating the greatest amount of play in the cooperative domain. This was found to be sand play followed by large construction play (large bricks) and play with small construction materials with small world materials. Role play stimulated the lowest levels of play in the cooperative domain. In a project discussion with all teachers and the researcher, one teacher noted that it was the more open-ended play materials that stimulated the higher levels of cooperative play. Discussion led us to explore how, across the classrooms, the role play areas had been themed with two of them being home corners, one a café, one a shop, and one a birthday party. As a consequence we debated, children were implicitly expected to model these themes when in these areas rather than being able to initiate and sustain whatever themes they wished, as was the case when playing with other materials. We decided, as an outcome of these pedagogical discussions, to establish what we called "open-ended play areas" in each of the five classes. The teachers provided cardboard boxes, large pieces of fabric, and other materials, and we undertook further joint observations of this new area of play. All subsequent observations were located in the cooperative domain. This led to further project discussions about the potential of such open-ended materials in allowing children to initiate and sustain their play themes and commit to their extended and reciprocal engagements in ways characterized both in Table 63.1 and on Side 1 of the SPC. One of the teachers reported that she was discussing "the open-ended role play area" with her class 1 day and invited them to think of a new name for it. A girl remarked that it was "the whatever you want it to be place" because as she explained: "it can be whatever you want." Young as she was, she had fully grasped the potential of this play space to match with her own

inner plans, memories, interests, experiences, and ideas. But more than this, we noted how this space allowed children to recognize compatible interests and to align these interests in cooperative endeavor and extensive problem setting and solving. They were engaged in what Bodrova (2008) describes when saying that play allows children to engage in new forms of thinking, bringing alive internal ideas by the creation of external realities that they then collaboratively inhabit.

In a later research project, Broadhead collaborated for a longitudinal study with another reception class teacher to study how the creation of a large-scale "whatever you want it to be place" in the outdoor area had impact on children's play (Broadhead and Burt 2012). Burt (p. 140) eloquently describes the extensive pedagogical challenges of working in this way:

"They (other teachers) think that by working like this, we are doing less. But we are not. I think we are doing far more. We are spending less time doing some of the more structured things. . . although we still do them, but more time observing the play, interacting with the play and using play as the basis of our planning and then going forward with it . . ."

In the book, we describe some of the requirements of this complexity as follows:

These pedagogies include:

> Extended periods of time available for playful engagements alone and with peers on a daily basis;
>
> Team planning that builds on the observed interests and preoccupations of children;
>
> Recognition of and respect for the children's emerging and repeated play themes;
>
> Support for mobility in play scenarios as they move indoors and outdoors, sometimes requiring high levels of physical activity;
>
> Sensitive adult interventions that start from the child's agenda and not the adult's agenda;
>
> A willingness to allow children to transport materials from play site to play site because play themes are often developed through mobility;
>
> Providing spaces that are large enough for more complex designs that older children can create with like-minded peers. (pp. 152–3)

In this classroom, regular observations of the children's play experiences and interaction across the early years team have supported the pedagogical development of the play area. The staff articulated how the quality of the play was now higher in the setting with children engaged in intellectually challenging and self-initiated tasks on a regular basis and, interestingly, how the levels of antisocial or unacceptable behaviors had diminished. Children were more inclined to comply with adult directives for adult-led activities, relating to literacy and numeracy when they were undertaken. As one team member, Debbie, puts it in her reflections:

> Children's behavior is fantastic now; we don't have many problems, the odd bickering now. But before, when we were asking them to do what we wanted them to do all the time, we had more behavior issues, whereas now we don't.

The final section considers some implications for the chapter having juxtaposed the findings from the ongoing research against the curriculum and assessment iterations which paralleled the research. The research findings have aimed to reveal the

competence and complexities young children can exhibit in playful engagements where playful pedagogies prevail. The key question is whether curriculum and assessment policy iterations in England serve children and educators as well as they might.

This brief section has aimed to show how pedagogical thinking and decision-making relating to play has a positive impact on the learning potential of cooperative play. Teacher thinking and decision-making can allow play to become an integral part of the daily curriculum. It can also provide opportunities to learn from observations of children's learning and development and also about the kinds of play experiences that might challenge and liberate children.

From policy to practice; protecting the status of self-initiated play and educator observation within early years curriculum and assessment.

The four English early years policy iterations reviewed in this chapter have revealed that, with one exception, this policy has paid little attention to playful learning and its associated complexities. It has paid similarly scant attention to the observation of play both as a route to informing pedagogy and educator professional development and as a means of assessment. Only one set of legislation and guidelines, Iteration 3, was designed and developed to actively support educators in observing children's learning through play and in using these observations as integral to both curriculum planning and assessment activity. This iteration is now obsolete, having been replaced by policy which prioritizes an early start to teacher-directed activity and a focus on school readiness.

Yet, drawing on joint research with educators and the development of the SPC, we have seen something of the potential of young children in terms of their capacity to consistently display and utilize the complex and high-order characteristics of the Social Play Continuum when classroom pedagogies allow them to do so. Drawing from this research, the chapter has argued that these pedagogies can further benefit from the incorporation of open-ended play materials in order to more effectively liberate children's memories, ideas, and experiences by allowing them to initiate and sustain thematic play scenarios in cooperation with peers. A deep immersion in play brings with it the capacities for sustaining cooperative interactions and with this comes a range of behaviors indicative of both learning and development (as the cooperative domain reveals). Unfortunately, the current early years policy iteration in England gives no indication of taking regard of these capacities and competencies. It actively promotes adult-led play and structured play as good curricular practice. This chapter has aimed to illustrate that playful pedagogies do have a very active and engaged role for educators; adults are by no means bystanders in this form of curricular engagement. Their own intellectual engagements are demanding, and it is through observation, interpretation, and reflection that they create the conditions for children to lead their own learning through play.

The chapter has spoken of "culturally informed pedagogies" where educators recognize, via observation and assessment, that the thematic interests in which children most substantially engage and cooperate can arise from a wide range of experiences. For example, in one extended joint observation in the "whatever you want it to be place," we saw a group of six children engaging with the play themes of

domestic life, burglars, babysitting, and the literacy hour. While the first three are drawn from home experiences, the literacy hour was at that time a daily, class-based experience. In Broadhead and Burt (2012), where this vignette is presented, we argue that children seldom pretend. Their play is rooted in memory, experience, and a desire to understand their place in the world; its demands upon them; and their own potential for impact. Observing and interpreting children's play lead to a deeper understanding of both individual and collective cultures and to more informed decisions about how to pedagogically structure the children's daily experiences of play in ways that liberate both child and adults. Observing children's open-ended and free choice play brings their own cultural heritages and personal interests to the fore, and yet we see nothing of this in current policy iterations in England.

If play is complex to understand, then playful learning is even more complex. The SPC depicts some of these complexities in terms of play characteristics, behaviors, and uses of language. The observer is required to note their display and also, alongside this, to capture the narratives of play. It is from understanding and reflecting on those narratives that the culturally informed pedagogies can emerge. As discussed earlier in the chapter, the completion of the sheets can tell the educator which materials are stimulating cooperative play in the classroom – with its high-order demands on the interacting peers. But play is not just the exhibition of characteristics, behaviors, and language. These are the manifestations of play. Play tells us about children's lives, knowledge, and ideas. It is important to know of these if we are to better understanding playful learning in young children and to best support it with playful pedagogies, which of course includes assessment-related tasks for the educator. If we were to ask ourselves how well policy makers in England understand these complexities, then on the evidence we have seen in this chapter, the answer would be "not very well." Indeed it might even be "not at all." In such climates this chapter concludes, neither observation of children nor their play will be deemed important and our curriculum and associated pedagogies will be the poorer for it.

References

Bennett, N., & Kell, J. (1989). *A good start? Four year olds in school*. Oxford: Blackwell.

Bodrova, E. (2008). Make-believe play versus academic skills: A Vygotskyan approach to today's dilemmas of early childhood education. *European Early Childhood Education Research Journal, 16*(9), 357–369.

Broadhead, P. (1997). Promoting sociability and cooperation in nursery settings. *British Educational Research Journal, 23*(4), 513–531.

Broadhead, P. (2001). Investigating sociability and cooperation in four and five year olds in reception class settings. *International Journal of Early Years Education, 9*, 24–35.

Broadhead, P. (2004). *Early years play and learning. Developing social skills and cooperation*. London: RoutledgeFalmer.

Broadhead, P. (2006). Developing an understanding of young children's learning through play: The place of observation, interaction and reflection. *British Educational Research Journal, 32*(2), 191–207.

Broadhead, P. (2009). Conflict resolution and children's behaviour: Observing and understanding social and cooperative play in early years educational settings. *Early Years, 29*(2), 105–118.
Broadhead, P., & Burt, A. (2012). *Understanding young children's learning through play. Building playful pedagogies*. Oxon: Routledge.
Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and motivation. In A. Kozulin, B. Gindis, V. S. Ageyev, & S. M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 39–64). Cambridge: Cambridge University Press.
Charlesworth, R., & Hartup, W. W. (1967). Positive social reinforcement in the nursery social peer group. *Child Development, 38*, 93–102.
Cleave, S., & Brown, S. (1991). *Early to school: Four year olds in infant classes*. Windsor: NFER-Nelson.
Daniels, H. (1993). *Charting the agenda; Educational activity after Vygotsky*. London: Routledge.
David, T., Goouch, K., & Powell, S. (2010). Play and prescription: The impact of national developments in England. In M. Kernan & E. Singer (Eds.), *Peer relationships in early childhood education and care* (pp. 49–60). London: Routledge.
DCSF (Department for Children, Schools and Families). (2009). *Learning, playing and interacting*. London: QCA.
DfEE (Department for Education and Employment). (1996). *Nursery education: Desirable learning outcomes for children's entering compulsory education*. London: QCA.
DfEE (Department for Education and Employment). (2000). *Curriculum guidance for the foundation stage*. London: QCA.
DfES (Department for Education and Skills). (2003). *Foundation stage profile*. London: QCA.
DfES (Department for Education and Skills). (2007). *The early years foundation stage*. London: DfES.
DoE (Department of Education). (2012). *Statutory framework for the foundation stage*. London: DoE.
Parten, M. B. (1933). Social play amongst pre-school children. *Journal of Abnormal and Social Psychology, 28*, 136–147.
Reynolds, G., & Jones, E. (1997). *Master players. Learning from children at play*. New York: Teachers College Press.
Saxe, G. B., Gearhart, M., Note, M., & Paduano, P. (1993). Peer interaction and the development of mathematical understandings; a new framework for research and educational practice. In H. Daniels (Ed.), *Charting the agenda; educational activity after Vygotsky* (pp. 107–144). London: Routledge.
Schaffer, H. R. (1996). *Social development*. Oxford: Blackwell Publishers Ltd..
Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. London: Harvard University Press.
Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: MIT Press.
Whitebread, D., & Bingham, S. (2011). School readiness; a critical review of perspectives and evidence. TACTYC (Association for the professional development of early years educators) Occasional paper No 2 http//:www.tactyc.org.uk accessed July 22nd, 2013.

Chapter 64
Making the Case for Playful Learning

Hande Ilgaz, Brenna Hassinger-Das, Kathy Hirsh-Pasek, and Roberta Michnick Golinkoff

Children learn as they play. Most importantly, in play children learn how to learn. – O. Fred Donaldson

Abstract Play is one of the natural strengths of childhood through which children acquire and also practice critical language, cognitive, and socio-cognitive abilities. This long-standing belief has widely shaped curriculum in early childhood, mainly in the form allotting time and space for free play. However, lately the effectiveness of play for early childhood development and consequently its place in the early childhood curriculum are under attack especially in the USA. Policy makers are substituting playtime with didactic instruction aimed at imparting decoding skills that speak to a narrow set of literacy and school readiness skills. Their decision to make the early childhood classroom a more didactic, adult-directed teaching environment is seemingly supported with recent reviews of play research that show minimal or inconsistent effects. We propose that playful learning deserves careful consideration before we discard play as a learning and instruction strategy. In this chapter, we review some of the newly emerging evidence for the effectiveness of *guided play*, a form of play that is situated on a continuum between adult-directed didactic instruction and child-directed free play. In the light of reviewed evidence, we propose that playful learning should be implemented to target specific learning objectives such as numeracy, vocabulary, narrative competence, and knowledge of science concepts. We discuss the need for comprehensive playful learning programs

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that complement free play and didactic programs. Finally, we emphasize the need to share playful learning techniques with educators that will enable them to integrate curricular objects in playful learning activities.

Keywords Guided play • Early childhood education • Cognitive development

In the USA, 23% of children are growing up in poverty with little access to age-appropriate books or games that support language or early mathematics knowledge (Kids Count Data Center 2013). Without a strong early education in these areas, these children will be at a disadvantage. However, many studies have shown that rich curricula improve preschool children's later academic outcomes, particularly in the areas of literacy, mathematics, and school readiness (Campbell et al. 2001, 2002; Campbell and Ramey 1994; Reynolds et al. 2004; Schweinhart 2004; Weikart 1998). As such, we not only know that early education matters, but research is narrowing in on exactly the kinds of curricula that will align preschool education with later school success. Yet curriculum is but one part of the puzzle; the other part, of equal importance, is how the curriculum is delivered. Without effective pedagogical approaches, even the best curriculum can fail.

Many early education curricular and assessment approaches have focused on directly presenting content without addressing the need for innovative and responsive pedagogy (Miller and Almon 2009). In this chapter, we question whether the default pedagogical option should be didactic instruction measured solely by standardized assessments. We consider those factors that lead to "effective" early childhood education. Our skepticism is not a matter of preference or as a result of an aversion to "didactic" or "traditional" teaching methods (Bowman 1999). We offer an alternative pedagogical approach in the form of guided play—a type of play that is child centered but is situated on a continuum between adult-directed didactic instruction and child-directed free play (also see, Toub et al. 2016; Weisberg et al. 2013a, b; Weisberg et al. 2016). The construct of guided play offers the opportunity for a rich curriculum delivered through a playful learning experience that features a whole-child approach and utilizes child-centered instruction. In fact, guided play has been shown to promote the same academic outcomes, including language skills and school readiness, as a strong preschool curriculum (e.g., Hirsh-Pasek et al. 2009; Roskos and Christie 2001; Fisher et al. 2011). Here, we review the emerging evidence for the effectiveness of guided play. In light of this evidence, we propose that playful learning in the context of guided play should be given careful consideration as a pedagogy that complements both preschool curricula and free play.

64.1 The Face of Early Education and Assessment in the USA

The image of the preschool classroom that Americans have in their minds has changed drastically in recent years. A classroom full of young children where there is happy chaos during play time and where children test which objects float in water or pretend to write down orders in the house corner for peers pretending to be restaurant patrons is now becoming a thing of the past. The 2009 Alliance for Childhood report (Miller and Almon 2009), based on a survey of 200 kindergarten classrooms in New York and Los Angeles, found that 25% of the teachers in Los Angeles reported having no time for play in their classrooms. Perhaps even more worrisome is the report's finding that young children had, on average, less than 30 min a day for play in the New York classrooms and less than 20 min in Los Angeles. What is replacing the time opened up by eliminating play? Individual work with a teacher on standardized test taking! Providing quantitative evidence for this disconcerting fact is the report's finding that 80% of teachers from both cities clear time in their daily classroom schedules for test preparation. These findings are consistent with Elkind's (2008) claim that children have lost up to 8 h a day of free-play time over the last two decades and that thousands of schools in the USA have given up recess time to ensure that children have more time for academic study. This reduction in playtime is a barometer for a much deeper debate in our society about the value of play in children's lives. In short, early childhood classrooms are looking more and more like grade school every year.

This radical change that has so profoundly altered the image of the typical preschool and kindergarten classroom was ushered in by the No Child Left Behind Act (NCLB), which promoted one message loud and clear: the need to modify the way that we have been viewing the effectiveness of education. Though early education was not targeted in NCLB, it was caught up in the wave of change. Effective early childhood education needs to produce children who know their letters and numbers so that they are ready for formal schooling by age 5 or 6. Effectiveness has thus become a criterion through which parents can understand whether or not their children's teachers are actually succeeding in teaching children the necessary information to facilitate school readiness and later school success. Perhaps most worrying is that this view has emphasized the active nature of teaching while downplaying the active nature of learning. Teaching is being redefined as the ability of the teachers to pour information into the empty vessels of the young rather than inspiring learning through discovery (Hirsh-Pasek and Golinkoff 2003).

Ironically, research suggests that a focus on child-centered pedagogies is effective for improving educational outcomes (Campbell et al. 2002; Montie et al. 2006) and that the renewed emphasis on didactic instruction to improve test scores at earlier ages has not resulted in improved academic and socio-emotional readiness skills (Schweinhart and Weikart 1997). Particularly, in an analysis of 6 longitudinal data sets, Grissmer et al. (2010) found that the combination of attention, fine motor skills, and general knowledge of the social and physical world was a better predictor

of later mathematics, reading, and science scores than kindergarten reading and mathematics scores.

It also does not appear that NCLB has had the intended effects on later school outcomes. The first crop of students who experienced all of their formal schooling during the NCLB era would be reflected in the international test scores that were reported in 2009. The 2009 Programme for International Student Assessment (PISA) found that 70% of 15-year-olds in the USA read at level 3 proficiency or lower, meaning they did not display advanced reading abilities that involve extracting, interpreting, and synthesizing information from texts that do not rely on common knowledge (OECD 2010). The same study found that the USA ranked 30th among industrialized countries in math proficiency and 23rd in science. This grave picture coupled with the fact that children from low socioeconomic backgrounds are more likely to score below the average on both US and international proficiency levels shows us that the way we have been approaching the education problem is not providing solid results.

More than a decade after the NCLB act was passed, a different US president faced many of the same challenges, including persistent achievement gaps between American children and children from other countries, as well as the gaps between American children from different socioeconomic backgrounds (IES National Center for Education Statistics 2011; OECD 2010). In this climate of educational urgency, President Obama (2009) introduced the Race to the Top Initiative with a speech that focused on "raising the bar in early childhood education" and emphasized that "success should be judged by results and data is a powerful tool to determine results." The common threads between NCLB and Race to the Top seem to be the emphasis on knowledge as commodity, and that educational institutions should be held accountable for providing the type of education that prepares the American child to compete and succeed in a competitive world. Although these initiatives are focused on K-12 education, many of the core principles trickled down to the early childhood education community. The rationale is straightforward and at this point all too familiar: teachers should be held accountable; accountability should be judged by data; and children's performance on standardized assessments will provide policy makers and parents with the data to judge the effectiveness of their children's education.

The positive in this grim picture is that initiatives like the NCLB, Race to the Top, and the Common Core State Standards (Common Core State Standards Initiative 2010) shone the spotlight on education in general and early education in particular. Today, there is also renewed emphasis in the USA on the promise of early education (Heckman 2011; Obama 2009). The question on the table is not whether participation in formal early childhood programs has both short- and long-term benefits on children's school readiness and success; a plethora of research tells us that it does (e.g., Campbell et al. 2001, 2002; Campbell and Ramey 1994; Justice et al. 2008; Schweinhart 2004; Weikart 1998; Reynolds et al. 2004). The question is also not whether early language, math, and science skills contribute to school readiness or success; the research is clear that they do (Duncan et al. 2007; NICHD Early Childcare Research Network 2005; Whitehurst and Lonigan 1998). The question is

whether we can have strong curricular goals that are taught using developmentally sensitive and developmentally appropriate methods. And here too, there is a strong suggestion that this is possible (Hirsh-Pasek and Golinkoff 2011; Zigler et al. 2004). Indeed, research from Montessori schools (Lillard and Else-Quest 2006; Lillard 2012) along from anecdotal evidence from popular schooling methods like Reggio Emilia (e.g., Edwards et al. 1998) offer preliminary evidence that we can have a content-rich curriculum within a more playful and developmentally appropriate pedagogy.

Our concern is that the view of didactic instruction as educational effectiveness is at odds with what we know about how young children learn. Conceptually, our argument is based on the seven principles of a whole-child approach (for detailed discussion of these principles, see Hirsh-Pasek et al. 2009). These principles paint a picture of an active learner who gains new information and ways of understanding the world through participation in social and responsive learning situations. These young learners are most successful when the learning situation is sensitive and responsive to their social and emotional needs. Within this framework, early childhood education is most successful when it targets the whole child promoting essential life skills such as self-regulation, flexibility, and creative thinking, as well as curricular goals that will feed into school readiness and later school success. We argue that only holistic pedagogies that emphasize children becoming active seekers and learners of knowledge will produce what the policies of the past decade have actually been striving for: learners who know how to seek and integrate information and learners who can find solutions to novel problems.

Under the guidance of these principles and based on mounting evidence, we propose that guided play is a developmentally sensitive and developmentally appropriate pedagogy that needs to be brought to the forefront in child education. We support our argument with evidence from studies that have examined the effects of guided play on children's school readiness abilities such as literacy, language, math, and science, as well as important life skills such as self-regulation.

64.2 Guided Play: A Developmentally Appropriate Learning Context

Most scientists agree that play activities are fun, voluntary, flexible, have no extrinsic goals, involve active engagement of the child, often with an element of make-believe (Johnson et al. 1999; Pellegrini 2009; Sutton-Smith 2001; Fisher et al. 2011). In their review of the literature on pretend play and learning, Lillard et al. (2013) add positive affect, nonliterality, and intrinsic motivation to the mix (see also Bateson 1972; Garvey 1977; Sutton-Smith and Kelly-Byrne 1984).

This definition of free play provides a good starting point for our explanation of guided play. The two defining features of free play are that it is child-initiated and child-directed. Free play is child-initiated in the sense that it emerges spontaneously

and is based on children's will. It is child-directed in the sense that children have full control over the topic of play, the roles of self and others, and the implicit rules and conditions of play. For instance, at the water table children may choose to experiment with different containers to see which one holds more liquid, or they can engage in make-believe and pretend to make lemonade. Importantly, the play may change in nature over a brief span of time, where children pretending to make lemonade may start experimenting with the containers or children who were busy trying to solve the shape-volume issue may start pretending that they are selling lemonade at a stand. Children engage in exploration and discovery learning in free play where they actively manipulate objects or try out social roles and practice their narrative abilities without adult-imposed constraints and learning objectives (Pellegrini 2009). Free play also provides children with a medium to develop socio-emotional abilities (see Pagani et al. 2010; Romano et al. 2010; Singer and Singer 1990).

The debate is not whether children benefit from free play, but whether free play supports learning objectives or promotes school readiness. Two studies suggest that free play, alone, may not be powerful enough to prepare children for these standards. Chien et al. (2010) observed 2,751 children in 701 state-funded preschool classrooms from 11 states across the country to identify patterns of children's classroom engagement. They also investigated whether these patterns were differentially related to gains in school readiness. Their analysis revealed four different engagement patterns: free play, large or small group instruction, individual instruction, and scaffolded learning contexts. The first three of these patterns are clearly identified in the classroom setting and schedule. The fourth pattern is one that is based on the nature of children's interaction with others. In the scaffolded learning contexts, children were observed in interaction with their teachers or a more capable peer where they engaged in learning as a response to contingent support that helped to extend children's understanding and knowledge. A striking result of the study was that children who were observed spending the most time in free play made the smallest gains in language, literacy, and math measures across the academic year. There were no differences in the gains children made based on the other three engagement patterns with the exception of children in the individual instruction group outperforming all other groups on Woodcock-Johnson Applied Problems subtest.

Another piece of evidence comes from a meta-analysis on 164 studies that examined the effects of unassisted discovery learning, enhanced discovery learning, or explicit instruction with children and adults (Alfieri et al. 2010). Unassisted discovery typically involved working alone or with a naïve peer on a problem with novel material. Enhanced discovery learning typically involved interactive problem-solving contexts where learning was supported through questions and supportive comments that served to guide participants' reasoning and learning. In the explicit instruction condition, participants were provided information through didactic methodologies such as lectures and presentations or demonstrations. The results are telling. Enhanced discovery learning conditions were found to be more effective than explicit instruction and unassisted discovery contexts.

Taken together, these two findings indicate that when it comes to targeted learning goals, unassisted learning contexts are not effective in producing specific

learning outcomes. This conclusion is also supported by Chi's work (2009). Chi argues that, particularly for young children, learning that is active, constructive but also interactive, will yield the best learning results. Do these results then justify eliminating playtime and replacing it with more didactic forms of instruction? To the contrary, in our view, the stated research also provides compelling evidence to consider a different type of play activity that can allow children to explore and lead in their learning while receiving contingent support: guided play.

Guided play is a middle ground between free play and direct instruction (Weisberg et al. 2013a, b). It combines the enjoyable and empowering nature of play with developmentally appropriate and scaffolded instruction. Guided play is essentially a child-directed activity where children lead the play and guide their own learning and discovery within a framework of careful adult guidance. In this type of play, adults support and subtly guide children's learning through setting up the learning environment, commenting on the play, asking questions that encourage deeper thinking, discovery, and reflection (Ash and Wells 2006; Berk and Winsler 1995; Callanan and Braswell 2006; Callanan and Oakes 1992; Copple et al. 1979; Rogoff 2003).

Guided play can be initiated by children and supported by adults as when an adult seizes the opportunity and enters an ongoing play context. For instance, upon seeing two children building castles with blocks, the teacher may participate in the play and subtly probe for learning objectives such as mathematical concepts (e.g., How many blocks do we need to make another tower? Which castle is taller? What would happen if we took one block away?), vocabulary (e.g., Who lives in castles? Can we build a turret on this tower?), or social sciences (e.g., Why do you think kings and queens used to live in castles? Couldn't they live in houses or apartments like we do?). Teachers may also craft a play activity with a careful plan that targets learning objectives such as a providing theme-related toy sets that support the use of new vocabulary or providing irregularly shaped blocks to build a house which yields rich talk about shapes. In this case, the adult structures the environment that allows children to initiate play that will foster learning.

The roles of both the adult and the children are very different from those in free play and direct instruction. In free play, teachers typically assume the role of a bystander/observer who intervenes during times of crisis such as when children cannot resolve conflicts on their own. For direct instruction, the role of the teacher is that of the director who provides explicit instruction. In contrast to both of these roles, in guided play the adult takes the role of a coach that observes children's learning and intervenes subtly to scaffold children's thinking and reflection of the new information all the while taking a playful stance. In stark contrast to free play, the teacher shares the play context with the children, taking on a role, participating in the play, and is careful to maintain the light and fun atmosphere. In guided play, teachers follow children's lead but have a learning goal in mind.

To illustrate, imagine three teachers who all taught new farm-themed vocabulary words during story time. All teachers added some props and toys such as farming tools, flower pots, seeds, and plastic flowers to their house corner that might facilitate use of these new vocabulary words. The teachers who take a free-play approach

invite the children to play at the house corner but would only enter children's play if they experienced a problem and would otherwise stay on the sidelines to let children experiment with the new words on their own. The teacher who takes a didactic approach would provide adult-centered and adult-directed instruction about the words if she ever entered the children's house corner. She might ask children to name the different flowers and show her how to use a rake.

In contrast, the teacher who takes a guided play approach would enter their play as a play partner. For example, she might ask if the farmer needs help before joining in. She would then ask questions that prompt children to think deeply about the new words as they play: "I can't find the rake, do you think a shovel will work to pick the leaves?" Depending on how children answered, she might even follow up with open-ended questions that get children to talk like, "Why not?" This example illustrates that guided play is fundamentally a scaffolded activity in the spirit of the Piagetian and Vygotskian schools of child development, following children's lead while at the same time exposing them to richer curricular concepts. Guided play is also compatible with new conceptualizations of effective learning contexts as including assisted discovery and children's own activity (e.g., Chi 2009; Honomichl and Chen 2012).

The role of children in guided play is similar to that in free play. True to the core definition of play, children are expected to take ownership of the play context and lead the play. This is in direct contrast to the direct instruction pedagogy where children are passive recipients of information. In guided play, children have to actively construct the play scene in collaboration with peers. Children's ownership of play is one of the critical elements of the guided play approach as it ensures that the play context is meaningful and interesting for children.

64.3 Guided Play: The Evidence

Studies that directly investigate the effectiveness of guided play on academic outcomes are sparse, but there is enough evidence to guide research programs. In the following sections, we provide a brief overview of studies that present us with the relevant evidence.

64.4 Language, Literacy, and Guided Play

Studies that have focused on structuring the play environment in the classroom in order to enhance children's literacy-related play have generally shown positive effects (Christie and Enz 1992; Christie and Roskos 2006). By way of example, Neuman and Roskos (1992) investigated whether the incorporation of literacy props in the dramatic play, library, and other centers increased literacy-related activities compared to a control group. Children in the intervention group interacted with the

literacy materials significantly more than children in the control group, and they also engaged in longer and more complex literacy-related activities than the children in the control group.

Structuring the play environment to provide children with materials that will enhance their learning of curricular objectives is only one component of guided play. Another essential component is the developmentally sensitive support and guidance provided by the adult or more capable peers. Research by Morrow and Rand (1991) provide some evidence that the combination of structuring the play environment combined with sensitive support leads to higher levels of literacy-related play. In this study, the authors randomly assigned 170 preschool and pre-K children from 13 classrooms in one of four conditions. In the guided play-literacy condition, literacy-related materials such as magazines, books, pens, and papers were introduced to the block corner and the dramatic play center. In the guided play-thematic play condition, dramatic play centers were enriched with thematic materials (e.g., veterinarian's office with pet-themed magazines, nurse's station). In the free play with thematic materials condition, the same thematic setup was offered without adult guidance. Finally, traditional curriculum play centers resumed their business-as-usual style. Adult guidance in the literacy condition took the form of reminding children to use the new materials in their play, but also importantly included modeling of the desired behavior by the teacher. This study showed that children in the two guided play conditions engaged in more literacy activities. They also engaged in more complex literacy behavior such as pretending to read and write. This study provides evidence that the combination of organizing the environment to target curricular goals and providing guidance during play is a powerful combination in increasing children's engagement with curricular activities in a play setting.

Another line of inquiry asks if guided play can be used to promote oral language abilities. Oral language abilities lay the foundation for literacy abilities that prepare children for school readiness. Importantly, oral language abilities have long-term and pervasive effects on later school success (e.g., Dickinson et al. 2010). Two aspects of oral language have been studied with guided play techniques: vocabulary acquisition and narrative development.

Several studies have used guided play techniques to complement other literacy activities in the classroom such as story time (e.g., Han et al. 2010; Roskos and Burnstein 2011; Vukelich et al. 2009). For example, Han et al. (2010) investigated whether a book reading and guided play intervention could increase vocabulary scores of at-risk Head Start children whose scores on the Peabody Picture Vocabulary Test were one standard deviation below age norms. All children participated in interactive book readings that targeted new vocabulary words for 30 min, twice a week for 2 months. The treatment group received book reading for 20 min followed by 10 min of guided play with book-related props. Children in the control group engaged in 30 min of interactive book reading without guided play. While children in both groups showed gains in their expressive vocabulary, the group who had received the play intervention showed significantly more gains than children in the no-play group. This study illustrates that guided play can be used with very specific

learning objectives (i.e., learning specific vocabulary words) and can complement existing literacy activities in the classroom to support children's oral language abilities.

Play interventions that target narrative abilities have been around since the 1970s. These interventions typically take two forms: thematic-fantasy play where children enact stories that are read to them during story time and storytelling and story-acting activities where children author their own stories and later enact them with friends (for reviews, see Mages 2008; Nicolopoulou and Ilgaz 2014; Pellegrini and Galda 1993; Rowe 1998). Thematic-fantasy play research has systematically tested whether adult guidance matters in children's narrative gains. In a study that compared adult guidance with peer guidance, Pellegrini (1984) found that younger children (preschoolers) benefited from adult guidance significantly more in terms of story comprehension, whereas older children (kindergarteners) benefited equally from adult and peer guidance. Guided play seems to help children especially when the task at hand is challenging. To illustrate this point, Silvern et al. (1986) investigated the effects of varying degrees of adult support (directive vs. facilitative) and story difficulty (familiar vs. unfamiliar fairy tales) on preschoolers' narrative comprehension abilities. Echoing Pellegrini's (1984) findings, they found that children's age and degree of adult support interact differentially based on story familiarity. Younger children benefited more from stronger adult scaffolding in making sense of the story regardless of story familiarity, while older children benefited from this type of support with unfamiliar stories. Further, when the story does not pose a challenge (familiar stories), older children benefited equally from opportunities to co-construct the story with peers or adults. These two studies collectively show that guided play that is sensitive to children's developmental levels can have potentially long lasting effects on critical oral language and school readiness abilities.

Another type of guided play activity involves adaptations of Paley's (1990) storytelling and story-acting activity. These adaptations involve true integration of guided play and playful learning principles as they are adult-structured, child-centered, and child-directed activities (e.g., Nicolopoulou 2002; Nicolopoulou and Richner 2004). This activity generally involves encouraging children to tell stories to their teacher at free-play time. The teacher writes the stories down in a class storybook, taking care not to direct or shape children's stories. Later, during circle time the story is read to the whole group, and the author of the story is asked to invite friends to act in the story. The children have full ownership of their stories both during the process of composing the story and during enactment. In one such study, Nicolopoulou et al. (2006) found that Head Start preschool children who engaged in this activity created longer stories with more complex storylines.

In sum, research that looks at the effect of guided play on children's language and literacy abilities shows gains in children's literacy-related behavior, literacy knowledge, and oral language abilities. This line of research as indicated by Lillard et al. (2013) shows one of the strongest relations between play and curricular outcomes. However, as Lillard and colleagues also caution, this body of work is not without methodological problems and requires rigorous studies that investigate this relationship (see Nicolopoulou and Ilgaz 2014 for further discussion). Nevertheless,

this research provides a solid starting point for devising playful activities for children that target specific literacy-related curricular goals.

64.5 Mathematics and Guided Play

In the area of mathematics, guided play helps children become competent problem-solvers while receiving support from both educators and peers (Fisher et al. 2013; Saracho and Spodek 2009). To foster guided play, educators may provide children with opportunities to interact with games and toys that are aligned with mathematics curricula. For instance, a teacher may introduce Unifix cubes into children's play stations to encourage spontaneous counting behaviors.

Teachers can also facilitate math learning by scaffolding children's spontaneous play experiences. By playing alongside children and making suggestions about creative ways to play or creating games based on mathematical concepts, teachers can build off of children's natural curiosity and create opportunities for mathematics learning. In the area of geometric knowledge, Fisher et al. (2013) found that when children were taught about the properties of shapes using guided play methods, as opposed to free play or didactic pedagogies, they increased their shape knowledge. The authors suggest that the scaffolding techniques present within guided play helped the children learn by increasing engagement and aiding in sense-making (Fisher et al. 2013).

In the current literature, game play is the chief method in which playful learning approaches are integrated into mathematics curricula. Research has shown that when games are combined with educational content, their playful, active, and engaging elements may be used to increase children's motivation (Garris et al. 2002; Habgood and Ainsworth 2011). Instructional games enhance learning, because they increase children's motivation, which in turn increases attention to content and information retention (Garris et al. 2002).

Studies have demonstrated success with integrating mathematics and playful elements such as games with young children (e.g., Griffin 2004; Klein and Starkey 2004; Ramani and Siegler 2008). Games maybe considered guided play when they are accompanied by minimal guidance, whether from an adult or a computer program. Ramani and Siegler (2008) specifically examined the effects of a game and demonstrated that playing a linear number board game—Great Race Game—for four 15- to 20-min sessions within a 2-week period and for a fifth session 9 weeks later increased low-income preschoolers' numerical knowledge in numerical magnitude comparison, number line estimation, counting, and numeral identification. Additionally, Sarama and Clements (2009) demonstrated that children involved in Building Blocks, a mathematics curriculum featuring games and other playful elements, outperformed their peers taking part in their regular mathematics curriculum on measures of counting, geometry, and number combinations.

64.6 Science and Guided Play

Science readiness is less of a focus during the early childhood years as other academic content areas, such as literacy and mathematics (Greenfield et al. 2009). However, one key area of interest is the development of young children's "scientific" curiosity, defined as "the threshold of desired uncertainty in the environment which leads to exploratory behavior" (Jirout and Klahr 2012, p. 150). Jirout and Klahr (2012) proposed that children's scientific curiosity may be assessed using a measure of their comfort with different levels of uncertainty using a computer game called Underwater Exploration! During the game, children explore different situations varying in the amount of information available regarding the number of fish that are outside a submarine window. Curiosity is measured by the level of uncertainty the children select regarding their ability to know how many fish are outside the window during the game (Jirout and Klahr 2012).

Children are motivated to discover how things work and to use exploratory play, such as touching and moving objects, to satisfy their scientific curiosity regarding how the world works (Schultz and Bonawitz 2007). Given that children's free, exploratory play is often centered around discovery, it sets up the potential for teachers to incorporate guided play pedagogies into science education. Future research should examine the potential role for guided play in cultivating children's scientific curiosity in conjunction with their natural inclination to engage in exploratory play.

64.7 Socio-emotional Development and Guided Play

Studies that seek to improve young children's socio-emotional and self-regulation abilities are largely influenced by the teachings of Vygotsky. According to Vygotsky (1967), pretend play provides a zone of proximal development within which children develop two essential capacities: (1) navigating a possible world where they have to engage in reasoning about play partners' and play characters' motivations, thoughts, and beliefs and (2) the ability to exercise self-regulation in accordance with the implicit rules of the play situation (e.g., Berk et al. 2006; Berk and Winsler 1995; Meyers and Berk 2014). Supporting this claim is research demonstrating that children's engagement in pretend play is related to their theory of mind abilities (Astington and Jenkins 1995; Jenkins and Astington 2000).

What might be the role of teachers in promoting children's socio-cognitive understanding in pretend play? Ashiabi (2007) suggests that children would gain competence and extend their socio-cognitive abilities when teachers participate in play, guide the play as a stage manager, and facilitate who sets the play context, and support the development of play interactions. Teachers can act as mediators when conflicts between children arise that they cannot resolve on their own. Some preliminary evidence that speaks to these claims comes from a study that has shown a

positive relation between rate of parent-initiated guided play and children's prosocial behavior (Ladd and Hart 1992).

Play is also a context in which children develop self-regulation abilities. Self-regulation encompasses actions such as being able to wait for one's turn, resolve conflicts through negotiation rather than resorting to aggressive behavior, and being able to persist at a challenging task despite its difficulty (Berk et al. 2006). Children's competency in executive functioning which involves self-regulatory processes (such as behavior inhibition or acting contrary to one's impulses) is a primary factor that predicts school success above other strong factors such as IQ (e.g., Diamond et al. 2007).

Elias and Berk (2002) investigated whether there is a relationship between engagement in sociodramatic play and children's self-regulation abilities. Specifically, children who already have problems in regulating their behavior (i.e., impulsive children) benefit from play differently. The results showed that the frequency with which children engaged in complex sociodramatic play and their persistence in maintaining the sociodramatic play were significantly related to their self-regulation in cleanup contexts 4–5 months later. Notably, these findings also held for children who were rated as having impulse control problems by their parents.

Another piece of evidence comes from Bodrova and Leong's (2007) Tools of the Mind (Tools) program. This program aims to increase children's self-regulation along with other school readiness abilities (e.g., literacy) through playful learning practices. Tools encourages pretend play in accordance with Vygotskian insights. In this program, sociodramatic playtime is fostered and guided by the teacher who helps children make their daily programs. Teachers facilitate the richness of children's themes by taking them on field trips aimed to improve their world knowledge of roles and role-appropriate behavior. Several studies have documented consistent effects of Tools on children's self-regulation (Barnett et al. 2008; Diamond et al. 2007; but also see Farran et al. 2011). Other large-scale longitudinal studies are currently underway to investigate the effectiveness of this program on multiple school readiness abilities and on different populations.

One of the most pronounced criticisms of the Tools program is that isolating the effects of pretend play is nearly impossible due to the fact that the program incorporates a host of playful learning activities in addition to guided play (Lillard et al. 2013). In fact, Tools, with Montessori and Reggio, is grouped as the curricula that incorporate playful learning practices in all areas of instruction. In this paper, we argue for a formative, integrated playful learning pedagogy that targets a multitude of curricular and developmental objectives. Tools, in this respect, like Montessori and Reggio, provides a very good starting point.

64.8 Back to the Problem at Hand: Where Pedagogy Meets Curriculum

The research we have reviewed makes a strong case for joining curricula with a playful learning pedagogy through the use of guided play contexts (for more extensive reviews and comparison with free play, see Fisher et al. 2011). While some specialized curricula such as the Montessori education classrooms have successfully implemented a playful learning approach (Lillard 2005, 2013; Lillard and Else-Quest 2006), a playful pedagogy seems to be increasingly absent from state-funded preschool and pre-K programs. Confirming the suspicion that the preschool classroom is becoming a place of didactic instruction, the Chien et al. (2010) study shows that children's interaction with their teachers were more often didactic (31% of the observed interactions). Interestingly, of the time activity settings investigated, children also seemed to spend most time in free-choice or free-play time (30%). This study provides a clear picture that shows two polar ends of a spectrum: free play vs. didactic instruction. In this chapter, we introduced a middle ground and argued that this dichotomy does not need to exist. In other words, there is a developmentally sensitive and appropriate way to reach curricular objectives without taking the wonder, curiosity, autonomy, and enjoyment out of learning.

In our view, identifying a good candidate to complement didactic instructional practices is one step in solving a multistep problem. We see two important steps that await researchers and educators: the development of integrated comprehensive curricula that incorporate playful pedagogy for all learning objectives and training teachers in effective playful scaffolding techniques. First, it is possible to create a content-strong curriculum that is delivered through guided play. The research shows that we have an idea as to how to target specific learning objectives such as numeracy, vocabulary, narrative competence, and knowledge of science concepts. Indeed, our knowledge at this stage is fragmented and is not easy for policy makers to adopt. What we need is a comprehensive playful learning program that complements didactic learning to target the full list of curricular objectives that are being used to judge the effectiveness of preschool education.

Second, we have to share this information with teachers and supplement professional development so that teachers can effectively use guided play techniques in the classroom. While playful learning is, by definition, enjoyable and fun for children, it is serious work for the teacher. Teachers, who have taken on the brunt of our quest for accountability and have modified their interaction and teaching styles to meet the current demands, may find it difficult to see how playful approaches can yield the expected results. For many, a playful learning approach may mean a more interactive and scaffolded type of free play. Yet, as described, playful learning incorporates identifying clear learning objectives, preparing a setting that will allow for playful exploration of the learning material, observing children to identify the amount and type of support they need, and interjecting subtle yet powerful doses of guidance in fun learning environments.

Whether young children are being educated in the USA, Japan, or any modern society, they will need to know how to seek, discover, and integrate information and to create novel solutions to never-before-seen problems. Adults in this future will need to learn on their feet and know what questions to ask. The research suggests that the way to foster children who can learn independently is teaching curricular objectives through pedagogy that embraces active, engaged, meaningful, and interactive learning. That kind of pedagogy will be evidence-based and will include the ingredients that optimize how children best learn. Playful learning and guided play include these ingredients. A playful pedagogy assists children in their initial learning and in retaining that information over time (e.g., Fisher et al. 2012) and fosters deep thinking while making learning enjoyable. The current trend to reduce children to passive listeners flies in the face of what the data show: children learn best when they are part of the process and not relegated to the sidelines to be docile receptacles of information passed on by adults.

References

Alfieri, L., Brooks, P. J., Aldrich, N. J., & Tenenbaum, H. R. (2010). Does discovery-based instruction enhance learning? *Journal of Educational Psychology, 103*, 1–18.

Ash, D., & Wells, G. (2006). Dialogic inquiry in classroom and museum: Action, tools, and talk. In Z. Bekerman, N. Burbules, & D. Silberman-Keller (Eds.), *Learning in places: The informal education reader* (pp. 35–54). New York: Peter Lang Publishing.

Ashiabi, G. S. (2007). Play in the preschool classroom: Its socio-emotional significance and the teacher's role in play. *Childhood Education Journal, 35*, 199–207.

Astington, J. W., & Jenkins, J. M. (1995). Theory of mind development and social understanding. *Cognition & Emotion, 9*, 151–165.

Barnett, W. S., Jung, K., Yarosz, D. J., Thomas, J., Hornbeck, A., Stechuk, R., & Burns, S. (2008). Educational effects of the tools of the mind curriculum: A randomized trial. *Early Childhood Research Quarterly, 23*, 299–313.

Bateson, G. (1972). *Steps to an ecology of mind: Collected essays in anthropology, psychiatry, evolution, and epistemology*. San Francisco: Chandler Publishing Co..

Berk, L. E., & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education*. Washington, DC: NAEYC Press.

Berk, L. E., Mann, T. D., & Ogan, A. T. (2006). Make-believe play: Wellspring for development of self-regulation. In D. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play = learning: How play motivates and enhances children's cognitive and social-emotional growth* (pp. 74–100). New York: Oxford University Press.

Bodrova, E., & Leong, D. J. (2007). *Tools of the mind: The Vygotskian approach to early. childhood education* (2nd ed.). Columbus: Merrill/Prentice Hall.

Bowman, B. T. (1999). *Dialogue on early childhood science, mathematics and technology education a context for learning: Policy implications for math, science, and technology in early childhood education*. Retrieved November 30, 2009, from http://www.project 2061.org/publications/earlychild/online/context/bowman.htm

Callanan, M. A., & Braswell, G. (2006). Parent-child conversations about science and literacy: Links between formal and informal learning. In Z. Bekerman, N. Burbules, & D. Silberman-Keller (Eds.), *Learning in places: The informal education reader* (pp. 123–137). New York: Peter Lang Publishing.

Callanan, M., & Oakes, L. (1992). Preschoolers' questions and parents' explanations: Causal thinking in everyday activity. *Cognitive Development, 7*, 213–233.

Campbell, F. A., & Ramey, C. T. (1994). Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development, 65*, 684–698.

Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood education experiment. *Developmental Psychology, 37*, 231–242.

Campbell, F. A., Ramey, C. T., Pungello, E., Sparling, J., & Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the Abecedarian project. *Applied Developmental Science, 6*, 42–57.

Chi, M. T. H. (2009). Active-constructive-interactive: A conceptual framework for differentiating learning activities. *Topics in Cognitive Science, 1*, 73–105.

Chien, N., Howes, C., Burchinal, M., Pianta, R., Ritchie, S., Bryant, D. M., Clifford, R. M., Early, D. M., & Barbarin, O. A. (2010). Children's classroom engagement and school readiness gains in pre-kindergarten. *Child Development, 81*, 1534–1549.

Christie, J. F., & Enz, B. (1992). The effects of literacy play interventions on preschoolers' play patterns and literacy development. *Early Education and. Development, 3*, 205–220.

Christie, J. F., & Roskos, K. (2006). Standards, science, and the role of play in early literacy education. In D. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play = learning: How play motivates and enhances children's cognitive and social – emotional growth* (pp. 57–73). New York: Oxford University Press.

Common Core State Standards Initiative. (2010). *Common core state standards*. Retrieved from http://www.corestandards.org

Copple, C., Sigel, I. E., & Saunders, R. (1979). *Educating the young thinker: Classroom strategies for cognitive growth*. New York: D. Van Nostrand Co..

Diamond, A., Barnett, W. S., Thomas, J., & Munro, S. (2007). Preschool program improves cognitive control. *Science, 318*, 1387–1388.

Dickinson, D., Golinkoff, R. M., & Hirsh-Pasek, K. (2010). Speaking out for language: Why language is central for reading development. *Educational Researcher, 39*, 305–310.

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K., & Japel, C. (2007). School readiness and later achievement. *Developmental Psychology, 43*, 1428–1446.

Edwards, C., Gandini, L., & Forman, G. (Eds.). (1998). *The hundred languages of children: The Reggio Emilia approach to early childhood education* (2nd ed.). Westport: Ablex Publishing.

Elias, C. L., & Berk, L. E. (2002). Self-regulation in young children: Is there a role for sociodramatic play? *Early Childhood Research Quarterly, 17*, 216–238.

Elkind, D. (2008). Can we play? *Greater Good, 4*, 14–17.

Farran, D., Lipsey, M., & Wilson, S. (2011). *Experimental evaluation of the tools of the mind pre-K curriculum*. Working paper available online (95 pages), Retrieved from http://www.peabody.vanderbilt.edu/peabody_research_institute/pri_news.xml

Fisher, K., Hirsh-Pasek, K., Golinkoff, R. M., Singer, D., & Berk, L. E. (2011). Playing around in school: Implications for learning and educational policy. In A. Pellegrini (Ed.), *The Oxford handbook of play* (pp. 341–363). New York: Oxford University Press.

Fisher, K., Hirsh-Pasek, K., & Golinkoff, R. M. (2012). Fostering mathematical thinking through playful learning. In E. Reese, & S. P. Suggate (Eds.), *Contemporary debates on child development and education* (pp. 81–92).

Fisher, K. R., Hirsh-Pasek, K., Newcombe, N., & Golinkoff, R. (2013). Taking shape: Supporting preschoolers' acquisition of geometric knowledge through guided play. *Child Development, 84*, 1872–1878. doi:10.1111/cdev.12091.

Garris, R., Ahlers, R., & Driskell, J. E. (2002). Games, motivation, and learning: A research and practice model. *Simulation & Gaming, 33*, 441–467.

Garvey, C. (1977). *Play*. Cambridge, MA: Harvard University Press.

Greenfield, D. B., Jirout, J., Dominguez, X., Greenberg, A., Maier, M., & Fuccillo, J. (2009). Science in the preschool classroom: A programmatic research agenda to improve science readiness. *Early Education and Development, 20*, 238–264.

Griffin, S. (2004). Number worlds: A research-based mathematics program for young children. In D. H. Clements & J. Sarama (Eds.), *Engaging young children in mathematics: Standards for early mathematics education* (pp. 325–342). Mahwah: Erlbaum.

Grissmer, D., Grimm, K. J., Aiyer, S. M., Murrah, W. M., & Steele, J. S. (2010). Fine motor skills and early comprehension of the world: Two new school readiness indicators. *Developmental Psychology, 46*, 1008–1017.

Habgood, M. P. J., & Ainsworth, S. E. (2011). Motivating children to learn effectively: Exploring the value of intrinsic integration in educational games. *Journal of the Learning Sciences, 20*, 169–206.

Han, M., Moore, N., Vukelich, C., & Buell, M. (2010). Does play make a difference? Effects of play intervention on at-risk preschoolers' vocabulary learning. *American Journal of Play, 3*, 82–105.

Heckman, J. J. (2011). The economics of inequality: The value of early childhood education. *American Educator*, *31–47*.

Hirsh-Pasek, K., & Golinkoff, R. M. (2003). *Einstein never used flashcards: How our children really learn and why they need to play more and memorize less*. Emmaus: Rodale Press.

Hirsh-Pasek, K., & Golinkoff, R. M. (2011). The great balancing act: Optimizing core curricula through playful learning. *The pre-K debates: Current controversies and issues*, 110–115.

Hirsh-Pasek, K., Golinkoff, R., Berk, L., & Singer, D. (2009). *A manifesto for playful learning in preschool: Presenting the scientific evidence*. New York: Oxford University Press.

Honomichl, R. D., & Chen, Z. (2012). The role of guidance in children's discovery learning. *Wiley Interdisciplinary Reviews, 3*, 615–622.

IES National Center for Education Statistics. (2011). *Digest of education statistics: 2011*. Washington DC: National Center for Education Statistics.

Jenkins, J. M., & Astington, J. W. (2000). Theory of mind and social behavior: Causal models tested in a longitudinal study. *Merrill-Palmer Quarterly, 46*, 203–220.

Jirout, J., & Klahr, D. (2012). Children's scientific curiosity: In search of an operational definition of an elusive concept. *Developmental Review, 32*, 125–160.

Johnson, J. E., Christie, J. F., & Yawkey, T. D. (1999). *Play and early childhood development*. New York: Addison Wesley Longman.

Justice, L. M., Mashburn, A. J., Hamre, B. K., & Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly, 23*, 51–68.

Kids Count Data Center: A project of the Annie E. Casey Foundation. (2013). *2013 data book: State trends in child well-being*. Retrieved from http://datacenter.kidscount.org/files/2013KIDSCOUNTDataBook.pdf

Klein, A., & Starkey, P. (2004). Fostering preschool children's mathematical knowledge: Findings from the Berkeley math readiness project. In D. H. Clements & J. Sarama (Eds.), *Engaging young children in mathematics: Standards for early mathematics education* (pp. 343–360). Mahwah: Erlbaum.

Ladd, G. W., & Hart, C. H. (1992). Creating informal play opportunities: Are parents' and preschoolers' initiations related to children's competence with peers? *Developmental Psychology, 28*, 1179–1187.

Lillard, A. S. (2005). *Montessori: The science behind the genius*. New York: Oxford University Press.

Lillard, A. S. (2012). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology, 50*, 379–401.

Lillard, A. S. (2013). Playful learning and Montessori education. *American Journal of Play, 5*, 157–186.

Lillard, A. S., & Else-Quest, N. (2006). Evaluating Montessori education. *Science, 313*, 1893–1894.
Lillard, A. S., Lerner, M. D., Hopkins, E. J., Dore, R. A., Smith, E. D., & Palmquist, C. M. (2013). The impact of pretend play on children's development: A review of the evidence. *Psychological Bulletin, 139*, 1–34.
Mages, W. K. (2008). Does creative drama promote language development in early childhood? A review of the methods and measures employed in the empirical literature. *Review of Educational Research, 78*, 124–152.
Meyers, A. B., & Berk, L. E. (2014). Make-believe play and self-regulation. In M. Blaise, S. Edwards, & E. Brooker (Eds.), *Sage handbook of play and learning in early childhood* (pp. 43–55). New York: Sage.
Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. College Park: Alliance for Childhood Press.
Montie, J. E., Xiang, Z., & Schweinhart, L. J. (2006). Preschool experience in 10 countries: Cognitive and language performance at age 7. *Early Childhood Research Quarterly, 21*, 313–331.
Morrow, L. M., & Rand, M. K. (1991). Promoting literacy during play by designing early childhood classroom environments. *Reading Teacher, 44*, 396–402.
Neuman, S., & Roskos, K. (1992). Literacy objects as cultural tools: Effects on children's literacy behaviors during play. *Reading Research Quarterly, 27*, 203–223.
NICHD Early Child Care Research Network. (2005). Pathways to reading: The role of oral language in the transition to reading. *Developmental Psychology, 41*, 428–442.
Nicolopoulou, A. (2002). Peer-group culture and narrative development. In S. Blum-Kulka & C. E. Snow (Eds.), *Talking to adults* (pp. 117–152). Mahwah: Erlbaum.
Nicolopoulou, A., & Ilgaz, H. (2014). Pretend play and narrative development – What do we know and where do we need to go?: A response to Lillard et al. (2013a). *American Journal of Play*.
Nicolopoulou, A., & Richner, E. S. (2004). "When your powers combine, I am Captain Planet": The development significance of individual- and group-authored stories by preschoolers. *Discourse Studies, 6*, 347–371.
Nicolopoulou, A., McDowell, J., & Brockmeyer, C. (2006). Narrative play and emergent literacy: Storytelling and story-acting meet journal writing. In D. Singer, R. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play = learning: How play motivates and enhances children's cognitive and social – Emotional growth* (pp. 124–144). New York: Oxford University Press.
Obama, B. (2009, July 24). *Remarks by the president on education*. Speech presented at the U.S. Department of Education, Washington, DC.
OECD. (2010). *PISA 2009 results: What students know and can do – Student performance in reading, mathematics and science* (Vol. I). Retrieved from http://dx.doi.org/10.1787/9789264091450-en
Pagani, L. S., Fitzpatrick, C., Archambault, I., & Janosz, M. (2010). School readiness and later achievement: A French Canadian replication and extension. *Developmental Psychology, 46*, 984–994.
Paley, V. (1990). *The boy who would be a helicopter: The uses of storytelling in the classroom*. Cambridge, MA: Harvard University Press.
Pellegrini, A. D. (1984). Identifying causal elements in the thematic-fantasy play paradigm. *American Educational Research Journal, 21*, 691–701.
Pellegrini, A. D. (2009). *The role of play in human development*. Oxford: Oxford University Press.
Pellegrini, A. D., & Galda, L. (1993). Ten year after: A reexamination of symbolic play and literacy research. *Reading Research Quarterly, 28*, 162–175.
Ramani, G. B., & Siegler, R. S. (2008). Promoting broad and stable improvements in low-income children's numerical knowledge through playing number board games. *Child Development, 79*, 375–394.
Reynolds, A. J., Ou, S.-R., & Topitzes, J. W. (2004). Paths of effects of early childhood intervention on educational attainment and delinquency: A confirmatory analysis of the Chicago child-parent centers. *Child Development, 75*, 1299–1328.

Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.

Romano, E., Babchishin, L., Pagani, L. S., & Kohen, D. (2010). School readiness and later achievement: Replication and extension using a nationwide Canadian survey. *Developmental Psychology, 46*, 995–1007.

Roskos, K., & Burstein, K. (2011). Assessment of the design efficacy of a preschool vocabulary instruction technique. *Journal of Research in Early Childhood, 25*, 268–287.

Roskos, K., & Christie, J. (2001). Examining the play-literacy interface: A critical review and future directions. *Journal of Early Childhood Literacy, 1*, 59–89.

Rowe, D. W. (1998). The literate potentials of book-related dramatic play. *Reading Research Quarterly, 33*, 10–35.

Saracho, O. N., & Spodek, B. (2009). Educating the young mathematician: The twentieth century and beyond. *Early Childhood Educational Journal, 36*, 305–312.

Sarama, J., & Clements, D. H. (2009). *Early childhood mathematics education research: Learning trajectories for young children*. New York: Routledge.

Schultz, L., & Bonawitz, E. B. (2007). Serious fun: Preschoolers engage in more exploratory play when evidence in confounded. *Developmental Psychology, 43*, 1045–1050.

Schweinhart, L. (2004). *The high/scope Perry preschool study through age 40*. Ypsilanti: High/Scope Educational Research Foundation.

Schweinhart, L. J., & Weikart, D. P. (1997). The high/scope preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly, 12*, 117–143.

Silvern, S. B., Taylor, J. B., Williamson, P. A., Surbeck, E., & Kelley, M. F. (1986). Young children's story recall as a product of play, story familiarity, and adult intervention. *Merrill-Palmer Quarterly, 32*, 73–86.

Singer, D. G., & Singer, J. L. (1990). *The house of make-believe: Children's play and the developing imagination*. Cambridge, MA: Harvard University Press.

Sutton-Smith, B. (2001). *The ambiguity of play*. Cambridge, MA: Harvard University Press.

Sutton-Smith, B., & Kelly-Byrne, D. (1984). *The masks of play*. New York: Leisure Press.

Toub, T. S., Rajan, V., Golinkoff, R. M., & Hirsh-Pasek, K. (2016). Guided play: A solution to the play versus discovery learning dichotomy. In *Evolutionary perspectives on child development and education* (pp. 117–141). Springer International Publishing.

Vukelich, C., Han, M., Buell, M., & Moore, N. (2009). Supporting head start preschoolers' language and early reading development: Tutoring as a tier approach. *NHSA DIALOG: A Research to Practice Journal for the Early Intervention Field, 12*, 192–209.

Vygotsky, L. (1967). Play and its role in the mental development of the child. *Soviet Psychology, 5*, 6–18.

Weikart, D. P. (1998). Changing early childhood development through educational intervention. *Preventive Medicine, 27*, 233–237.

Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013a). Embracing complexity: Rethinking the relation between play and learning: Comment on Lillard et al. (2013). *Psychological Bulletin, 139*, 35–39.

Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013b). Guided play: Where curricular goals meet a playful pedagogy. *Mind, Brain, and Education, 7*(2), 104–112.

Weisberg, D. S., Hirsh-Pasek, K., Golinkoff, R. M., Kittredge, A. K., & Klahr, D. (2016). Guided play: Principles and practices. *Current Directions in Psychological Science, 25*(3), 177–182. doi:10.1177/0963721416645512.

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development, 69*, 848–872.

Zigler, E., Singer, D., & Bishop-Josef, S. (Eds.). (2004). *Children's play: The roots of reading*. Washington, DC: Zero to Three Press.

Chapter 65
Children's Perspective to Curriculum Work: Meaningful Moments in Finnish Early Childhood Education

Lasse Lipponen, Kristiina Kumpulainen, and Maiju Paananen

Abstract Recently, and especially in early childhood education, there has been a transition from understanding child perspective to understanding children's perspective. Taking children's perspective as a foundational starting point, we explore and identify moments that children find important, meaningful, and positive in their daily life at the context of preprimary education. We use empirical evidence from our research situated within the cultural context of Finnish early childhood education where children documented their preprimary education experiences with digital cameras and reflected upon them in joint discussions with their peers and researchers. We discuss to what extent these documentation and reflection practices can be used as tools for understanding children's perspective to meaningful moments in the Finnish preprimary context and what implications this kind of approach would set for curriculum, curriculum assessment, and curriculum development.

Keywords Children's perspective • Documentation • Finnish early childhood education

65.1 From Child Perspective to Children's Perspective

Recently, and especially in early childhood education, there has been a transition from understanding child perspective to understanding children's perspective. According to Sommer and others (Sommer et al. 2010), child perspective directs adult's attention toward understanding of children's perceptions, experiences, and

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actions. It is the adult's interpretation of children's statements and actions. Child perspective is expressed in adult's words and thoughts, for instance, through scientific concepts and theories concerning children and childhood. One could say that what is important for children, as seen by adults, is child perspective. Instead, children's perspective represents children's experiences, perceptions, and understandings in their lifeworlds. The focus is on the child as subject, not object, in their own world: What children say and do express what is meaningful to them. Children's perspective is always expressed in the children's own words, thoughts, and images.

The theoretical rationale of capturing children's perspective and experience comes mainly from three traditions, which overlap and complete each other: research on children's rights relying on the United Nations Convention on the Rights of the Child, sociology of childhood, and socioculturally oriented research on learning and development. These three traditions together have inspired a significant paradigm shift for the early childhood educational research.

Those that propose children's rights rely their arguments often on social science studies; if children have the right to participate in social life, they should have the right to express their opinions and experiences regarding their participation (Shier 2001; Smith 2002). Adults should recognize children's abilities and right to participate in societal activities and to speak for themselves. Sociology of childhood emphasizes children as beings not becomings. In this tradition, children are seen as social actors and as active participants of society. Children are the experts of their own life who are no longer envisaged merely as the recipients of services, beneficiaries of protective measures, or subjects of social experiments (Christensen and James 2008; Qvortrup et al. 1994). Children's rights and sociology of childhood are overlapping in a sense that both share a focus on children as active agents, constructors of their own social worlds. Socioculturally oriented research on learning and development has shown that in some, and especially in non-Western cultures, children in all ages are given an active role in their community, resulting in major changes in children's participation opportunities and perspectives over time. In these non-Western cultures, children are part of adult world, and learning is understood as legitimate peripheral participation, embedded in sociocultural activities. In other words, development depends on cultural goals and transformation in participation (Fleer 2003; Rogoff 2003). We do not consider these three approaches as rival nor theoretically incompatible, and in our approach, one can find nuances of each of them.

65.2 Insights to Finnish Early Childhood Education

Finland aims to deliver integrated system of early childhood education. It covers and merges both the early childhood education for children and the child day care arrangements offered to the families. For families, preprimary education is voluntary and free of charge in Finland. Preprimary education is part of early childhood education and care and begins 1 year before the commencement of compulsory

education. Organizing preprimary education year before compulsory education is a statutory obligation for the municipalities. Thus, the majority of Finnish preprimary education, including preprimary education class of our study, is publicly funded and organized.

The staff in day care centers is required to have at least a secondary-level degree in the field of social welfare and health care (ISCED level 3). One in three of the staff must have a tertiary-level degree (ISCED level 5) – kindergarten teachers are required to have studied up to university or polytechnic level and need to have a bachelor's diploma. Preprimary teachers are required to have either a bachelor or master's degree in education.

A national pedagogical framework is a rather new phenomenon within early childhood education – it begun to appear in early childhood education in many places of the world in the middle of the 1990s (Sommer et al. 2010). The content of the Finnish ECEC is guided by the National Curriculum Guidelines on ECEC (2005) and the Core Curriculum for Pre-Primary Education (2010). According to the National Curriculum Guidelines on ECEC, the principal target of ECEC is to promote the child's overall well-being so as to ensure the best possible conditions for growth, learning, and development. In doing so, Finnish early childhood education practices and pedagogy combine care, education, and teaching in the daily activities as a whole (The National Curriculum Guidelines on ECEC in Finland 2005). The daily practices of Finnish day care centers include educator-initiated activities, such as reading to children and presenting materials-based learning. Activities such as having lunch, dressing for outdoor activities, and taking naps are also considered educationally valuable offering learning opportunities for children. Educators play an important role in these activities by guiding and helping children. The child is viewed as an active learner, whose learning is guided by curiosity, the will to explore, and joy of realization. Rather than setting goals for children, the National Curriculum Guidelines on ECEC set comprehensive standards for child care environments and activities that address the developmental needs of the whole child.

Kindergartens adhere to more detailed early childhood plans that each municipality must create to implement the national curriculum guidelines. The National Curriculum Guidelines on Early Childhood Education and Care provide a basis for local curricula drawn up by municipalities. It encourages the entire staff to be involved in drafting, implementing, monitoring, and evaluating local curricula. Unit-specific curricula complement the local one. They should include principles for drafting and follow-up of ECEC plans that are made for every child individually. The National Curriculum Guidelines on Early Childhood Education and Care encourage parents, children, and cooperation partners to be involved in planning and evaluating these curricula.

The child's individual ECEC plan sets criteria for assessment. In Finnish early childhood education, the object of assessment is implementation of curriculum rather than child outcomes. However, the National Curriculum Guidelines on ECEC states that staff should systematically and consciously observe the child's development and take the observations account in planning activities and child's individual

ECEC plan. The implementation of child's individual ECEC plan and the implementation of unit-specific curriculum are assessed among the staff and together with parents.

It is also stated that children's own views should be taken into account in early childhood education to a degree corresponding to their age and level of development. Thus, children's perspective is enrooted in Finnish early childhood education curricula, as Scandinavian early childhood education curricula more widely. According to Sommer et al. (2010), there is an intention in the curricula in Scandinavia to see children as active participants with rights to influence their every daily lives in ECE.

However, it is not stated in curriculum guidelines how to enhance and enable children's perspectives and how could it inform curriculum planning and assessment. There is, thus, a need for the development of approaches and practices that recognize and harness children's participation and perspective in curriculum work. As pointed out by Hedges et al. (2011), existing research has rarely investigated children's interests as important "funds of knowledge" nor teachers' knowledge and decision-making in creating curriculum and assessment based on children's interests and perspectives.

65.3 Capturing Children's Perspective to Curriculum Work

According to Clark (Clark 2005; see also Smith et al. 2005), capturing children's perspective and experiences is understood to be an active process of communication involving hearing, interpreting, and co-constructing meanings. Thus, children must be given the opportunity to express their perspectives and voice, and they should be facilitated to express themselves. Listening and involving young children require the refinement of research methods to meet the authentic worlds and voices of children. In addition to the traditional methods such as observation, interview, and questionnaires, these include not so traditional methods such as the use of cameras and audio equipment, tours, map making, and arts-based activities (Clark 2005; Cook and Hess 2007; Fleer and Quiñones 2009).

In this paper, we draw on a case study from a Finnish preprimary community, in order to illuminate practices that aim at recognizing children's perspective to curriculum work. In specific, we shall demonstrate moments and matters that children have identified important, meaningful, and positive in their daily life at preprimary education. This empirical case is drawn from a large ongoing research initiative studying children's efficacious agency in formal and informal contexts (Kumpulainen et al. 2010; Kumpulainen and Lipponen 2010). After exploring to what extent these documentation and reflection practices can be used as tools for understanding children's perspective to meaningful moments in the Finnish preprimary context, we will be able to discuss what implications this kind of approach would set for curriculum, curriculum assessment, and curriculum development.

Altogether 19 preschool children (6–7 years old), 9 girls and 10 boys, from one public preschool class participated in the study. The children represented the lower and upper middle class of Finnish society in terms of socioeconomic background. The female teacher (Ellen) of this preschool community was a qualified kindergarten and preschool teacher.

Preschool community of the case study participated in a 2-week, two-phase progressive enculturation process leading to documenting, sharing, and reflecting upon their lives and experiences by taking photographs and videos with digital cameras (Kumpulainen et al. 2013). During the first phase, we took part in the everyday life of the preschool community and engaged with the children in discussions about their meaningful experiences during a preschool day. This was followed by the children starting to familiarize themselves with the cameras (assisted by us) and taking photos based on their own interests. The second phase started with a joint discussion during which the children and researchers agreed on what to capture with the digital cameras. We encouraged the children to take photos of things and situations which were important and meaningful to them and about which they felt happy and glad. The cameras were available throughout the day, and during the research period, they were part of the children's everyday activities. At the end of each preschool day, the children participated in joint focus group discussions (three children per group) with us where they shared their photos and collectively reflected upon them. Photo reflections/interviews lasted from 25 min to an hour and were video recorded. The child-adult interactions and reflections upon the photos were transcribed in full. Relevant contextual information such as reference to the photo talked about, pointing, and other nonverbal gestures were included in the transcriptions to guide the children's reading.

Central to our analysis was a multistep process that involved progressive refinement of our representations and claims about the nature of moments that were important to the children. Firstly, we took a rough overview of all the transcriptions and videos and made content logs, that is, a time-indexed list of topics (Jordan and Henderson 1995). Next, keeping our research questions in mind, we read the transcriptions and watched the videos several times in an attempt to identify the regularities and patterns in the data source (Mitchell 1984; Roth 2005). We also looked through all the photos children took. In sum, our analysis proceeded as a series of cycles during which questions are posed, data is represented, in our case in the form of video records and transcriptions. In our analysis we have attempted to gain insights into the meanings the children ascribe to their lives and experiences. Specific value is placed on the children's personal voice and experiences and the opportunity to broaden their perspective of knowing, thinking, and acting (Herrenkohl and Guerra 1998; Kumpulainen and Renshaw 2007).

65.4 Reflections on the Procedure of the Study

Children's recorded meaningful moments highlighted the rich variation in what the children identified as present and meaningful to them in their preschool lives. The moments captured, documented, and mediated in and by photographs were not tied to any specific domain or lifeworld, but rather distributed across various domains and as a network of positive emotional valence. Children took photos in the library, at lunch, and in the playground during outdoor activities, thus connecting their experiences across place and time.

The children were very enthusiastic about the study and took part in every phase of it with great excitement and engagement. When we introduced the cameras to the children for the first time, they could hardly wait their turn to try them. The children learned to use the cameras very quickly, and whenever they invented a new feature or new way of using them, they very spontaneously taught it to the other children. When somebody was taking photographs, the other children were very interested in the photographer and her or his doings: Taking photographs was an activity that made the children to come together in a new and unexpected ways. Photographing and sharing photos with friends appeared to be a meaningful practice in itself.

The cameras were available all day. This time-space configuration of the preschool learning environment provided them with diverse and rich possibilities for becoming engaged and involved with the cameras. Cameras were not just tools for documenting and sharing sparkling moments, but appeared to be a constitutional part of children's everyday activities and experiences. For some of the children, photographing itself became a very meaningful activity. The children explored the various features of the cameras and dimensions of their learning environment in order to take visually imposing photos.

During the 2-week study period, every child took photos, of total 477 photos (from 3 to 66 per child). Three broad themes appeared in the photos and the children's stories. The children's meaningful moments were especially related to personally significant places and artifacts (178 photos), relationships with peers and adults (263 photos), and opportunities to do things that they considered important (102 photos). For the joint sessions, every child chose photos to reflect on and to talk with and to talk about. The number of photos reflected on per child varied from two to nine photos and 74 altogether.

65.4.1 Ethical Consideration

Since the study is based on the idea that children have their own views and experiences and have the right to be heard (Ben-Arieh 2005; Einarsdottir 2007), we considered children as leading authors in documenting and reflecting upon their lives and experiences. The focus was on the child as a subject, not as an object, in his or her own world. Children, teachers, and parents were informed about all the aspects

of the research. We also asked for a written authorization from children's parents, and nobody refused their child's participation in the study. After the study, we organized an event for the children and the parents and discussed the study, the experiences, the results, and the possible implications of the study. At every phase of the study, we tried to protect children's anonymity and privacy and to treat children, parents, and teachers with dignity. We are aware that our research project (of which this study is a part) should, at least in the long run, contribute to children's lives in situ but also through future research and policy.

With our inquiry, we attempted to gain insights into the meanings the children ascribe to their lives and experiences. We were interested in what moments children identify as important, meaningful, and positive in their daily lives at preschool and how children reflect upon these important moments in their lives mediated by their self-initiated photos in a supportive social context. In the next section, we will discuss how children's perspective informs the curriculum development and assessment.

65.5 Children's Perspective Informing the Curriculum Development

The Finnish National Curriculum Guidelines on ECEC define the core of learning situating in the interaction between children, adults, and the environment. Playing, movement, exploration, and self-expression through different forms of art are defined as children's peculiar ways of acting and thinking. These activities are considered to enhance their well-being and perception of themselves and increase their opportunities for participation. An activity that children find meaningful also gives insights to their thoughts and feelings. As educators interact and discuss with children and observe their activities, they also begin to understand children's world and thinking. And most importantly, children are able to feel that their explorations, questions, thinking, and activity are valuable and they are heard and recognized.

Our case illustrated that with and through the cameras, the children started to pay attention to their living environments in a new way. Thus, it is not only teachers who can learn to see the curriculum from the children's perspective, but the activity of documenting meaningful moments with cameras and reflective upon them provided children with new learning opportunities to see their lifeworlds (Kumpulainen et al. 2013). Children described how physical learning environments made them feel happy, because they were sites for play and for fun. For instance, outdoor learning environments and activities such as playing with the snow were considered very gratifying. As pointed out by Fattore et al. (2007), those environments that fill children with joy do not have to be some "special location," but sites for daily play and leisure activities. The following picture (Picture 65.1), taken by Michael, and the excerpt are an example of how children did word their daily outdoor activities.

Adult: Could you tell me what you have here. (Points to the picture on the computer screen. The picture is selected by the child to for discussion).

Picture 65.1 Having outdoor activities

Michael (child): This is, I just like this. I like when others are playing.
Adult: Would you like to tell something more about this picture, what do you play there, looks like fun.
Michael: It is not a play, others are just playing something. And look, this is really fun, this is the fanciest. Those, those things they glitter. (Points to the picture on the computer screen) the picture). Looks like Jude goes on the speed of light.

The children also talked a lot about different artifacts (see Picture 65.2) and explained how artifacts such as books, toys, self-made pictures, and crafts were special and personally meaningful to them (see also Clark 2005). Self-made artifacts appeared to be especially important and the possibility to play with them (usually with others), show them to somebody, and the possibility to give them to someone as a gift.

Thus, in daily activities artifacts appeared to have a double function. Firstly, they mediated the interaction, like play activities, between the children and between children and adults (Vygotsky 1978). Secondly, the artifacts had the meaning of social attachment, especially the self-made ones.

Both, peers (see Picture 65.1) and adults (see Picture 65.3), were important to the children, the peers having a more central and visible role in everyday preschool life. The peers were talked about in positive ways, and positive emotional expressions were associated with them. They were great fun to play with and hang out with, and they were excellent, funny, and nice. Giving help to peers and receiving help from them were captured in several photos and were also talked into being in the reflection situations. The teacher, Ellen, as experienced and talked about by the children, appeared to be a person who spent time with the children and was there for them and for their everyday needs. She offered care, protection, and social resources (like giving help), which were considered important from the children's perspective. Children also mentioned several times that Ellen helped them to learn new things.

The data shows children finding joy in being active agents (see Picture 65.4) in documenting and reflecting upon their lives with others in supportive contexts.

Picture 65.2 Making artifacts

Supportive adults can provide children with a secure learning environment, where they can practice their agency and develop the learning identity of an active agent. One important aspect of developing agency is having the opportunity to participate and contribute in interaction, where one is framed and positioned as an accountable author who is in charge of one's actions. Acting as an accountable author is enabled by the creation of interactional spaces in which children are positioned as contributors whose inputs are recognized and credited (Greeno 2006; Lipponen and Kumpulainen 2011). The way the teacher constructs the environment together with the children and what kinds of experiences this provides are decisive for child's learning and possibilities of grasping the world around them. Thus, teachers must see the learning possibilities in the child's environment.

65.6 Discussion

It is not easy to catch a meaningful moment. In some sense, a meaningful moment is an abstract and immaterial entity, an indefinite interval of time or specific point of time. To capture a meaningful moment, one has to somehow make it concrete or materialize it. This is what children did when they photographed their meaningful moments.

It is not a new idea to use photos as stimuli in an interview. They have been used as a part of interviews, especially in sociological and anthropological research (Collier 1957; Harper 2002). This type of interview, in which photographs have been used as interview stimuli, has been called a photo-elicitation interview (Cappello 2005; Harper 2002) or photo-elicitation "autodriven" interview (Clark 1999) where the photographs to be used later as interview stimuli are taken by the research participants (interviewees). In contrast to stimulated recall interviews (Calderhead 1981) where the stimuli are produced and selected by the researcher, here the stimuli (photos) were produced by the children themselves.

Picture 65.3 Ellen, the teacher (on the right), is important person from the children's perspective

Picture 65.4 Documenting and reflecting

We have illustrated before that children's meaningful moments may be so "small" that they do not grab one's attention if one does not deliberately focus on identifying and noting them. If the teachers do not grasp children's perspective and do not identify those meaningful moments important for them, a possibility to construct shared meanings and fruitful opportunities for learning will be missed. Teacher curriculum decision-making should, therefore, be a conscious process that draws on understandings about children, curriculum, pedagogy, and context (Hedges et al. 2011), providing a positive way for teachers to acknowledge the richness of children's lives.

No research evidence exist showing that some particular curriculum or pedagogical approach can be identified as the best. But as maintained by Sommer et al. (2010), the high-quality curricula stress issues such as active child, cooperation with the parents, the view of children's rights and teacher professionalism, and children's perspective. "Since education is always normative, based on the intentions of the

curriculum or the teacher's ideas, one can say that child perspectives are respected in all early childhood education of good quality, while we who advocate development pedagogy also try to let the children's subjective worlds come through – that is children's perspectives" (Sommer et al. 2010, p. 201).

Hedges et al. (2011) state that one promising direction to search for children's interest and perspective for curriculum development is funds of knowledge (Gonzalez et al. 2005). The notion of funds of knowledge provides one such framework for a stronger interpretation of children's experiences and interests in order to enhance curriculum planning and assessment. Funds of knowledge are local networks of cultural know-how created within different communities, such as families, in order to solve everyday challenges.

It is important to acknowledge that it also is a challenging task to use children's perspective to inform curriculum development and assessment. Children's perspectives are always ambiguous: They can be easily shaped by established ideas about the child or child's interpretation about what adults want to hear. Moreover, individual differences among the children and their lifeworlds may position some children in unwanted marginal. Children's perspectives can be used to prove something what was going to be argued in any case (e.g., see Spyrou 2011). Reflexivity is therefore needed when enabling children's perspective in curriculum planning and assessment. Whose perspectives are valued and heard after all or in the end?

65.7 Conclusions

Children's perspective to curriculum work by means of documentation and collective reflection appears as a positive and prominent approach which can encourage educators to take a more analytical interpretation of children's interests in early years education. This perspective also positions children as active agents in examining and potentially shaping early years curriculum, supplementing and even challenging the Finnish early years curriculum and policy recommendations. To strengthen and to raise the awareness of the importance of children's perspective, the national pedagogical framework for ECE (at least in Finland) could entail the theoretical foundations for understanding it. The curriculum guidelines should also highlight capturing, harnessing, and applying children's perspective in and for curriculum design. Taking children's perspective seriously has consequences for ECE teacher education as well. It calls for reorienting the still dominating developmental view of child and childhood toward understanding childhood more broadly, including understanding children's interest and lifeworlds. Additionally, it calls ECE professionals to develop practical methods and to share examples for capturing, harnessing, and applying children's perspective in and for curriculum design. In all, our research directs attention to the possibilities that children's perspective embedded in authentic and engaging practices grants for getting to know children and how they experience the curriculum and activities in the preschool environment.

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References

Ben-Arieh, A. (2005). Where are the children? Children's role in measuring and monitoring their well-being. *Social Indicators Research, 74*, 573–596.

Calderhead, J. (1981). Stimulated recall: A method for research on teaching. *British Journal of Educational Psychology, 5*, 211–217.

Cappello, M. (2005). Photo interviews: Eliciting data through conversations with children. *Field Methods, 17*, 170–182.

Christensen, P., & James, A. (Eds.). (2008). *Research with children: Perspectives and practices*. London: Routledge.

Clark, C. D. (1999). The autodriven interview: A photographic viewfinder into children's experiences. *Visual Sociology, 14*, 39–50.

Clark, A. (2005). Young children as protagonists and the role of participatory, visual methods in engaging multiple perspectives. *Early Child Development and Care, 175*, 489–505.

Collier Jr., J. (1957). Photography in anthropology: A report on two experiments. *American Anthropologist, 59*, 843–859.

Cook, T., & Hess, E. (2007). What the camera sees and from whose perspective: Fun methodologies for engaging children in enlightening adults. *Childhood, 14*, 29–45.

Core Curriculum for Pre-Primary Education in Finland (2010). National Board of Education.

Einarsdottir, J. (2007). Research with children: Methodological and ethical challenges. *European Early Childhood Education Research Journal, 15*, 197–211.

Fattore, T., Mason, J., & Watson, E. (2007). Children's conceptualisation(s) of their well-being. *Social Indicators Research, 80*, 5–29.

Fleer, M. (2003). Early childhood education as an evolving 'Community of Practice' or as lived 'Social Reproduction': Researching the 'taken-for-granted'. *Contemporary Issues in Early Childhood, 4*, 64–79.

Fleer, M., & Quiñones, G. (2009). A cultural-historical reading of "children as researchers". In M. Fleer, M. Hedegaard, & J. Tudge (Eds.), *World yearbook of education 2009. Childhood studies and the impact of globalization: Policies and practices at global and local levels* (pp. 86–107). New York: Routledge.

Gonzalez, N., Moll, L. C., & Amanti, C. (2005). *Funds of knowledge: Theorizing practices in households and classrooms*. Mahwah: Lawrence Erlbaum Associates.

Greeno, J. G. (2006). Authoritative, accountable positioning and connected, general knowing: Progressive themes in understanding transfer. *The Journal of the Learning Sciences, 15*, 537–547.

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies, 17*, 13–26.

Hedges, H., Cullen, J., & Jordan, B. (2011). Early years curriculum: Funds of knowledge as a conceptual framework for children's interests. *Journal of Curriculum Studies, 43*, 185–205.

Herrenkohl, L. R., & Guerra, M. R. (1998). Participant structures, scientific discourse, and student engagement in fourth grade. *Cognition and Instruction, 16*, 433–475.

Jordan, B., & Henderson, A. (1995). Interaction analysis: Foundations and practice. *The Journal of the Learning Sciences, 4*, 39–103.

Kumpulainen, K., & Lipponen, L. (2010). Productive interaction as agentic participation in dialogic inquiry. In C. Howe & K. Littleton (Eds.), *Educational dialogues* (pp. 48–63). London: Taylor and Francis.

Kumpulainen, K., & Renshaw, P. (2007). Cultures of learning. *International Journal of Educational Research, 46*, 109–115.

Kumpulainen, K., Järvelä, S., & Lipponen, L. (2010). *Towards children's efficacious agency in formal and informal contexts: A research project of the Academy of Finland*. Available at http://www.aka.fi/fi/A/Tutkimusohjelmat/kaynnissa/SKIDI-KIDS/Hankkeet/Lasten-pystyvyys-ja-sinnikkyys-tutkimuksen-kohteena/. Accessed 1 Oct 2012.

Kumpulainen, K., Lipponen, L., Hilppö, J. A., & Mikkola, A. I. (2013). Building on the positive in children's lives: A co-participatory study on the social construction of children's sense of agency. *Early Child Development and Care*. http://dx.doi.org/10.1080/03004430.2013.778253

Lipponen, L., & Kumpulainen, K. (2011). Acting as accountable authors: Creating interactional spaces for agency work in teacher education. *Teaching and Teacher Education, 27*, 812–819.

Mitchell, C. J. (1984). Typicality and the case study. In R. F. Ellens (Ed.), *Ethnographic research: A guide to general conduct* (pp. 238–241). New York: Academic Press.

National Curriculum Guidelines on early childhood education and care in Finland (2005). Oppaita 56. Helsinki: Stakes.

Qvortrup, J., Bardy, M., Sgritta, G., & Wintersberger, H. (1994). *Childhood matters: Social theory, practice and politics*. Aldershot: Avebury.

Rogoff, B. (2003). *The cultural nature of human development*. Oxford: Oxford University Press.

Roth, W.-M. (2005). *Doing qualitative research: Praxis of method*. Rotterdam: Sense.

Shier, H. (2001). Pathways to participation: Openings, opportunities and obligations. Children & Society, 15, 107–117.

Smith, A. B. (2002). Supporting participatory rights: Contributions from sociocultural theory. *International Journal of Children's Rights, 10*, 73–88.

Smith, A., Duncan, J., & Marshall, K. (2005). Children's perspective on their learning: Exploring methods. *Early Child Development and Care, 175*, 473–488.

Sommer, D., Pramling Samuelsson, I., & Hundeide, K. (2010). *Child perspectives and children's perspectives in theory and practice*. Milton Keynes: Springer.

Spyrou, S. (2011). The limits of children's voices: From authenticity to critical, reflexive representation. *Childhood, 18*, 151–165.

Vygotsky, L. S. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.

Chapter 66
Assessing Young Children's Learning and Behavior in the Classroom: A Complexity Approach

Henderien Steenbeek and Paul van Geert

Abstract This chapter provides a complex dynamic systems view on curriculum-based learning in early education. We first discuss the general notions of *curriculum*, *assessment*, *skills*, and *learning* in early education and give a short overview of curriculum-based assessment in early childhood education (ECE) in the Netherlands. We conclude that for assessment to be usable in an educational context, an understanding of the *process* of learning is crucial. We then present the theory of *complex dynamic systems* as a general framework for defining learning, skills, and assessment. A complex dynamic system is defined as any network of interacting components (e.g., cognitive, emotional, and behavioral components in an agent, such as a learning child, and components of the teaching process in a teacher). As a consequence of their interactions in a network of dynamic connections, complex dynamic systems undergo typical change in the form of self-organization, variability, temporal stability, and so forth. These patterns of change characterize the processes of learning and associated teaching in young children and educators. In spite of the abstract nature of this theoretical framework, we show that its basic concepts are intuitively appealing in educational contexts and provide concrete and usable ways for assessment in early childhood education. To this end, we present a taxonomy of assessment forms based on complexity thinking and provide two practical, complexity-based examples of the assessment of learning processes in early childhood education: a web-based program for assessing students' learning and behavioral goals and a video feedback coaching program for teachers giving science lessons for young children. We conclude with practical recommendations for early childhood curricula and for early childhood assessment.

Keywords Curriculum • Assessment • Early childhood education • Complex dynamic systems approach

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66.1 Introduction

Picture a young child playing with a balloon. As the child fails to firmly close the spout of the balloon, the air escapes. Then the child blows the balloon up again, lets the air escape, blows it up, lets the air escape again, and continues to do so several times. Is the child playing? Is the child learning? Is what the child is doing the opposite of learning? Is it playing with the intention to learn? Does the child learn from its experiences, given that it appears to make the same error over and over again, namely, that it fails to firmly close the spout of the balloon? Is there a way we can actually assess whether or not the child has learned something in this particular sequence of activities, or is this a sequence of activities where the notion of assessment is entirely misplaced?

66.1.1 Curriculum

From the age that children go to school in the Netherlands, that is to say from the age they are participating in early childhood education (ECE), children are confronted with a new phenomenon in their lives, which is the phenomenon of a school curriculum, and the associated assessment of the eventual progress that these young children make with regard to the curriculum goals. Many comparative studies have shown the positive consequences of early childhood education for the development of children, and assessment of educational progress due to ECE is an important issue. Although various authors have claimed that especially in young children, the positive developmental consequences of play are very important (Hirsh-Pasek et al. 2009), the assessment of the learning that takes place in such informal play activities is considerably more complicated than assessment in the context of formal curricula, because the latter prescribe specific activities and specific goals, which can be assessed more directly. A curriculum can be defined as a coherent whole of study components that together form a training or domain of education. A curriculum contains a plan for teaching and learning that consists of textbooks, modules, courses, lesson packages, syllabuses, and lists with finer requirements (Pinar et al. 1995), sometimes also called a learning plan. In principle, any form of formal education or training is based on the curriculum of learning plan, including foundational and early education. At a minimum, a curriculum contains the contents and goals to be achieved as a consequence of the training or teaching (wikipedia.org/wiki/Curriculum). Early childhood education (ECE) is education during the period of time in which children are between the ages of 2 and 6 years. In the Netherlands, the term early or preschool education is often used (in Dutch "voor- en vroegschoolse educatie," abbreviated as VVE) which refers to the measures or strategies followed to reduce educational delays at the start of primary school. In particular, early childhood education, also early childhood learning and early education, refers to the formal teaching of young children by people outside the family or in settings

outside the home. "Early childhood" is usually defined as the age occurring before the age of normal schooling—5 years in most nations, though the US National Association for the Education of Young Children defines "early childhood" as before the age of 8 (wikipedia.org/wiki/Early_childhood_education). In the Netherlands, early childhood education aims at preparing children for their entrance in Grade 3, the grade at which they receive formal education to learn to write, read, and do math. Preschool education focuses on 2- to 3-year-old children, whereas early school education addresses the ages of 4–6 years, with obligatory participation of children from the age of 5 years. Recently, there is an increasing focus on so-called product-oriented toward revenue-oriented teaching, which focuses on measurable products of education and which is strongly motivated by the current level of Dutch education in the perspective of international comparisons, the approach and prevention of poorly performing schools, and the introduction of the so-called levels of reference and the so-called Actieplan Basis voor presteren (freely translated as action plan, basis for achievement) by the Ministry of Education. The aim of this action plan is the improvement of achievements in primary education by focusing more explicitly on measurable educational products, also at the level of early childhood education.

66.1.2 Assessment

Broadly put, assessment can take the form of "measuring," "evaluating," "valuating," or "taxing" and can be defined as "collecting relevant information that may be relied on for making decisions" (wikipedia.org/wiki/Assessment). An important question concerns the status of the information collected, i.e., what is relevant information? The relevance always gets its meaning in the light of the specific aim of the assessment. These aims can differ broadly. For instance, the aim of the assessment can be to get a picture of the child's "abilities or capacities" on the one hand or its "potential" on the other. The aim can also be to assess whether this child fits in with the (pre-)school's criteria with regard to performance profiles of the (pre-)school population. In all these cases, it is important that the child's skills must be viewed in relation to the context in which the child functions, i.e., "in order of merit" at this particular point in time: The child's skills that are assessed are "dynamic" skills. In our view, the misconception in assessment that one can easily be trapped into is that the assessment sheds a light on the child's skills and qualities as being fixed and stable, instead of getting a picture of a child's developing skills in order of merit. As an alternative, one should depart form the notion of "embedded achievement" (see the term "embedded cognition"), in which children's academic performances are "embedded," which entails that they come forward in the "here and now" of a specific context; are related to other capacities that are developing in this child, such as the child's bodily processes; and are expressed in a specific child-context interaction (e.g., the amount of help that the child receives from the teacher or other students). The former means that these skills need to be assessed, using this notion, instead of

departing from the child's progress on the curriculum. We claim that, as achievement is an intrinsically embedded phenomenon, assessment of achievement is also an embedded activity, that is to say an activity embedded in the real-time dynamics of teaching and learning and student-teacher interaction (Perry et al. 2002). The meaning of this embeddedness goes beyond the existing and usual distinction between formative and summative assessment.[1] The question is whether the practice of formal, curriculum-related assessment is consistent with the notion of the child—and the child-teacher relationship for that matter—as a complex dynamic system.

66.1.3 Skill as Dynamic Skill and the Learning Child as Dynamic System

The elementary definition of a skill as dynamic skill and of the learning child as dynamic system is very closely related to the goals of the sciences of learning, teaching, and assessment (or developmental science). A researcher studying learning processes of children diagnosed as having ADHD, for instance, will not only wish to know that a state of comportment characterized by extreme low anxiety during infancy will often be followed by a state of comportment characterized by weak regulatory ability problems with school performance during primary school years but will in fact wish to know how the first state changes into the second state. Thus, in its fundamental form, any theory of development, learning, or assessment should be formulated in terms of the child as a dynamic system: a way of describing how a particular state of a system (an early developmental state, a state of impaired cognitive performance, et cetera) changes into another state (a more mature developmental state, a state of improved cognitive performance) over the course of time. In the context of children's learning processes at schools, fundamental questions regard how the change from a relatively normal learning type of state to a state that falls under the criteria of a particular undesired form of learning takes place and the other way around. This "how" is a way of describing why one state changes into another and in fact implies a way of describing what can be done to make the state change into another one.

The aim of this chapter is to present the complexity approach on children's assessment in early childhood education (ECE). A second aim is to present a number of instruments for assessing children's performance (learning and behavior), which depart from such a complexity approach. The current state of affairs with regard to (national) measures to follow up students' progress in the Netherlands will

[1] Formative assessment refers to diagnostic procedures that are aimed to modify and improve teaching and learning activities and that are part of the process of teaching and learning itself and are most often performed by the teacher. Summative assessment refers to the assessment of educational outcomes and consists of a formal assessment activities often carried out by third parties such as the CITO and are mostly done for the purpose of external accountability.

be presented first. In the remainder of this chapter, the Dutch educational system of ECE is addressed including children from 4 to 6 years who attend primary school.

66.1.4 Assessment and Curriculum in Early Childhood Education in the Netherlands

In recent years, a variety of student tracking systems for primary education has been developed in the Netherlands. By means of the student tracking system, teachers can monitor the progress of their students and record this progress in written form (Blok et al. 2002). Currently, the majority of schools are using student tracking systems, which is at least partly due to the compulsory character that the school inspection bestows on such student tracking systems. Teachers view the reports to parents on the one hand and the support of the learning process on the other hand as the most important functions of this registration of student progress. Student tracking systems are seldom used for other purposes, such as guarding and improving the quality of teaching, or the analyses of group-based results, for instance, learning process made by the immigrant school population (Blok et al. 2002). Student tracking systems are hardly ever used for the improvement of the direct pedagogical and didactic activities of the teachers in response to the behavior of the students in an attempt to optimize the student's development (Steenbeek et al. 2012).

Although the student tracking systems have proven their added value (Blok et al. 2002), important clues or the starting points for the monitoring of students' learning are currently left untouched. In short, the current tracking systems do not succeed in collecting qualitatively and quantitatively sufficient information. An important cause of this failure is that such systems almost exclusively focus on learning progress. The behavioral and action-related aspects of learning and the way the aspects are guided and promoted during the teaching-learning process are hardly addressed. A second cause of the failure is that the current student tracking systems invite the teachers to assess with a low and in fact insufficient frequency. Intervals of a couple of weeks to several months are typical. With such large intervals, the system cannot provide a reliable and valid representation of the natural fluctuations in learning and behavior in the student's reactions to the didactic approach, and in the progress of the student (Fuchs and Fuchs 2001; Fuchs et al. 2006; Shapir and Heick 2004; Steenbeek and van Geert 2013; Hughes and Kwok 2007). Since these fluctuations are a natural and important part of learning-teaching processes, it is necessary that the frequency of the measurements or observations is high enough to capture such fluctuations (Steenbeek and van Geert 2005; Van Geert and Van Dijk 2002; Van Geert 2003). In addition, direct observation in the class and real-time recording of teaching-learning-related activities in performance are a reliable and valid method for obtaining information about the students' responses to the teachers' interventions (Hintze and Matthews 2004; Kloos et al. 2012). As regards ECE the Dutch government has ordained that during this educational period, children are assessed

at least once on their skills and knowledge by means of a standardized, nationwide test, developed by CITO, which is a central, government-approved center for test development primarily aimed at summative assessments. The question is whether this practice of formal, curriculum-related assessment is consistent with the notion of the child—and the child-teacher relationship for that matter—as a complex dynamic system. Therefore, the notion of complex dynamic systems and its consequences for the way the processes of learning, development, and assessment are to be addressed is presented first.

66.2 Complexity Approach on Assessment in the Classroom: A Conceptual Introduction

66.2.1 A Basic Definition of Dynamic Systems

A main starting point for a good understanding of the theoretical, empirical, and more importantly applied implications of a complexity approach is to look at the most basic definition of what a complexity approach entails, namely, the view of children's learning and developmental processes as complex dynamic systems. In its probably most basic form, a dynamic system is defined as "a means of describing how one state (of a system) develops or changes into another state over the course of time" (Van Geert 1998). However elementary this definition may seem, it has a number of profound consequences for theory formation, empirical research, and application, such as psychological interventions.

66.2.1.1 The Notion of System

Obviously, a dynamic systems theory—for instance, a dynamic systems theory concerning ADHD—is a theory about particular systems. The word system, from the Greek word "systema," means an organized whole, a series of things standing together. A more specific definition is that it is a collection of elements or components that are connected by particular relationships among them. The elements or components are defined by the fact that they can differ. There are properties that can differ between systems that are of the same kind and that can differ within a system from moment to moment. For instance, a child's task behavior is a property of a particular kind of system, a human being, and this property can differ between persons. One can have a tendency to show a lot of on-task behavior and another person a very small one. It can also differ within persons: A particular person's working memory may be small for a particular kind of task and big for another one or be small during young age and considerably bigger at a more mature age. That is to say, components of systems are described in terms of potential variation, between or within, and are habitually called variables. Systems are thus described by the whole

of properties along which they can vary, i.e., vary over time or be different from other systems of the same kind, e.g., other human beings. For instance, children can be described by means of properties such as their learning capacity and their motivation to learn (and many other such properties for that matter). At any particular moment in time, a particular child shows a particular level of task behavior or the momentary state of task behavior and a particular level of regulatory control or the momentary state of regulatory control. In dynamic systems it is common practice to combine these descriptive dimensions into a descriptive space, which in this case is a two-dimensional space. The momentary task behavior and momentary regulatory control of the child define one single point in the space. The technical term for such a descriptive space is state space, and the combination of a particular system's current values on the dimensions of the space forms the system's current state.

Recall that a dynamic system is a way of describing how the current state changes into another state, which by necessity must be the system's next state in time. This next state then becomes the systems current state, which changes into the then next state in time and so forth. That is to say, a dynamic system traces a particular (1) trajectory, i.e., a sequence of states, (2) over time (3) in the state space. The emergence of such a trajectory is based on the fact that a dynamic system describes iterative processes: Take the first state to produce the second, take the second to produce the third, take the third to produce the fourth, and so forth for as many successive states as you need to describe the system's time course. The iterative nature of the processes involved is central to the notion of development. Roughly speaking, an 8-year-old child's developmental state depends on the developmental course spanning the 8 years before; at the age of 9, the child's developmental state depends on the developmental course pending the 9 years before (that is to say, the 8 years before +1 and so on). Iterative processes have very interesting properties, but they are also very hard to imagine. The best way of studying what they can do is by simulating them on a computer, and that is why computer simulation of iterative processes, based on developmental models, is of such crucial importance for our understanding of developmental and clinical processes (Van Geert and Fischer 2009).

66.2.1.2 The Notion of States and the Dynamics

To begin with, the notion of "another state" does not imply that this other state must be different from the preceding one. If a system is stable—for instance, if the level of on-task behavior of a particular child has reached a stable level—the next state of the system, for instance, a child's level of on-task behavior next week, is similar to the preceding state of the system, for instance, a child's level of on-task behavior today. Hence, a dynamic system describing the child's level of on-task behavior will amount to a way of describing how the child's current level of on-task behavior changes into another level, namely, the level that we will observe next week that is similar to the current level. It may come as a surprise that this is seen as a serious problem for an explanatory model: If the level does not change, then there is nothing

to explain, so what is the problem? However, this reasoning is based on a faulty understanding of the problem of stability. It is a basic fact of nature that any ordered, specific system, such as a cup of hot coffee or a child with a particular working memory level, will naturally tend toward decay. More technically speaking, there is a natural tendency for systems to increase in entropy, which is another way of saying that there is a natural tendency for systems to lose their structure or order (Van Geert 2009). Hence, for a system to maintain its structure or order across time, it has to do something; it has to actively counteract the natural increase of entropy. A simple comparison on the behavioral level is a person's upright posture. If a person stands upright on his two feet, the upright posture is maintained because the system of bones, joints, muscles, and nerves carefully compensates for the physical forces that act on the system and that will destroy its balance if the counteractive force is not exerted. Babies, for instance, are not capable of doing this. This principle of the general loss of order is a general law of nature. This is known as the second law of thermodynamics, which is one of the basic laws in physics, and it applies to any system in which the amount of entropy is not yet maximal, that is, in which the amount of disorder is not yet maximal. Hence, a dynamic system is not only a way to describe change in the sense of becoming different but also a way to describe change in the sense of maintaining stability.

66.2.1.3 Properties of Learning and Behavior as Complex Dynamic Systems Processes

In summary, the most important properties of learning as a complex dynamic process are as follows: (1) the actual course of learning processes of students is determined by the interplay of a variety of child and contextual factors in which the teacher constitutes the most important context factor; (2) insights into the dynamics of interaction processes on the short-term timescale of a lesson are essential to get a grip on the development of desirable as well as undesirable learning trajectories on the long-term timescale (Lichtwarck-Asschof et al. 2008); (3) intraindividual variability in learning and interaction behavior and performance provides valuable information about the underlying processes of learning (Yan and Fischer 2002); (4) learning processes have an iterative character, that is, they continuously build upon what happened before, and this happens on the short-term as well as on the long-term timescale; and finally (5) dyadic agent systems provide an effective framework for studying the actual learning and teaching process in school as well as preschool education, where the interaction is understood as a process emerging on the basis of the fundamental properties of the agents (such as concerns, skills, evaluative perceptions, et cetera).

66.3 An Assessment Taxonomy Based on Complexity Principles

With regard to the goal and focus of assessment, the complexity approach implies that assessment focuses on the learning processes of a child as a complex dynamic system and that this dynamic system—in principle—consists of a network of connected agents. This network boils down to the interaction between the learning child and a teaching context. The teaching context is, in particular in the case of young learners, a context of interaction between particular materials/problems/contents on the one hand and a teacher on the other hand. Hence, the fundamental dynamics of learning consists of the triadic dynamic relationship between the child, the materials (problem, material context), and the teacher (see Tzuriel 2001). This notion of children's learning and the teacher's teaching leads to a model of assessment which takes into account all these aspects of children's learning and teacher's teaching as a complex dynamic process, in which, e.g., the time aspects must take its proper role. That is, important additions of this taxonomy in comparison with the traditional views on assessment are the explicit addition of the static-dynamic dimension and the timescale dimension. In addition, the complexity approach leads to an approach to assessment that justifies assessment as a multidimensional form of sampling information from the system that can serve a variety of goals. That is to say, the complexity approach criticizes approaches that focus on single forms of assessments that allegedly measure the value of some underlying latent variable and which is almost by definition done on the basis of standardized tests. In our complexity-based view, standardized tests are important, but they correspond with only one cell in the assessment taxonomy. Any form of valid and meaningful assessment of a complex system, such as a child learning in the context of explicit teaching, must be based on a combination of cells in the assessment taxonomy, *and* this particular combination is based on a preliminary specification of the broader assessment goals. The form of assessment resulting from a complexity approach is therefore a multidimensional construct. Different types of assessment can be distinguished, and the division is based on a variety of dimensions: (1) the goal of the assessment, (2) the persons who conducted the assessment, (3) the format of the assessment, (4) the persons who are assessed, (5) the assessment content, (6) the timescale covered by the assessment, and finally (7) the static versus dynamic nature of the assessed phenomena.

None of the forms mentioned in Textbox 66.1 is intrinsically superior to any other (e.g., standardized testing is not the golden standard). Assessment should be evaluated based on the concrete goal of the assessment and should in principle be of a multiple nature. These assessment dimensions have been summarized in the model of the assessment taxonomy proposed by Boelhouwer (2013) who focused on three dimensions in particular. These dimensions are (1) the static-dynamic distinction (data aggregated over many individuals versus data displaying the time course of a process, which in principle refer to individual trajectories); (2) the micro versus macro timescale, which corresponds with our distinction between short-term and

Textbox 66.1 Goal

Assessment aimed at advice or recommendations for educational and clinical action with individuals

Assessment for research purposes (testing scientific hypotheses)

Assessment aimed at deciding policies (e.g., which intervention or method should schools use to teach fractions in the most efficient way, i.e., results/costs)

According to person(s) who conduct(s) the assessment

Self-assessment

Assessment by practitioner

Assessment by third party

According to format

Real-time, spontaneous assessment during action (e.g., during teaching)

Situation-based assessment (e.g., in the class, based on real-time, contextual behaviors) by means of standardized procedures (e.g., coding schemes)

Assessment based on standardized tests

According to persons who are assessed

The client (e.g., student or students)

The practitioner (e.g., teacher)

The process governor (e.g., school board, policymakers)

According to what is assessed

Behavior (behavioral observation)

Cognitions, problem solving in standardized situations (e.g., responding to scenarios)

Memories, evaluations of experiences (questionnaires)

According to the timescale

Short-term changes (e.g., what happens during a concrete class activity)

Medium-term changes (e.g., changes over a number of class activities or lessons)

Long-term changes (developmental changes, long-term learning effects)

According to the dynamic/static nature of the assessed phenomena

Assessment of change/the dynamics

Assessment of static differences

long-term processes (the timescale); and (3) the distinction between direct and indirect assessment, which refers to the source of information (the assessed person him- or herself versus a third-party assessor). In the context of assessment of large-scale interventions, such as school- or nationwide interventions to reduce bullying, Boelhouwer adds a fourth dimension which is related to the distinction between timescales, namely, short-term effects (i.e., affects observable behavior right after or eventually during the intervention) versus long-term effects (maintaining effects that are still observable a long time after the intervention).

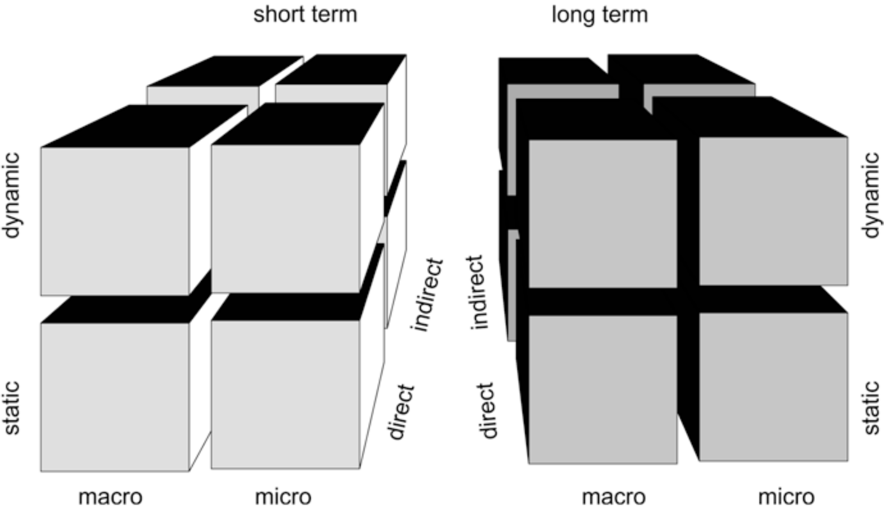

Fig. 66.1 The basis of the assessment taxonomy as proposed by Boelhouwer (2013)

Psychological and educational assessments are examples of assessments of complex dynamic systems. The assessment taxonomy provides a model for determining the structure of assessment procedures, in terms of complexity and dynamics (see Boelhouwer 2013). The taxonomy can be used as a frame of reference for assessment of complex dynamic systems such as learning students and teaching teachers. In principle, the assessment of a large-scale educational intervention or of a curriculum must fill all the cells of this 2 × 2 × 2 taxonomy (or, if the dimension of the duration of the intervention effect is concerned, in the 2 × 2 × 2 × 2 times taxonomy). In practice, however, most intervention assessments confine themselves to at most a few of those cells and focus in particular on the static, macroscopic, and indirect evaluation of educational interventions. Multi-assessment interventions such as the study of Boelhouwer (2013) on the effect of a personal empowerment program on primary school children are quite rare (Fig. 66.1).

66.4 Examples of a Process-Oriented Assessment in ECE

In order to understand the dynamics of a complex system such as a learning student in the context of a teaching teacher, the assessment must focus on the dynamic character of both macroscopic and microscopic information. That is to say, assessment must provide adequate descriptions of the actual processes that are taking place in individuals over the timescale of short-term learning-teaching interactions, e.g., during particular lessons, and over the timescale of long-term change, for instance, several weeks, months, or school years. Truly dynamic assessment, be it on the

short- or the long-term timescale, also focuses on fluctuations and intraindividual variability. That is to say, long-term changes, for instance, over the school year, are captured by recording changes as they occur over a considerably shorter time span, for instance, from lesson to lesson or from week to week. The next two examples concern assessments and assessment instruments that are capable of capturing the dynamic nature of change. The first one focuses on long-term change, but does so by recording relatively short-term fluctuations in a program called Digital Instruction Goals (Dingo). The second example focuses on short-term change, as it occurs during a particular lesson or educational activity, and thus tries to capture the properties of the short-term dynamics of teaching and learning. This concerns changes in the cognitive complexity of children's explanations of natural phenomena during a particular science class.

66.4.1 First Example: Digital Instruction Goals Orientation, a Web-Based Program for Assessing Students' Learning and Behavioral Goals

This instrument aims at facilitating primary school teacher's assessment of students' progress with regard to their learning and behavioral goals by means of using a Digital Instruction Goals (Dingo) program. The aim of the program is for students to show learning and behavioral patterns from a low to a higher level and increase their academic performance over time. Dingo tries to reach this aim by means of using teacher's assessments, systematic and on a daily basis, of student's progress on actual learning and behavioral goals. This is carried out by adjustment of teacher's direct actions as an immediate consequence after the assessment of these goals and teacher's feedback toward students with regard to their progress on a regular basis (Blok et al. 2001; Fuchs and Fuchs 2001; Safer and Fleischman 2005). In a recent version, student's assessment of their own progress is an important additional component of the instrument (Jellema et al. 2012), which is particularly suitable for use in upper grade classrooms. On the level of the school, we expect more efficient and effective ways of working on the learning and interaction behaviors of students requiring additional care, such that the quality of the school's educational means can be increased. By systematically working with the learning and interaction goals, it becomes increasingly easier to communicate about the educational activities and their effects, within the school, e.g., among teachers, and outside the school, such as parents or school inspection. For instance, it will be easier for teachers to provide concrete justifications for their actual approaches, and they will be able to show in much more detail what a particular approach leads to in the case of a particular student at a particular moment in time. Such justifications are important for the teacher himself, but also in the context of discussions with parents or the communication with the school inspection. The school inspection expects that teachers and schools will be able to use progress data of students as a basis for quality control and

improvement and that schools are accountable for their actual results on the basis of their actual educational and intervention decisions (Blok et al. 2002).

66.4.1.1 Embedded Assessment with Regard to Learning Goals, Using a Complex Dynamic Systems Approach

With the aid of Dingo, schools and teachers can show that they work in a goal-oriented way and that they follow the development and progress of their students on specific learning, behavioral, and interaction goals in a systematic way. By doing so, they can show that they take responsible decisions in their approach of students who need additional support. If schools can use the information collected by teachers this way, teachers are reinforced for and supported in the efforts they invest in collecting this type of information on a daily basis. This particular approach also fits perfectly well in the current aspirations regarding product-oriented teaching (Inspectie van het onderwijs 2010). Dingo can be specified in terms of the assessment taxonomy as a form of assessment that focuses on dynamics for medium- to long-term changes by practitioners in the context of real-time action as it aims at formulating concrete recommendations for educational actions of practitioners.

66.4.2 Second Example: Assessments Used in Our Curious Minds Research Project, a Video Feedback Coaching Program for Teachers (Vfc-T)

The Curious Minds research project is a Dutch research program that investigates science and technology talents of children in preschool (Van Benthem et al. 2005; www.TalentenKracht.nl). There is evidence that teachers do not sufficiently promote science education in elementary school (Bransford et al. 2004) and that children lose their interest in science in the course of their elementary school career (Osborne et al. 2003). Shortly, children may not get the education necessary to let their science and technology talents prosper.

The Curious Minds project emphasizes the importance of stimulating science talents of children when they are still young, in the age between 3 and 6 years. Young children show talent in science and technology in the form of natural inquisitiveness, enthusiasm, asking questions, and actively exploring their world. The concept of talent of the Curious Minds project entails that every child is talented, in the sense of having a particular developmental potential. Talent is a transaction between a talented child and a talent-stimulating environment. A child is seen as talented if the child is intrinsically motivated, is cognitively active, and exhibits a level of performance leading to further learning (Steenbeek and van Geert 2007; Steenbeek et al. 2011). In this respect talent also includes the capacity to elicit high-quality information and instruction of the material and social environment (Steenbeek and

van Geert 2007; Steenbeek et al. 2011). In short, the talent of children in science manifests itself and develops in the dynamic relationship between three components, namely, the child, the adult, and the task, the so-called Curious Minds talent triangle. The child and the environment mutually stimulate each other, in such a way that a positive developmental talent spiral can develop over time (Steenbeek and Van Geert 2008; Steenbeek et al. 2011). The educational philosophy of the Curious Minds project is based on the observation that learning takes place in social interaction and that learning is a dynamic, socially situated process (Hirsh-Pasek et al. 2009; Van Geert and Steenbeek 2005). Therefore, the Curious Minds project uses good practice examples of interactions, by means of Curious Minds video clips which show a triangular interaction between a child and an adult while working on a science and technology task (www.talentenKracht.nl).

It is important that adults gain insight in this interaction process and that they learn how children learn from them (Alfieri et al. 2010). For this to happen, it is crucial that adults are capable of seeing the dynamic relationship between child, adult, and talent-eliciting tasks as an expression of the child's science and technology talents on the one hand and the adults' potential to stimulate these talents on the other hand. This is one of the main goals of the video feedback coaching program for teachers (vfc-t) that was developed by Wetzels et al. (2013b). The assessment focuses on children's talents in the form of their scientific reasoning skills and teachers' skills to stimulate children's reasoning. These assessments take place "on the spot," i.e., in the science classroom during actual lessons. Variables which are assessed are, e.g., the number and types of questions asked by the teacher (Wetzels et al. 2013a) and the occurrence of coherent "action-reaction chains" in teacher-student interaction. With regard to the children's scientific reasoning skills, an important variable is the child's level of understanding of scientific concepts that children show in their verbal utterances during the science and technology lessons. In principle, the children's levels of scientific reasoning and the teachers' activities to stimulate scientific reasoning should increase as the teaching increasingly incorporates Curious Minds principles.

66.4.2.1 Embedded Assessment for Science Education, Using a Complex Dynamic Systems Approach

In our project, we chose for assessment embedded in the process of intervention, taking into account the contextual and individual nature of the intervention process (Lich et al. 2013; Ridenour et al. 2013). What needs to change is the actual process of teaching and reasoning, and this must be assessed in the context of the process. A typical feature of such processes is that they show natural fluctuation, which is often incorrectly identified as "measurement error," but which in fact provides information about the underlying process (Van Geert and Van Dijk 2002; Steenbeek et al. 2012). The child's current level, which fluctuates across events in utterances, can fluctuate per sentence and is measured by using a coding scheme (Van der Steen et al. 2012; Meindertsma et al. 2013) based on skill theory (Fischer and Bidell

2006). Skill theory enables researchers to extract the complexity of, e.g., utterances from content, which makes it possible to compare understanding across multiple time points, contexts, and persons (Parziale and Fischer 1998). In addition, skill theory allows assessment in the actual context of skill performance, which in this particular case is the science lesson the teacher offers young children. As a consequence assessing these kinds of variables, as collected in the naturalistic setting that children function in on a daily basis, and by assessing these variables multiple times, insight is gained into the course of the skill process over time.

The project therefore includes two observational measurements in order for the researcher and the teacher to obtain an idea about the teacher's "teaching as usual." This is followed by four observation-based measurements from the video recordings during the coaching trajectory. Then two observation-based measurements after the coaching trajectory are carried out. Analyses of the short-term interaction patterns emerging between teachers and students during actual lessons are done on the basis of the coded observations. Effects are investigated by searching for stable changes in the teacher-student interaction patterns regarding the level of reasoning of the children, the type of questions asked by the teacher, et cetera. In short, this form of assessment is embedded in the coaching program: It takes place during the coaching trajectory and in the actual context that the coaching seeks to change. Finally, it is accompanied by discussions between the coach and the teacher after each coaching session, which focuses—in a nontechnical way—on the same variables that are analyzed via the formal coding system. This form of assessment can be specified as a form of assessment that focuses on the actual process of change on the microscale. By assessing a sequence of short-term timescale events (lessons), the assessment can be generalized to the medium-term timescale, namely, the duration of the coaching trajectory including observations before and after by a third party (researcher), of actual behaviors and cognitions, with the aim of testing scientific hypotheses.

66.5 Conclusion

In this chapter, we have discussed the basic properties of a child's learning process as a complex dynamic system. This includes using an embedded achievement approach toward monitoring students' learning progress. This view leads to a new assessment taxonomy, which takes into account a wide variety of aspects of children's learning and teacher's teaching as a complex dynamic process, in which the time aspect plays a vital role. An important addition of this taxonomy in comparison with the traditional views on assessment is the explicit addition of the static-dynamic dimension and the timescale dimension. Thus, this assessment taxonomy starts from the idea that the child's embedded achievement must be viewed as "temporary points in a specific zone." That is to say, what we wish to assess is not a point value on some underlying ability variable, for instance, a child's alleged true score on the variable "scientific reasoning ability." What we must assess is the broad range of

possibilities, including natural fluctuations, of skills and abilities functioning in specific teaching contexts, with specific teachers (Ensing et al. 2014). In our view, this form of assessment goes beyond the classical distinction between formative and summative assessment. A first implication of using this kind of assessment is that, in the early childhood education for young children, it is virtually impossible to draw long-term conclusions about the long-term progress of individual children. The fact that there exist statistically significant predictors of future trajectories on a group level has only very little effect on the prediction of individual trajectories, which are characterized by naturally fluctuating, idiosyncratic, i.e., individual-specific, statistical properties (Molenaar and Campbell 2009). In addition, the problem is attempting to control a complex dynamic system and to use embedded assessment allows this in a successful way.

66.5.1 Recommendations for ECE Curriculum

A number of applied recommendations follow from the general framework of a complex dynamic systems approach. First, with regard to the role of the professional who works in ECE, it is recommended that the unit of analysis is the child-teacher dyad, and this recommendation applies to research on intervention effectiveness as well as to embedded assessment as described in this chapter. Second, it is very important to confront educational professionals—ranging from teachers to educational policymakers—with the reality of natural fluctuations in the behavior and performance of children. They need to be shown the various functions that such natural fluctuations have as important mechanisms of learning and development on the one hand and as important sources of information about processes of learning and development on the other hand. Third, it is important that educational professionals become aware of their own role in the learning processes of children and that such awareness is grounded in a concrete understanding of principles of complex dynamic systems thinking. An example of the latter is the principle of mutual influences between the performance of the student and the performance of the teacher. Educational professionals who regularly reflect on their own practice and who are not afraid to use their own intuition and critical sense very often spontaneously think in concepts and mechanisms that come quite close to the concepts and mechanisms of complex dynamic systems thinking. For this reason, the message of complex dynamic systems thinking is not too difficult to convey to teachers and practitioners working in applied settings.

66.5.2 Recommendations for Assessment in ECE

With regard to student tracking systems, a first recommendation is that such a system must be able to provide information about the concrete short-term processes that influence the children's learning on the long-term timescale. In these short-term processes, the contribution of the teacher is of crucial importance. The two examples described in the chapter regard the teacher's activities in the classroom by making use of naturally occurring science teaching moments, e.g., by posing open, content-informed questions to children in order to stimulate their own thinking process. Many successive short-term interaction processes constitute long-term learning processes of young children in the school context. It goes without saying that such processes emerge on the basis of many components, certainly those that are specific to a particular child, but it is highly likely that this process of emergence owes a great deal to the role of the teacher as the person who stimulates the development of the child and who is the first and most important person to assess the progress of the child and to immediately act in accordance with the results of the embedded assessment.

A second recommendation is that the student tracking systems provide insight into the changes in learning and behavior, in the form of real process information. In order to do so, they should focus on intraindividual variability in student and teacher performance as regards particular learning goals or intended achievements of particular students. That is to say, information must be collected with a frequency appropriate for providing information about the way real-time processes actually occur and about important features such as variability and interactivity. Performance and change occur within a particular bandwidth of variation which itself might change over the long term of learning (Bassano and Van Geert 2007; Van Dijk and van Geert 2007).

A third recommendation, closely related to the second, concerns the materials used for assessment. In our view, the current Dutch educational system should focus primarily on factual and concrete indicators of real cognitive and skill performance, as they occur in the daily school routine in order to assess and influence learning progress. It is of course of great importance that teachers should be equipped with usable and efficient tools to do so. The existing official policy overemphasizes the use of allegedly objective, aggregate ability measures in the form of tests that extends to the youngest age groups. Tests might be a good source of information for high-level policymakers or for international comparisons, but it is questionable whether they are also a good source of information about individual students and their educational needs, especially in ECE.

66.5.3 Final Remarks

The contribution of the complexity approach on children's learning processes and the accompanying assessment taxonomy to the field of early childhood education is that it does justice to the nature and form of developmental processes of young children by focusing on the idiosyncratic and context-specific nature of the processes. By doing so, it can increase the children's chances to optimally develop in line with the mechanisms and features of their individual and contextual properties and in line with the processes of emergence that result from those properties. In this way, it can be avoided that children are prematurely and unnecessarily put into the straitjacket of formal indicators such as intelligence quotients or other indicators of broad latent variables, to which more importance and veracity are assigned than they actually deserve. It can help us avoid that young children are unnecessarily put into the restriction of categorical distinctions that are too easily imposed on children, such as ADHD (Batstra and Frances 2012a, b; Batstra et al. 2012).

In addition, the complex dynamic systems approach yields more and more refined information about changes in children's learning processes and how to act as a professional in real-time classroom situations in order to stimulate the processes at the fullest potential. This approach thus is an important starting point for teachers to become properly equipped for class practice. This increasingly demands accounting for the diversity between students and also requires proper attention to the natural and important diversity that a particular student during his processes of acting and learning expresses.

Finally, with regard to the young child playing with a balloon that this chapter started with: Is there anything to assess here? The answer is yes. The child clearly seems absorbed by the activity, and the phenomena it involves—air pressure, force, etc.—are important aspects of a deeper understanding of physical nature. We can ask ourselves whether there is any learning in this event by focusing on the eventual, subtle differences between the repetitive acts. Can we see indicators of "deep practice," i.e., does the child vary his activity with each repetition, does the child visually focus on the balloon and the spout, is it more like a mechanic repetition, or is the child trying to make fun and is not watching the balloon but the teacher to see whether he gets annoyed by the child's actions? Moreover, we can observe whether the child has changed his manipulation, indicating a progress in understanding the next time he is playing with a balloon, tomorrow or next week. Is the child now exploring the same features, is he focusing on the same part of the balloon, or has his exploratory focus shifted to some other properties such as a different sizes of the balloon after blowing it up with more or less force? These observations reveal how learning occurs and proceeds in the real life of children and how sensitive and responsive adults may assess such learning and may help guide it toward richer directions.

References

Alfieri, L., Brooks, P. J., Aldrich, N. J., & Tenenbaum, H. R. (2010). Does discovery-based instruction enhance learning? *Journal of Educational Psychology, 103*, 1–18.

Bassano, D., & Van Geert, P. (2007). Modeling continuity and discontinuity in utterance length: A quantitative approach to changes, transitions and intra-individual variability in early grammatical development. *Developmental Science, 10*(5), 588–612.

Batstra, L., & Frances, A. (2012a). Holding the line against diagnostic inflation in psychiatry. *Psychotherapy and Psychosomatics, 81*(1), 5–10.

Batstra, L., & Frances, A. (2012b). Diagnostic inflation: Causes and a suggested cure. *The Journal of Nervous and Mental Disease, 200*(6), 474–479.

Batstra, L., Hadders-Algra, M., Nieweg, E., Van Tol, D., Pijl, S. J., & Frances, A. (2012). Childhood emotional and behavioral problems: Reducing overdiagnosis without risking undertreatment. *Developmental Medicine and Child Neurology, 54*(6), 492–494. doi:10.1111/j.1469-8749.2011.04176.x.

Blok, H., Otter, M. E., & Roeleveld, J. (2001). *Het gebruik van leerlingvolgsystemen anno 2000*. Amsterdam: SCO-Kohnstamm Instituut.

Blok, H., Otter, M. E., & Roeleveld, J. (2002). Coping with conflicting demands: Student assessment in Dutch primary schools. *Studies in Educational Evaluation, 28*, 177–188.

Boelhouwer, M. D. (2013). *Tussen weerstand en weerbaarheid, en andere recepten; Een effectevaluatie van het WIBO-lesprogramma met behulp van vragenlijsten, dagboeken en observaties* (Between resistance and empowerment; the evaluation of the WIBO-program prevention program). Dissertation, University of Groningen, Groningen, The Netherlands.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2004). *How people learn: Brain, mind, experience, and school*. Nashville: Vanderbilt U, Learning Technology Ctr.

Ensing, A., van der Aalsvoort, G. M., van Geert, P., & Voet, S. (2014). Learning potential is related to the dynamics of scaffolding, an empirical illustration of the scaffolding dynamics of five year olds and their teacher. *Journal of Cognitive Education and Psychology, 13*, 1–15.

Fischer, K. W., & Bidell, T. R. (2006). Dynamic development of action and thought. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology. Vol 1: Theoretical models of human development* (6th ed., pp. 313–399). Hoboken: Wiley.

Fuchs, L. S., & Fuchs, D. (2001). Helping teachers formulate sound test accommodations decisions for students with learning disabilities. *Learning Disabilities Research and Practice, 16*, 174–181.

Fuchs, L., Hamre, B. K., & Pianta, R. C. (2006). Student-teacher relationships. In G. Bear & K. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 59–71). Washington, DC: National Association of School Psychologists.

Hintze, J., & Matthews, W. J. (2004). The generalizability of systematic direct observations across time and setting: A preliminary investigation of the psychometrics of behavioral observation. *School Psychology Review, 33*(2), 258–270.

Hirsh-Pasek, K., Golinkoff, R., Berk, L., & Singer, P. (2009). In defense of play: beginning the dialog about the power of play. *Young Exceptional Children, 16*, 40–41.

Hughes, J., & Kwok, O. (2007). Influence of student-teacher and parent-teacher relationships on lower achieving readers' engagement and achievement in the primary grades. *Journal of Educational Psychology, 99*(1), 39–51.

Inspectie van het onderwijs. (2010). *Opbrengstgericht werken in het basisonderwijs: een onderzoek naar opbrengstgericht werken bij rekenen-wiskunde in het basisonderwijs* (Product oriented teaching in primary education). Internal Report, Educational Inspection Service, The Netherlands.

Jellema, K., Jansen, T., Steenbeek, H., & Jansen, L. (2012). *Project Dingo: hoe leerkrachten leer-en gedragsdoelen van leerlingen kunnen bijhouden* (Project Dingo: How to assess pupils' progress on behavioral- and learning goals). Internal publication, University of Applied Sciences North of the Netherlands & University of Groningen, The Netherlands.

Kloos, H., Morris, B.J., & Amaral, J.L. (Eds.) (2012). Current topics in children's learning and cognition. *InTech*, CC BY 3.0 license. doi:10.57721162.

Lich, K. H., Ginexi, E. M., Osgood, N. D., & Mabry, P. L. (2013). A call to address complexity in prevention science research. *Prevention Science: The Official Journal of the Society for Prevention Research, 14*(3), 279–289.

Lichtwarck-Asschof, A., van Geert, P., Bosma, H., & Kunnen, S. (2008). Time and identity: A framework for research and theory formation. *Developmental Review, 28*(3), 370–400. doi:10.1016/j.dr.2008.04.001.

Molenaar, P. C. M., & Campbell, C. G. (2009). The new person-specific paradigm in psychology. *Current Directions in Psychological Science, 18*(2), 112–117.

Meindertsma, H., van Dijk, M., Steenbeek, H., & van Geert, P. (2013). Assessment of preschooler's scientific reasoning in adult–child interactions: What is the optimal context? *Research in Science Education*. doi:10.1007/s11165-013-9380z.

Osborne, J., Simon, J., & Collins, S. (2003). Attitudes towards science: A review of the literature and its implications. *International Journal of Science Education, 25*(9), 1049–1079. doi:10.1080/0950069032000032199.

Parziale, J., & Fischer, K. (1998). The practical use of skill theory in classrooms. In R. Sternberg & W. Williams (Eds.), *Intelligence, instruction, and assessment: Theory into practice* (pp. 95–110). Mahwah: Lawrence Erlbaum Associates Publishers.

Perry, N., Vande Kamp, K., Mercer, L., & Nordby, C. J. (2002). Investigating teacher-student interactions that foster self-regulated learning. *Educational Psychologist, 37*(1), 5–15.

Pinar, W., Reynolds, W., Slattery, P., & Taubman, P. (1995). *Understanding curriculum; an introduction to the study of historical and contemporary curriculum discourses. Counterpoints: Studies in the postmodern theory of education* (Vol. 17). New York: Peter Lang Publishing.

Ridenour, T. A., Pineo, T. Z., Maldonado Molina, M. M., & Hassmiller Lich, K. (2013). Toward rigorous idiographic research in prevention science: Comparison between three analytic strategies for testing preventive intervention in very small samples. Prevention science. *The Official Journal of the Society for Prevention Research, 14*(3), 267–278.

Safer, N., & Fleischman, S. (2005). Research matters/how student progress monitoring improves instruction. *Educational Leadership, 5*, 81–83.

Shapir, E., & Heick, P. F. (2004). School psychologist assessment practices in the evaluation of students referred for social/behavioral/emotional problems. *Psychology in the Schools, 41*(5), 551–561. doi:10.1002/pits.10176.

Steenbeek, H., & van Geert, P. (2005). A dynamic systems model of dyadic interaction during play of two children. *The European Journal of Developmental Psychology, 2*(2), 105–145.

Steenbeek, H., & van Geert, P. (2007). A theory and dynamic model of dyadic interaction: Concerns, appraisals, and contagiousness in a developmental context. *Developmental Review, 27*(1), 1–40.

Steenbeek, H., & van Geert, P. (2008). The empirical validation of a dynamic systems model of interaction; do children of different sociometric statuses differ in their dyadic play interactions? *Developmental Science, 11*(2), 253–281.

Steenbeek, H., & van Geert, P. (2013). The emergence of learning-teaching trajectories in education: A complex dynamic systems approach. *Nonlinear Dynamics, Psychology, and Life Sciences, 17*(2), 1–34.

Steenbeek, H., van Geert, P., & Van Dijk, M. (2011). The dynamics of children's science and technology talents: A conceptual framework for early science education. *Netherlands Journal of Psychology, 66*(3), 96–109.

Steenbeek, H. W., Jansen, T., & Van Geert, P. (2012). Scaffolding dynamics and the emergence of problematic learning trajectories. *Learning and Individual Differences, 22*(1), 64–75.

Tzuriel, D. E. (2001). Dynamic assessment of young children. New York: Kluwer Academic/Plenum.

Van Benthem, J., Dijkgraaf, R., & De Lange, J. (2005). TalentenKracht. Tweede brochure van TalentenKracht, herziening van de versie van juli 2005.

Van der Steen, S., Steenbeek, H., van Dijk, M., & van Geert, P. (2012). A comparison between young students with and without special needs on their understanding of scientific concepts. *Educational Research International*, *2012*, Article ID 260403, 1–12. doi:10.1155/2012/260403.

Van Dijk, M., & van Geert, P. (2007). Wobbles, humps and sudden jumps: A case study of continuity, discontinuity and variability in early language development. *Infant and Child Development, 16*(1), 7–33.

Van Geert, P. (1998). A dynamic systems model of basic developmental mechanisms: Piaget, Vygotsky and beyond. *Psychological Review, 105*(5), 634–677.

Van Geert, P. (2003). Dynamic systems approaches and modeling of developmental processes. In J. Valsiner & K. J. Conolly (Eds.), *Handbook of developmental psychology* (pp. 640–672). London: Sage.

Van Geert, P. (2009). Transmission, self-organization, and the emergence of language: A dynamic systems point of view. In U. Schonpflug (Ed.), *Cultural transmission: Psychological, developmental, social, and methodological aspects* (pp. 48–69). New York: Cambridge University Press.

Van Geert, P. L. C., & Fischer, K. W. (2009). Dynamic systems and the quest for individual-based models of change and development. In J. P. Spencer, M. S. C. Thomas, & J. McClelland (Eds.), *Toward a unified theory of development? Connectionism and dynamic systems theory reconsidered* (pp. 313–336). Oxford: Oxford University Press.

Van Geert, P. & Steenbeek, H. (2005). A complexity and dynamic systems approach to developmental assessment, modeling and research. In K. W. Fischer, A. Battro & P. Lena (Eds.), *Mind, brain and education*. Cambridge: Cambridge University Press.

Van Geert, P., & Van Dijk, M. (2002). Focus on variability; new tools to study intra-individual variability in developmental data. *Infant Behavior & Development, 25*(4), 340–374.

Yan, Z., & Fischer, K. (2002). Always under construction: Dynamic variations in adult cognitive microdevelopment. *Human Development, 45*(3), 141–160.

Wetzels, A., Steenbeek, H., & van Geert, P. (2013a). *The effect of a coaching program on teachers' practices in primary science teaching*. Submitted for publication.

Wetzels, A., Steenbeek, H., & van Geert (2013b). *The design of an intervention for lower grade teachers on teaching science*. Submitted for publication

wikipedia.org/wiki/Curriculum

wikipedia.org/wiki/Assessment

wikipedia.org/wiki/Early_childhood_education

www.woorden-boek.nl/woord/curriculumxxx

www.talentenKracht.nl

Chapter 67
Conclusions and Discussion

Geerdina van der Aalsvoort

Abstract The eight chapters within the theme of curriculum and assessment reveal the long way from effective incidental to government-lead early childhood education. Within the early childhood curriculum implementation of assessment has a specific place. The same accounts for the role of play in early childhood education curriculum and assessment. Although play is presented as a site for assessment few clues on what to observe and to what purpose the observations are to be collected within the complexity of play are presented. Moreover, the consequences of seeing the child and teacher contribution as one dynamic system while carrying out a task requires much more awareness of the teacher's role than currently is taken for granted. The chapters show that each of the countries has its own developmental trajectory with regard to development of early childhood curriculum. Political choices as well as facts such as prosperity of the country, money, professional knowledge and time to prepare preschool teachers profoundly on their most important work, each of those, influences how early childhood curriculum gets organized and implemented within a country. The role of well-grounded assessment while adjusting to preschool teachers' opinion about how to work with young children and the role of keeping track of children's progress is still modest in most countries.

As to future research agendas on a more global level we must respect that profiting from other cultures when trying to make early childhood education effective within a specific country cannot succeed without respecting national issues. It could be that research findings sometimes are too optimistically applied to solve contextualized problems.

Keywords Cultural diversity • National issues on curriculum and assessment • Dynamic systems approach

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67.1 Conclusions

67.1.1 The Long Way from Effective Incidental to Government-Led Early Childhood Education

Campos illustrates how the actual development of the educational system could only start after the end of the military regime in Brazil. Both the decisions that basic education was a right for each child as that this would have consequences for the education of (preschool) teachers gave way to many scholarly documents in the government and in advisory boards to ensure educational quality with regard to early childhood curriculum and assessment. Campos stresses that a lot has been reached over the last 20 years with regard to early childhood education. She describes the several layers of discussion that need to be passed among the partners of early childhood education in order to secure implementation of the quality criteria in the childcare centers. Recent findings with regard to the quality of the centers show that there is still a long way to go. "Reality can be distant from the general principles that are presented in the official curriculum" (Campos, Chap. 59, this volume). The responsible workers in the field as well as in the government are well aware of the situation. A main need is to make sure that the early childhood curriculum is in place and contains a translation of the general principles into examples of preschool teachers' daily practices with children. Discussions with regard to assessment are taking place but need more time and attention as well as teaching the (future) preschool teachers. Zhu and Zhang point at the fact that in mainland China, a reform movement is ongoing to guide the preschool teachers from only emphasis on children's acquisition of skills and knowledge to development on abilities, emotions, and sociability. Since there is a strong emphasis on the examination of academic knowledge at the end of high school in China, preschool teachers tend to give priority to academic knowledge as well. There is also a lot to gain in rural areas as compared to developed cities. Early childhood education is not compulsory, and especially in the rural areas, resources are small. Moreover, curriculum content is discussed lately as a product that has been too heavily based on foreign cultures and clashes with traditional culture and communist culture. Combined with the low professional level of preschool teachers, the curriculum demands very much from preschool teachers to both understand the guidelines and implement the curriculum. The authors firstly suggest that more attention to Chinese cultural values will strengthen the preschool teachers to adopt the curriculum and the assessment in ways that are cultural authentic. There are many different cultures within China. Moreover, curriculum content needs to be adjusted to city and rural areas in order to allow meaningful early childhood education. More time and attention to push the training of preschool teachers to a higher level is a second very important means to succeed in implementing the new curriculum. Whereas Brazil and China impress as huge countries with early childhood education issues, Brody shows that implementing optimal early childhood curriculum in a small country such as Israel is complicated too. First, the formation of a new country since 1948 has led to specific

processes for the country as a whole which had a massive influx of Jews from all over the world including their cultural diversities. This stressed the educational system to its boundaries in order to take in all the children and including their diversity as well. For a long time, early childhood education was not part of the primary school program. However, when the Israeli students' performance on international standards such as PISA was poor, the early childhood curriculum was rewritten into core curriculum to specify knowledge and skills with regard to the main academic domains, and the preschool teachers all underwent intensive training to ensure implementation. Since Israeli society is a mosaic of cultures, the ministry develops special initiatives with regard to early childhood education to meet particular problems and ensure preschool teachers' involvement in the national curriculum. Within the early childhood curriculum implementation, assessment has a specific place. The instrument requires from teachers to observe the child playing in a variety of contexts, and its implementation is an ongoing endeavor in the Israeli multicultural society.

Whereas Brody speaks of an eroding play-based curriculum in Israel in favor of a more academic program, Grieshaber describes how the Australian nationally mandated learning framework includes "play based approaches to enact the learning framework" (Chap. 23, this volume) to ensure five specific outcomes. The educators are made accountable for the curriculum and pedagogical importance of high expectations and equity. The framework "emphasizes the importance of both the human capital and children as citizens approaches" (Chap. 62, this volume). This is to be aimed at through play-based learning and intentional teaching: "importance is placed on children's learning, how learning is to occur and the role of educators in children's learning" (Chap. 62, this volume). Assessment is related to the outcomes of the framework, and each of the outcomes is described in examples of child behavior and ways to promote this behavior. Grieshaber points at the specific role for the educators that is different from the earlier guidelines for early childhood education in Australia. She establishes that descriptions of the framework do not take qualifications of educators into account although they can vary widely from masters' degree to educators with no formal qualifications. Given this fact she claims that "the actual implementation of the Framework requires the provision of ongoing and high quality professional learning support for the early childhood workforce" (Chap. 23, this volume). Broadhead addresses the issue of a play-based curriculum from another perspective. First she describes how play and observation have been "in and out of vogue with policy makers in England" (Chap. 63, this volume). This has resulted in a "barrage of changes, both ideological and practical" (Chap. 63, this volume). Within this context Broadhead has developed a Social Play Continuum which draws preschool teachers' attention to higher-order characteristics of play in the cooperative domain. The instrument reveals to the professionals that young children are capable of cooperative play on a high level when "classroom pedagogies allow them to do so" (Chap. 63, this volume). However, the current policies fail to recognize this fact and prioritize teacher-directed activity and a focus on school readiness. This has caused much debate as well as resistance within early years communities in England. Both academic- and practitioner-based discussions

have not led to changes so far. The same goes for assessment. Broadhead describes that there are no integral links between pedagogical developments and assessment criteria. "Play is presented as a site for assessment" without clues on what to observe and to what purpose the observations are to be collected within the complexity of play as typical children's expression of learning and development.

67.1.2 Research Findings That Empower the Specifics of Early Childhood Curriculum and Assessment

Broadhead already mentions how research findings with regard to early childhood curriculum and assessment are used to influence political movements within England. The same is true for the contribution of Ilgaz, Hassinger-Das, Hirsch-Pasek, and Golinkoff who refer to recent findings that the No Child Left Behind policy has not provided as solid results both nationally and in international comparisons have revealed. In their chapter they describe massive evidence for the effectiveness of playful learning by guided play in early childhood education. The studies they collected are on the topics of language and literacy, mathematics, science, and socio-emotional development. The authors claim that guided play can complement didactic instructional practices. The early childhood curriculum should therefore be composed of "integrated comprehensive curricula that incorporate playful learning for all learning objectives" (Chap. 64, this volume). Moreover, preschool teachers "should be trained in effective playful scaffolding techniques" (Chap. 64, this volume). Assessment as a specific part of guided play has not been part of the studies that were undertaken. Where Ilgaz and her colleagues present overwhelming evidence of the importance of guided play during academic tasks on children's academic progress, Lipponen, Kumpulainen, and Paananen accentuate children's perspective to curriculum work as opposed to child perspective that is included in guided play. The seemingly subtle difference actually draws attention to a theme that only very recently came to the fore. Children's perspective is expressed in the children's own words, thoughts, and images. From the need to develop approaches and practices that recognize children's participation in curriculum work, the Finnish research group aims at revealing what children perceive as meaningful while doing academic work. Interestingly they found that the children's documenting of meaningful moments with cameras provided the children with new learning opportunities as well. The authors suggest that based on their findings, the children's perspective deserves attention in early childhood curriculum in the form of ethical considerations and professional practice in developing and using the children's voice in school. It goes without saying that this point of view will also have consequences for the content and type of assessment with regard to early childhood developmental progress. The complexity of child and children's perspective during tasks in the classroom has been the topic of Steenbeek and Van Geert too. They address the learning child as a dynamic system. This theoretical point of view is well described

in the chapter with convincing examples (see Chap. 66, this volume); it has far-reaching consequences for assessment of children's learning. Especially with regard to time scale and dynamics of change as opposed to static differences, assessment can capture the dynamic nature of change and as such give powerful information to teachers as to how their interaction initiatives during a task on a specific moment in time actually elicit changes in student learning and achievement in the long run. The authors describe this process as an embedded achievement approach: A child learns within a specific context, namely, this teacher and this task, and the data "must be viewed as temporary points in a specific zone" (Chap. 66, this volume). The approach is especially powerful when trying to capture learning progress with young students since their development and learning trajectories fluctuate strongly in the early years. The early childhood education curriculum so far does have elements that refer to the role of the preschool teacher in guiding a child's developmental and learning trajectories, but the consequences of seeing the child and teacher contribution as one dynamic system while carrying out a task require much more awareness of the teacher's role than currently is taken for granted.

67.1.3 Topics That Are Raised by the Section Editor Concerning Curriculum and Assessment

The conclusions that were drawn by the authors themselves with regard to the long way from effective incidental to government-led early childhood education, the special role of play in early childhood education curriculum and assessment, and research findings that empower the specifics of early childhood curriculum and assessment can also be perceived on a more global level. The chapters from the eight countries show that each of the countries has its own developmental trajectory with regard to development of early childhood curriculum. Political choices and facts such as prosperity of the country, money, professional knowledge, and time to prepare preschool teachers profoundly on their most important work, each of those, influence how early childhood curriculum gets organized and implemented within a country. The role of well-grounded assessment while adjusting to preschool teachers' opinion about how to work with young children and the role of keeping track of children's progress is still modest in most countries. As scholars we are aware of characteristics of assessment (Office of Superintendent of Public Instruction 2008) and of the dynamic processes that occur in early childhood education between preschool teacher and child (Steenbeek and Van Geert, Chap. 66, this volume) which are causally intertwined on short notice and in the long run. It is also understandable from a governmental point of view that questions with regard to accountability of an early childhood curriculum are raised and answers are expected. Why, however, is assessment such an issue in classrooms? Preschool teachers struggle: How to measure in ongoing daily practice? How to accept variability between children's progress without losing track of curriculum goals? How to pinpoint a child's

developmental trajectory as being at risk? The chapters in this volume all contribute to getting a clearer picture of the topics that are related to effective early childhood curriculum and useful assessment practices. The theme of play seems to have a special position in this respect. Although play as a subject is part of every early childhood curriculum, it is a complicated issue to grasp what this specific characteristic of especially young children demands from preschool teachers' role in the classroom (Hannikainen et al. 2013). Assessment of play as a means to make statements about children's development in relationship to the curriculum is even harder. According to Lenz-Taguchi (2010), teachers need to be trained to become competent in playing together with children and make statements of children's progress from those experiences. She describes that playing together actually is about sharing intrapersonal experiences. There is an open-end situation; only the processes that occur while playing together count. The conscious effort of preschool teachers to apply this knowledge allows a child to prosper and really share his discoveries as part of his development: there is no "best play"; there is only opportunity to play and thus to elicit development. In this respect the children's perspective is self-evident (see also Lipponen et al., Chap. 65, this volume). As to research issues, the chapters abundantly raise questions about ways to make early childhood curriculum and assessment insightful and useful for future research agendas as well as for educating future preschool teachers (Prakke et al. 2015; Wylie 2001). On a more global level, we must respect that profiting from other cultures when trying to make early childhood education effective within a specific country cannot succeed without respecting national issues. It could be that research findings sometimes are too optimistically applied to solve contextualized problems. Handbooks like the one that this section belongs to may assist its readers in grasping the complicated issue of balancing between pushing new ideas and respecting slow but ongoing progress in early childhood education.

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References

Hannikainen, M., Singer, E., & Van Oers, B. (2013). Promoting play for a better future. *European Early Childhood Education Research Journal, 21*(2), 165–171.

Lenz-Taguchi, H. (2010). *Going beyond the theory/practice divide in early childhood education*. London: Routledge.

Office of Superintendent of Public Instruction. (2008). *A guide to assessment in early childhood; infancy to age eight*. Washington State Office of Superintendent of Public Instruction.

Prakke, B., van der Aalsvoort, G. M., Howard, J. L., König, A., & Parkkinen, T. (2015, in press). Reflecting upon play characteristics and the role of teachers: An international comparative study amongst trainee teachers in the Netherlands, Wales, Germany and Finland. *Journal of European Early Childhood Education Research Association*, *23*.

Wylie, C. (2001). *Why quality matters in early childhood education: The research evidence*. Conference proceedings, Early Childhood Education for a Democratic Society, Wellington, New Zealand.

Part VI
Pedagogies in Early Childhood Education

Ingrid Pramling Samuelsson and Niklas Pramling

Chapter 68
Pedagogies in Early Childhood Education

Niklas Pramling and Ingrid Pramling Samuelsson

Abstract In our introduction to the section on early childhood pedagogies, we point out and discuss some key features of the represented approaches: Fröbel, HighScope, Developmentally Appropriate Practice (DAP), Waldorf, Cultural-Historical, Montessori, and Reggio Emilia. Each approach is briefly located in a cultural and historical frame. We then analyze and critically discuss the leading metaphors of the reasoning behind these approaches.

Keywords Pedagogy • Fröbel • HighScope • Developmentally Appropriate Practice (DAP) • Waldorf • Cultural-historical • Montessori • Reggio Emilia • Metaphor • Play • Learning • Development • History

68.1 Introduction

In this introductory chapter, we will highlight some distinctive features of the seven pedagogical approaches that follow: Fröbel, HighScope, Developmentally Appropriate Practice (DAP), Waldorf kindergarten, Cultural-Historical approach, Montessori, and Reggio Emilia. The chapter is structured in two sections. In the first section, we give a brief summary of the tradition of these pedagogies, that is, how long history they have and if there is a recognized first, formative text. We also locate the traditions geographically. The first section ends with a brief reflection on the pedagogies in terms of play. In the second section of the chapter, we discern a number of distinguishing features of the pedagogies through analytically attending to how the objects of study are constituted in language, particularly through metaphor. Identifying key metaphors in the presentations leads to us pointing out some problematic features and giving some critical reflection on the pedagogies presented.

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68.2 Pedagogies When, Where, and for Whom?

A first observation when reading the presentations that follow is that, with the exception of two, all these approaches are primarily focused on children 3–5 or 6 years of age. The exceptions are DAP, that builds on the premise of adapting to the child's development and where no particular age span is mentioned, and Reggio Emilia. This is worth to ponder over, since today many children around the world participate in early childhood education and care programs from infancy or at least as toddlers. What does it mean for these youngest children if the programs are premised on older children?

Of the pedagogies presented, the one with the longest tradition is the Fröbel pedagogy. It has a history of approximately 160 years. As implied by the name, it has a "founding father" and fundamental texts in Friedrich Fröbel's (1782–1852) own writings. Two other approaches with long histories are Montessori and Waldorf. Both these are about a hundred years old. They also share a founder, Maria Montessori (1870–1952) in the first case and Rudolf Steiner (1861–1925) in the latter. Both these traditions have been rather consistent in approach over time, as clarified by the following presentations. Also the Cultural-Historical approach has a recognized originator, in this case in the writings of Russian psychologist Lev Vygotsky (1896–1934) in the 1930s. The basis for these pedagogies differs (see the individual chapters). Another pedagogy that was founded as part of rebuilding, in this case, Italy after the second world war is Reggio Emilia. It became widely known outside its native country in the 1980s in relation to children's art making. The pedagogy of HighScope has a 50-year history. It was developed in relation to a particular research study, the Perry Preschool study, looking at the effects of preschool education for later schooling. Theoretically, its basis is founded on the work of Swizz psychologist Jean Piaget (1896–1980) whose work became widely known at this time. Also DAP has a basis in Piaget's theory of child development. DAP has a 30-year history.

Looking at the origins of these pedagogies, we can see that there is a dominance of Europe (four), with two from the USA and one from Russia. Why the dominance of Europe? Today, early childhood education is much developed and spread in this part of the world. Historically, preschool (early childhood education) is inherently related to other important social movements with a strong tradition such as women's liberation and social justice. We also observe that the European-based pedagogies are to a large extent formed on philosophies, while the US pedagogies are based on developmental theory, in these cases Piagetian theory. Also the Russian pedagogy, the Cultural-Historical approach, is based on developmental theory, Vygotsky's theory.

The notion of play has been fundamental to the understanding of children and early childhood education for a long time. However, despite the centrality of play in contemporary curricula, this part of early childhood education is not a major part of the presentations of the following pedagogies, particularly the question of how play and learning are related – if at all – is not extensively analyzed and discussed

(for examples of this contemporary debate, see Brooker et al. 2014; Pramling Samuelsson and Fleer 2009). However, Fröbel pedagogy contains notions of play-care and playing games, and his follower Henriette Schrader-Breymann puts three notions at the center: play, learn, and work. The Montessori pedagogy does not focus on play, instead focusing on children's work. Waldorf emphasizes the importance of toys made by hand from natural materials and spells out movement, imagination, and play as important features of the approach. In the HighScope pedagogy, the concept of plan-do-review is central. Particularly the middle part leaves space for the children to play what they have planned. Pretend play is here an important feature. DAP pedagogy mentions play in three ways: children's need to play, play as a facilitator of learning, and play as learning. In Reggio Emilia, children are seen as competent in building their own culture. As for Cultural-Historical pedagogy, play in relation to creativity was a major concern for its founding theoretician, Vygotsky (1930/2004), among other things, emphasizing the experiential foundation of playing.

The presented pedagogies differ in what they see as the goal of early childhood education, that is, what it will give children participating in the program. HighScope has a detailed curriculum with 58 key developmental indicators from eight domains that the child's learning should be directed toward. The Cultural-Historical approach highlights the making and use of visual models for developing higher-order thinking in the child. The Reggio Emilia approach has no set curriculum and does not include academic skills such as reading, writing, and counting, but emphasizes documentation for making visible children's learning. Goals of DAP are for the child to develop responsibility, self-reliance, and self-regulation (see also Wineberg and Chicquette 2009). Montessori pedagogy focuses on academic contents (geometric blocks are central), but also nature in the form of animals and plants, and changing seasons. In Fröbel pedagogy, mathematics (with blocks), moral, and free thinking are emphasized. Waldorf pedagogy is focused on freedom and to prepare the child for the world, school, and future life. Sensitivity and goodness are goals of learning. Being a child in these different pedagogical approaches clearly makes him or her a participant in rather different domains and forms of knowledge. In order to gain a deeper insight into distinguishing and shared features of these seven pedagogies, in the next section of this chapter, we will investigate how the key features of these are constituted through its central metaphors.

68.3 Constituting Learning and Educational Practice in Metaphorical Terms

Phenomena such as learning and development are not there to be seen as such. We have to infer these processes on the basis of different observations and representations. How we represent what these phenomena are is contingent on what theoretical language we use. We cannot simply compare linguistic representations with these phenomena. Rather, we have to constitute learning, development, and related

phenomena in language. Speaking about such abstract matters makes metaphor and other forms of figurate language come to the fore. A metaphor is an utterance that conveys something in terms of something else that it in a literal sense is not. For example, to say that "Now I see your point" is metaphorical, since what someone means by what they say is not something (a point) that in a literal sense can be seen. Ocular metaphors are common when speaking about understanding and knowledge: "a clear idea," "to be illuminated by knowledge," and "to have a vision of a different society" are some examples (cf. Rorty 1979). Metaphor can be conceived – in metaphorical terms – to be a multifunctional tool (Pramling 2006), that is, people do many different things with metaphors. Furthermore, with time and use, prevalent metaphors tend to become "invisible" as metaphors and are conventionalized into eventually being inscribed in lexicons as (more or less) literal meanings (Zittoun and Cerchia 2013). There is thus a metaphorical nature of our language.

One function filled by metaphor is to make graspable what is for some reason difficult to conceive. In the chapters on pedagogies, we find metaphors being used to reason about, for example, learning, development, the child, the adult/teacher, teaching/instruction, and culture. For instance, in the chapter on Developmentally Appropriate Practice (DAP), a common metaphor for learning is employed: learning as constructing. "Construction" is a metaphor used in the tradition of Piagetian developmental psychology, that DAP is based on. Sanders and Farago (Chap. 71, this volume) argues that "the child must construct its understanding of the world by interacting concretely and actively with it" (p. 7), something also referred to as "discovery learning" (ibid.). The metaphor of construction is also employed by Epstein and Schweinhart when presenting HighScope (Chap. 70, this volume), arguing that "Children will construct their own learning if allowed to do so" (p. 1). In their presentation of Waldorf, Frödén and von Wright (Chap. 72, this volume) suggest that "[t]he role of the kindergarten is not to deliver knowledge" (p. 6). They also cite Burnett (2011, p. 84), who states that children in this form of kindergarten "don't *learn about* bread making, they *make bread* for people to eat, and do this slowly, dreamily and repeatedly, as part of a yearly rhythm" (cited in Frödén and von Wright, Chap. 72, this volume, p. 14, italics in original). The first quote, arguably, conflates knowledge with information. Information can be delivered, but knowledge always implies some form of sensemaking of the learner (Bruner 1990). The second quote makes a distinction that, in our view, is difficult to maintain. Contrasting "learning" with "making" implies that learning is not related to what the child does, and when the child is engaged in meaningful activities, he or she does not learn. The concept of learning appears to be in need of theoretical conceptualization in this pedagogy. Other metaphors for learning are increased discernment (Marton and Tsui 2004), changed participation (Lave and Wenger 1991), and appropriation of cultural tools and practices (Tomasello 1999).

Closely related to conceptions of learning are conceptions of development. The term development as such could be seen as a metaphor (cf. above). The word development etymologically means "unfold, unwrap" (cf. envelope: wrap up) (Barnhart 2004, p. 273). Hence, the term as such could be seen as a conventionalized metaphor, according to which this is a process of unfolding, unwrapping something that is

already there (e.g., written on a paper). From a more contemporary point of view, we can see that psychological theories differ in how the relationship between these processes is understood (see, e.g., Vygotsky 1978, on different conceptualizations, as discussed in relation to the introduction of his concept of the zone of proximal development (ZPD)). A metaphor commonplace in accounts of development is "stages" (see, e.g., Gustafsson on Montessori, Chap. 72, this volume, who also uses this in conjunction with "sensitive periods," p. 18). Arguably, the stage metaphor directs attention to "where" the child "is at," rather than how he or she is in a process of developing. A developmental stage implies something already achieved rather than a learner being in a process of continuous change. Building on the theory of Vygotsky, as we have already briefly touched upon, Veraksa and Veraksa (Chap. 73, this volume) use an interesting metaphor when discussing development. Referring to Zaporozhets, they suggest that "preschool children's development should be based not on acceleration but on amplification–that is, maximum saturation of the activities specific to preschool children" (p. 2). Finding new metaphors for conceiving important phenomena can be an incentive for new theoretical developments. A historical example is the "human as information processor" (the computer metaphor) for conceiving human psychological functioning, as constitutive of cognitive psychology in the 1960s (Leary 1990; see also, Keller 1995, for a discussion of this issue in the natural sciences).

Not only the abstract and invisible (cf. above) phenomena of learning and development are conceived in metaphorical terms. Also the participants in educational practices, primarily the child/learner and the adult/teacher, are spoken about in such terms. Different notions of the child are discussed at some length in Giudici and Cagliari in their presentation of Reggio Emilia (Chap. 75, this volume). In terms of images of the child, they write about "the cultural construct about childhood" (p. 4). They argue that several of these images present "a child described for what he doesn't have or he is not in comparison to the adult" (p. 4). Norwegian psychologist Ragnar Rommetveit (1980) has argued that much psychological research is characterized by what he refers to as negative scholarly rationalism, that is, accounts of what the child cannot (yet) do or understand. In contrast to such accounts, Guidici and Cagliari (Chap. 75, this volume) argue for a need to conceptualize the child as the "competent child" (p. 6, cf. Epstein and Schweinhart, Chap. 70, this volume). Guidici and Cagliari present this conception in the following way: "By 'competent child' we mean a child who, from shortly after birth, has available a collection of data and information saved in his mind that dialogue with new data and information he constantly receives from the outside" (p. 6). This reasoning employs many metaphors; knowledge is conceptualized as having data and information in the mind. This is in line with an information-processing paradigm of how to understand human psychological functioning (cf. above). Furthermore, information is, according to this reasoning, saved (which is also employed in the man-as-computer metaphor, see, e.g., Hunt 1971) and has information in the mind (information as objects stored in a container metaphor). This set of metaphors also presumes a dichotomous view, where knowledge (or rather information) enters the mind from outside. Several contemporary theories emphasize the need to reconceptualize learning

without residing to such a dichotomous view. Two examples of such theories are variation theory (Marton and Tsui 2004) and Cultural-Historical theory (Daniels et al. 2007), arguing that such dichotomous views lead to philosophical cul-de-sacs.

Theoretical elaboration on the role – if any – of the adult or teacher is related to metaphors of the child. For example, if viewing the child as independently discovering and constructing his or her knowledge, as is done in Reggio Emilia and DAP, the view of the adult/teacher follows by logical necessity. In their text on DAP, Sanders and Farago (Chap. 71, this volume) reason that in this approach "emphasis is on teachers being child development specialists with child development knowledge and observation skills enabling them to respond to the needs and interests of children" (p. 25). Within this perspective, a central idea is thus to build on the needs and interests of the child. While it is arguably fundamental to connect to children's interests (this issue is, e.g., much discussed in literacy research; see, e.g., Larson and Marsh 2013), it is important to take a critical stance to this guiding principle. Whose interest is taken as a starting point? There is a great risk that only the children who actively express their interests are heard. This stance also leads to individualized accounts of learning – see, for example, "This pedagogical approach allows HighScope teachers to individualize learning for children" (Epstein and Schweinhart, Chap. 70, this volume, p. 6) – which is arguably a problem in itself if speaking about early childhood education in preschools and kindergartens, as inherently and necessarily social arenas for learning and development. Pedagogy in such environments, we argue, needs to cater for the fact that children there interact with other children and adults with a variety of experiences (Pramling 1996). Furthermore, the idea to build on the child's interest and the responsive role ascribed to the teacher in Sanders and Farago's account of DAP (see the quote above), we argue, are problematic since a fundamental point of societal institutions such as preschool and school is to introduce the child to what he or she would not likely discover in everyday life outside these institutions and develop an interest in (Luria 1976; Pramling and Pramling Samuelsson 2012; Vygotsky 1987). Making sure that all children are introduced to important forms of knowledge and domains of human experience (e.g., music, visual art, and mathematics) is how we can counteract the fact that children come to preschool and school with a great variety of repertoire of experiences. Not only, for example, children from families nurturing a musical interest should be allowed and supported in developing musical skills and interests. Building on children's interest can therefore never be the only starting point of pedagogical practices in early childhood education and care institutions.

As seems generally the nature of pedagogies, they are founded on different and sometimes, in part, incommensurable theoretical positions. We have already mentioned that DAP is founded on Piagetian developmental theory, but as Sanders and Farago (Chap. 71, this volume) clarify, it is also based on Vygotskian theory. They suggest that in DAP "learning is child-driven yet adult-guided. The teacher is there to support the process of learning that the child is experiencing but the child is the one in the driver's seat" (p. 15) and that "[a] child-centered environment leaves room for interpretation in terms of how much leeway a teacher allows children to

experience the learning environment independent from face-to-face teacher instruction" (ibid.). This "leeway" and the relationship between the child being in "the driver's seat" and "adult-guided" learning, in their terms, is arguably contingent on whether the teacher puts the emphasis on the Piagetian or the Vygotskian base, as also argued by Sanders and Farago. It may be questioned whether an environment where the teachers work from the one or the other of these points of view could be considered examples of the same pedagogy. In one case, the teacher should be responsive and follow the child, in the other, teacher mediation is key. In terms of Vygotskian theory, this distinction could, we suggest, be conceptualized in terms of the important distinction in Vygotsky (1997) between elementary and higher-order functions. The everyday ones could be discovered by the child, while the higher-order ones presume tool mediation (see also Veraksa and Veraksa, Chap. 71, this volume, on the latter).

Metaphor is not only employed by the researchers presenting their pedagogy. There are also examples in the texts of guidance for teachers on how to communicate with children in metaphorical terms. One example is found in Frödén and von Wright's presentation of Waldorf (Chap. 70, this volume). Writing about wet-on-wet painting, they reason in reference to Lim (2004) that in order to "experience the 'feeling' of different colours," the teacher might "refer to the colours as different persons by saying that 'for example, 'Blue wants to play with yellow' instead of 'Let's mix colours'" (Frödén and von Wright, Chap. 72, this volume). Speaking about the nonliving in living terms, that is, animism (and the adjacent metaphorics of anthropomorphism; see Thulin and Pramling 2009), is frequently observed in teacher-child communication in early childhood education (Fleer and Pramling 2015; Pramling 2010).

As presented by Frödén and von Wright (Chap. 72, this volume), a distinguishing mark of Waldorf is that all toys are made by hand from natural materials. "The point," they explain, "is to enable the children to transform all these 'open-ended' and changeable toys imaginatively, so that they can fill different purposes in the various forms of play" (p. 12). The importance of non-predefined toys to the development of children's creativity has also been advocated by other researchers (e.g., Fleer 2010).

Different metaphors for "the same thing" will sometimes be problematic. At the same time, if taking a theoretical position where language is seen as constitutive (Taylor 1985/1999), it could be argued that different metaphors for the same terms constitute the object referred to as different kinds of objects, rather than providing different perspectives on the same thing (as if the reference was language independent and constant). One example concerns the use of the term culture. In their presentation of DAP, Sanders and Farago (Chap. 71, this volume) first present an underlying metaphor of culture as "the individual is situated within a web of concentric circles in which historical events, societal changes, institutions, and interpersonal interactions interact to influence development of the individual," and later adding that DAP is now also informed by Rogoff's theorizing from a sociocultural theoretical point of view. According to the latter, culture and participant are seen as mutually constitutive rather than the individual being influenced by culture (as an

external force and/or container within which the learner exists; see also, Cole 1996, for an elaborated discussion between these two metaphors of culture, and van Oers 1998, on the related issue of how to conceptualize context). Sanders and Farago (Chap. 71, this volume), perhaps in an attempt to relate these two different concepts of culture, suggest the following, and somewhat opaque, metaphor, "Akin to layers of an onion, culture is the interconnected and overlapping element central to the individual: a way of doing and being" (p. 12). It may be argued that theoretical consistency is pivotal to scientific explanation, but that educational practice can, and perhaps should, build on different perspectives. However, since we argue that language is constitutive, how teachers act in relation to children in early childhood education will be contingent on, among other things, how they perceive the nature of children's learning and what, for example, culture means.

A clear example of how metaphors constitute educational practice is given in Frödén and von Wright's chapter (Chap. 72, this volume) on Waldorf. They write about "[t]he daily rhythm" of the child's life in kindergarten as consisting of "various periods of contraction and expansion in order to provide a balance between movement and rest and in order to create different moods during the day's activities" (p. 9), which is referred to in terms of another pair of metaphors, "breathing in and breathing out" (ibid., italics omitted). In clarifying this metaphor, Frödén and von Wright give the example of "the teacher tries to create a celebratory, yet meditative and ceremonial mood at a yearly festival" with the aim "to bring about inner stillness and a sense of awe and wonder (breathing in)" in contrast to outdoor activities that are "to be characterized as joyful, exciting and full of bodily movements (breathing out)" (pp. 9–10). As here exemplified, it could be argued that the metaphors employed in reasoning about education practice are constitutive, that is, have material consequences for how practice is organized.

Since we argue (see also, above) that language is constitutive rather than simply and in a clear-cut manner refer to external objects, there can be no neutral description. Metaphors and other forms of language "do" argumentative work. We perspectivize phenomena through how we constitute them. This feature of language practices is what Mehan (1993) refers to as the politics of representation. Some metaphors may, for example, imply that a certain understanding or developmental process is natural (growth, breathing, or maturation). A clear example of a reasoning that, through employing an asymmetric pair of metaphors implies that the proposed approach to early education is the sound one, is given in the presentation on HighScope when Epstein and Schweinhart (Chap. 70, this volume) suggest that on the basis of Piagetian theory, "the acquisition of knowledge" is seen "as being child-driven rather than adult-imposed" (p. 5). The metaphors used do not simply make a distinction; they also do argumentative work through connotations. In contrast, imagine if the previous quote had made a distinction between "child driven" and "adult driven," rather than "adult imposed." The word "impose," according to common lexicon, means "to force someone to accept" and "to establish or create (something unwanted) in a forceful or harmful way" (Merriam Webster Dictionary, m-w.com). The curriculum of this approach is also said to be "tailored to the child, rather than insisting the child be molded by the curriculum" (ibid.).

A central tenet of HighScope is what is referred to as "plan-do-review" (Epstein and Schweinhart, Chap. 70, this volume, p. 10). In one regard, this pedagogical principle is analogous to the development in children of making plans as presented in Veraksa and Veraksa (Chap. 73, this volume) from a Cultural-Historical perspective. The latter presents a pedagogy based on children making and using visual models to play, carry out, and reflect on actions. Their presentation highlights how a Cultural-Historical approach "links the formation of higher mental functions with mastering certain forms of mediation" (p. 14). There is a risk, we argue, that if, in contrast, outlining pedagogy on the individual child's exploration (as, for instance, in Reggio Emilia), the child will not appropriate insights that carry beyond the present and concrete here and now. But arguably, it is the ambition of any educational institution to contribute with insights, skills, and/or knowledge that carries beyond the here and now. This is an important part of what constitutes an education.

In conclusion, through our attention on some of the metaphors used in the presentations of the different pedagogies, we have pointed at some inherent tensions (and potential problems in these accounts), including:

Natural – cultural
Individual – social
Receptive – proactive
Building on the child's interest – make the child interested in new things and domains
Development – learning
Here and now – anticipating future actions

The pedagogies presented in the following contain diverse and thoughtful approaches to early childhood education and care practices. They all provide distinct voices on important issues concerning children's learning and development and how we support these processes. According to variation theory (Marton and Tsui 2004), only what varies can be discerned and thus learned. Having these different voices on early childhood education and care is therefore much informative as to how stakeholders in different societies have conceptualized and historically argued, and today argues, for how to best cater for the growth of children.

The pedagogical approaches introduced in this chapter and presented more extensively in the following chapters are more or less specific about how they conceptualize children's learning and teachers' role in this process. Still, if we take modern psychology as a base for pedagogy, any approach will have to be related to interaction and communication (Sommer 2012), a perspective challenging some of the earlier approaches since these notions were not obvious in earlier early education. Today, early childhood education is clearly related to the teacher's role, since he or she in most countries has a curriculum that guides the activities with children. This fact challenges the teacher to be both child centered and to take the child's perspective (Sommer et al. 2010). This further means that both the child and the teacher interchangeably will be the one initiating and leading an activity (Siraj-Blatchford et al. 2010). Based on empirical research, Doverborg et al. (2013) summarize some key findings on developmental pedagogy in terms of (i) being both

goal oriented and child centered simultaneously, (ii) teachers recognizing the importance of and entering into negotiations of meaning with children, (iii) using naturally occurring (or designed) variation as a source for learning, (iv) working from local toward expansive language, (v) challenging and supporting children, and finally (vi) having an idea about what it means to be knowledgeable in a field of knowledge and how to develop it further in young children.

Our final conclusion is that all these positions are valid, but since children's development, learning, or growth (or whatever term we want to use) is a complex matter and many stakeholders have an interest in early childhood education – children, parents and their employers, politicians, teachers, and "society" – it is important not to simplify the matter. A common way of simplifying the world is to constitute it in terms of dichotomies and then take a stance for one or the other position. However, we suggest that, for example, teachers need to be both receptive and proactive; both build on children's interests and introduce children to new domains and topics so that they can develop new interests. Managing such tensions in interacting with children, we argue, is pivotal to the professional task of the preschool teacher (for an elaborate discussion, see Pramling Samuelsson and Pramling 2011). What the advocates for all the different pedagogies presented in this volume appear to agree on is that early childhood education matters. How to best make it a rewarding experience for children (and others concerned) should be the common goal for further theoretical debate. It is important that this debate is based on empirical research.

References

Barnhart, R. K. (Ed.). (2004). *Chambers dictionary of etymology*. Edinburgh: Chambers.

Brooker, L., Blaise, M., & Edwards, S. (Eds.). (2014). *The Sage handbook for play and learning in early childhood*. London: Sage.

Bruner, J. S. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.

Burnett, J. (2011). Carolyn's voice. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 81–93). New York: Routledge.

Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Belknap Press.

Daniels, H., Cole, M., & Wertsch, J. V. (Eds.). (2007). *The Cambridge companion to Vygotsky*. New York: Cambridge University Press.

Doverborg, E., Pramling, N., & Pramling Samuelsson, I. (2013). *Att undervisa barn i förskolan* (Teaching children in preschool). Stockholm: Liber.

Fleer, M. (2010). *Early learning and development: Cultural-historical concepts in play*. Cambridge: Cambridge University Press.

Fleer, M., & Pramling, N. (2015). *A cultural-historical study of children learning science: Foregrounding affective imagination in play-based settings (Cultural Studies of Science Education, 11)*. Dordrecht: Springer.

Hunt, E. (1971). What kind of computer is man? *Cognitive Psychology, 2*(1), 57–98.

Keller, E. F. (1995). *Refiguring life: Metaphors of twentieth-century biology*. New York: Columbia University Press.

Larson, J., & Marsh, J. (Eds.). (2013). *The Sage handbook of early childhood literacy* (2nd ed.). Thousand Oaks: Sage.
Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
Leary, D. E. (Ed.). (1990). *Metaphors in the history of psychology*. Cambridge: Cambridge University Press.
Lim, B. Y. (2004). The magic of the brush and the power of color. Integrating theory into practice of painting in early childhood settings. *Early Childhood Education Journal, 32*(2), 113–119.
Luria, A. R. (1976). *Cognitive development: Its cultural and social foundations* (M. Lopez-Morillas & L. Solotaroff, Trans.). Cambridge, MA: Harvard University Press.
Marton, F., & Tsui, A. B. M. (Eds.). (2004). *Classroom discourse and the space of learning*. Mahwah: Lawrence Erlbaum.
Mehan, H. (1993). Beneath the skin and between the ears: A case study in the politics of representation. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 241–268). New York: Cambridge University Press.
Pramling, I. (1996). Understanding and empowering the child as a learner. In D. R. Olson & N. Torrance (Eds.), *The handbook of education and human development: New models of learning, teaching and schooling* (pp. 565–592). Cambridge, MA: Blackwell.
Pramling, N. (2006). *Minding metaphors: Using figurative language in learning to represent (Göteborg Studies in Educational Sciences, 238)*. Göteborg: Acta Universitatis Gothoburgensis.
Pramling, N. (2010). Unearthing metaphors: Figurativeness in teacher-child talk about soil and related matters. *Early Childhood Education Journal, 38*(1), 57–64.
Pramling, N., & Pramling Samuelsson, I. (2012). School readiness and school's readiness: On the child's transition from preschool to school. In S. Suggate & E. Reese (Eds.), *Contemporary debates in childhood education and development* (pp. 133–142). London: Routledge.
Pramling Samuelsson, I., & Fleer, M. (Eds.). (2009). *Play and learning in early childhood settings: International perspectives (International perspectives on early childhood education and development, 1)*. Dordrecht: Springer.
Pramling Samuelsson, I., & Pramling, N. (2011). Didactics in early childhood education: Reflections on the volume. In N. Pramling & I. Pramling Samuelsson (Eds.), *Educational encounters: Nordic studies in early childhood didactics* (pp. 243–256). Dordrecht: Springer.
Rommetveit, R. (1980). On meanings of acts and what is meant and made known by what is said in a pluralistic social world. In M. Brenner (Ed.), *The structure of action* (pp. 108–149). Oxford: Blackwell.
Rorty, R. (1979). *Philosophy and the mirror of nature*. Princeton: Princeton University Press.
Siraj-Blatchford, I., Sylva, K., Melhuish, E., Sammons, P., & Taggert, B. (2010). *Early childhood matters: Evidence from the effective pre-school and primary education project*. London: Routledge.
Sommer, D. (2012). *A childhood psychology: Young children in changing times*. Hampshire: Palgrave Macmillan.
Sommer, D., Pramling Samuelsson, I., & Hundeide, K. (2010). *Child perspectives and children's perspectives in theory and practice*. New York: Springer.
Taylor, C. (1999). *Human agency and language: Philosophical papers* (Vol. 1). New York: Cambridge University Press. (Original work published 1985).
Thulin, S., & Pramling, N. (2009). Anthropomorphically speaking: On communication between teachers and children in early childhood biology education. *International Journal of Early Years Education, 17*(2), 137–150.
Tomasello, M. (1999). *The cultural origins of human cognition*. Cambridge, MA: Harvard University Press.
van Oers, B. (1998). From context to contextualizing. *Learning and Instruction, 8*(6), 473–488.
Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1987). *The collected works of L. S. Vygotsky, Volume 1: Problems of general psychology, including the volume Thinking and Speech* (R. W. Rieber & A. S. Carton, Eds., N. Minick, Trans.). New York: Plenum Press.

Vygotsky, L. S. (1997). *The collected works of L. S. Vygotsky, Volume 4: The history of the development of higher mental functions* (M. J. Hall, Trans., R. W. Rieber, Ed.). New York: Plenum Press.

Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology, 42*(1), 7–97.

Wineberg, L., & Chicquette, L. (2009). Play and learning in Wisconsin. In I. Pramling Samuelsson & M. Fleer (Eds.), *Play and learning in early childhood settings* (pp. 155–171). Dordrecht: Springer.

Zittoun, T., & Cerchia, F. (2013). Imagination as expansion of experience. *Integrative Psychological and Behavioral Science, 47*(3), 305–324.

Chapter 69
F. A. W. Fröbel 1782–1852

Jan-Erik Johansson

Abstract Friedrich Fröbel (1782–1852) founded his kindergarten in 1840 for children between 3 and 6 years of age. His model had three components: play with his educational material, the 'Spielgaben' or play gifts together with occupations, song and dance games and gardening and outdoor activities. His intention was to build upon the child's activity and to develop an understanding of the world in close interaction between child and adult in a process he called 'Spielpflege' or play care. The foundation of his work lay in Johann Heinrich Pestalozzi's work, in crystallography, and in his own 'spherical law'. Bertha von Marenholtz-Bülow transformed his model during the 1850s into a programme preparing poor children for work and spread his work to many countries. At the end of the nineteenth century, Henriette Schrader-Breymann established the Pestalozzi-Fröbel-Haus. She wanted to help children with working mothers by means of a programme of motherly care in home-like institutions. But in so doing Fröbel's play theory based upon his educational materials and play care was lost. Aspects of his programme remained in a Fröbel tradition, which spread to many countries often by the bourgeois female movement. Today there is a revival of the interest in Fröbel with his original writings made available through the work of Helmut Heiland. The strong expansion of early childhood education worldwide means that there is a risk that the history of pioneers such as Fröbel will be forgotten. Fröbel's focus on play care and the role of interaction in the child's learning and development are still of interest.

Keywords Friedrich Fröbel • Fröbel's gifts • Fröbel's play theory • Early childhood education history • Kindergarten history • Preschool history

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Friedrich Wilhelm August Fröbel (1782–1852) is the founder of the ‘kindergarten’ for children between 3 and 6 years of age. Its purpose was to prepare for school. In this chapter kindergarten, which derived its name in 1840,[1] refers to Fröbel’s original model rather than the year before school, which is the present-day use in the USA. For him play involved children interacting with his educational materials, being outside in nature, and games of different kinds—all in a playful interaction between adult and child. Fröbel’s child should think and act freely and understand the world both as a whole and in all its details. There are a variety of educational programmes starting with Fröbel and his idea of the kindergarten. Fröbel was among the first in the ECEC field, but there has never been a single uniform worldwide ‘Fröbel programme’. There are only a few kindergartens today, which could be called explicitly Fröbelian. Still there are common traits, as outlined in a book review by the American child psychologist David Elkind:

> The kindergarten that many of us grown-ups remember is one of songs, games, playing with blocks, finger painting and nature walks. But today, many kindergartens have become simply smaller first grades, teaching numbers and letters and giving tests and homework. (Elkind 1997, September 7)

In this chapter, the focus is on Fröbel himself with a view to presenting Fröbel’s authentic work and its early revision in Germany. Early childhood education and care, ECEC[2], is a generic term covering full or half-day provision for children from birth up to school age. ECEC in many countries is almost as old as the primary school.

69.1 A Dynamic and Complex Context

Fröbel’s kindergarten was an integrated part of the liberal, democratic movements in Germany during the nineteenth century and build upon his earlier views of the nature of school education. Fröbel wanted to teach free, thinking human beings and not machines destined for state use (Lange 1862, in Heiland 2002, p. 20). Bodily punishment was not allowed, since children according to Jean-Jacques Rousseau are born without sin. Religion was evident in his kindergartens but it had to be non-confessional, which meant that Protestants, Catholics and Jews could join in the kindergarten, even if this might lead to conflicts with the churches. School preparation was indirect. This liberal view of child rearing and pedagogy is still considered controversial in many parts of the world, particularly in countries that see education, even early childhood education, in terms of human resource development rather than from a child-rights perspective.

[1] The German word ‘kindergarten’ is translated into many languages and used in different ways, both historically and today. The word ‘kindergarten’ was also in use before 1840 (Erning and Gebel 1999).

[2] There are other acronyms for the same field like ECD (*early childhood development*) by the World Bank and ECCE (*early childhood care and education*) by Unesco.

Fröbel's ideas are founded upon the educational thinking of Jean-Jacques Rousseau; the Enlightenment thinking of Johann Heinrich Pestalozzi, combined with crystallography from Christian Samuel Weiss; and the spherical law developed by Fröbel himself. The discussion on how to understand Fröbel's work started in the 1840s and is an integral part of the development of ECEC in many countries. Fröbel has many followers but also a significant number of critics—sometimes as well-known as John Dewey (cf. Dewey 1915) who wanted to substitute what he saw as metaphysics and philosophy with psychology (Manning 2005, p. 372). In 1851, Fröbel's kindergarten was banned in Prussia, and so there was little time for consolidation of his work there. His programme, students and followers were often absorbed into existent educational systems and models (Erning 1987, p. 36ff).

Fröbel's educational programme is closely related to his own life history. His mother died before he was 1 year old, and he experienced a bad relationship with his stepmother and with his father. During his youth, he developed a strong love of nature, but he gained little from school. Fröbel never finished his academic studies, but nevertheless he kept up a close interest in science and philosophy in the very complex ideological and political German context (cf. König 1984). He drew many of his formative ideas from earlier periods in philosophy rather than from his contemporaries, and his relationship with the university world was weak (Giel 1979, p. 1f). His programme was developed and applied in ECEC itself, something Grace Owen (1906) underlined when she focused on his practical work with children and not on his philosophy.

August Köhler, one of Fröbel's followers, writes in 1868 that one common assumption is that Fröbel invented new educational materials, which were solely limited to use in his own kindergartens, and that teachers imposed Fröbel's materials upon their children. Köhler says that this is a misunderstanding, since all of Fröbel's materials have been used in the upbringing of children throughout history (Köhler 1868, p. 55). Hence, we can think of Fröbel's work not as a theoretically based invention but rather as a result of continuous practical and theoretical innovations.

In the application of educational programmes, local conditions are important. Fröbel established his model in a small city in the rural countryside in eastern Germany, aimed at children and mothers from all social classes. He developed the theoretical framework for the kindergarten, and he and his staff were all very well qualified and experienced. However, it was hard for his followers to apply his programme into existing structures of childcare in Germany with large child groups in urban areas and staff with low qualifications. His followers tended to be those working in class-segregated contexts embedded within religious and political conflicts, a situation contrary to Fröbel's own model. As a result, some of his followers from the beginning questioned and revised his theories and practices, for instance, by introducing specific programmes for working-class children.

Fröbel is also very much part of the context of the early women's movement (Münchow 2006) with their efforts to develop a professional status for women (Read 2003) and with the intention of giving bourgeois women a better everyday life (Albisetti 1982). It is necessary therefore to view Fröbel's ideas within wider

political, religious contexts and the development of nineteenth-century feminism (cf. Allen 1982; Brehony 2010a) and the relationship to women's progressive thought (cf. Hilton 2001).

69.2 First-Hand Sources About Fröbel and His Followers

There is still no complete, annotated edition of Fröbel's texts. After decades of work, Helmut Heiland in 2008 at the University Duisburg-Essen made Fröbel's letters available on the Internet[3] which is a very important contribution. Still only limited amounts of Fröbel's works are available today in English (cf. Lilley 1967; Brehony and Jarvis 2001) or in other languages. The difficulty of translating central concepts continues, and as such only a few German academic studies on Fröbel are currently available in translation. The situation is generally the same for his followers. Their work was often supported by non-governmental organizations, perhaps in a local Fröbel association, but is not always well documented or archived.

Fröbel's transnational influence has been strong. In the UK there is first-hand information about Fröbelians and their work in the school system (cf. Brehony 1987; Read 2011). Also the Fröbel movement in the USA is studied widely (cf. Baader 2004; Allen 2006; Nawrotzki 2007), as in Japan (cf. conference reports by Heiland et al. 1999; Heiland and Neumann 2003). Research shows connections that have been neglected, as when Albisetti follows the Fröbel link to Italy (cf. Albisetti 2009, 2012). Valkanova studies the early Russian development of his ideas and their application (Valkanova and Brehony 2006; Valkanova 2009). The kindergarten developed in different directions worldwide (Beatty 2009), and in Wollons (2000) you will find information about development of his ideas and practices in countries such as Australia, China, Israel, Poland, Turkey and Vietnam. Heiland (1993) mentions also Bulgaria, Bohemia, Spain and Portugal.

Debate and revision are integrated in the Fröbelian heritage, and the links between his original work and the ECEC of today are complex. A reborn interest in Fröbel is expressed, for instance, in the International Froebel Society founded in 2002[4]. Among recent works are Sigurd Hebenstreit's work on Fröbel (2003) and 'Early childhood practice: Froebel today' edited by Tina Bruce (2012) in which the Fröbel pedagogy is contrasted with other models in today's settings. Another instance is 'Inventing kindergarten' by Norman Brosterman (1997) who connects the kindergarten concept to abstract art and modern architecture and gives an overview of Fröbel's educational materials.

A starting point in this chapter is the studies of the authentic Fröbel by Helmut Heiland (cf. Heiland 1998). There are other ways of looking at Fröbel and his followers, for instance, when the foundations of the different models are categorized as ideological positions such as romanticism, mysticism, rationalism, Hegelian,

[3] https://bbf.dipf.de/digitale-bbf/editionen/froebel

[4] http://www.ifsfroebel.com/

empiricism etc., but that is not my aim. In this chapter, examples from Fröbel's work and thinking about the kindergarten will be presented: where children play with educational materials, work in the garden and play games in interaction with their teachers. It is an unusual educational practice in comparison to other ECEC institutions of his time (Erning 1987, p. 13ff).

69.3 The Introduction of the Kindergarten in 1840

Friedrich Fröbel introduces the name 'kindergarten' in 1840, after decades spent as a teacher trying to reform primary schooling in Keilhau in eastern Germany and in Switzerland (Heiland 2002). He started to develop the kindergarten model in 1837 as a programme for mothers and their children between the ages of 3 and 6 years. His aim was to teach mothers how to educate their children and in so doing reform upbringing. He hoped to escape the conflicts he experienced with schools, state authorities and churches. Some of his critics saw him as an atheist. In his book *Die Menschenerziehung* or *The Education of Man* (e.g. Froebel 1974) from 1826, religion is evident through numerous references to God as the foundation of the universe and Jesus as a model for mankind. However, Fröbel has a panentheist perspective on religion[5] from the German philosopher Karl Christian Friedrich Krause (1781–1832), and there is no confessional Christian education in his kindergarten.

It is no surprise that the Prussian State after the 1848 revolution saw Fröbel's kindergarten as one more example of subversive education (Brehony 2010b). Fröbel's kindergarten might today seem to be harmless; however, it developed during a revolutionary period in which European nation states were born, and industrialism and capitalism left feudal Europe behind. Although Fröbel is not a political thinker (Heiland 1991), he was a part of the political context being a member of the Lützow free corps in 1813 that aimed at liberating the German states from Napoleon's rule. When Fröbel starts his school in Keilhau in 1817, he later experienced a state attack on liberals in 1819. During the following years, there were conflicts with schools, authorities and churches, and after the 1848 revolution, the kindergarten ban followed in 1851. Fröbel was the teacher of his two nephews Karl and Julius in his school in Keilhau, and Karl Fröbel is sometimes described as the reason behind the ban because of his radical political views. However, Julius was also on the republican side in the revolution and had to leave for the USA (Fröbel and Grünewald 1971) as did many radicals like him.

Bertha Ronge (1818–1863) and Bertha von Marenholtz-Bülow (1810–1893), both from Germany, introduced Fröbel to the UK during the 1850s (Woodham-Smith 1952, p. 36). Margarethe Schurz started the first kindergarten in the USA in 1854 for German-speaking children (Stolz 2007). She had worked in London

[5] *Panentheism* 'is the doctrine that the cosmos exists within God, who in turn pervades, or is 'in' cosmos'. In *pantheism* God is the cosmos (Fahlbusch et al. 1999, p. 21).

together with her sister Bertha Ronge. This fast but limited spread was possible because of the new interest in education, children and society. Fröbel was not the first to develop programmes for ECEC. Jean-Frédéric Oberlin (1740–1826) found his 'Écoles à tricoter' in Ban la Roche in the forests of Alsace in eastern France in 1771 (Chalmel 1996, p. 133ff). Robert Owen (1771–1858) starts an 'infant school' in 1815 at the cotton mill in New Lanark south of Glasgow (Claeys 1989). The ground was prepared for ECEC, but the focus in most parts of Europe was on the primary school for children of 6–7 years old. The UK follows a different logic. Samuel Wilderspin (1791–1866) revised Robert Owen's infant school with a focus on teaching poor children religion and good morals. Infant schools were introduced in 1818, for many children under the age of five, because of the early industrial development in the UK, whereas compulsory primary school for the age of 5–10 started later in 1870. Wilderspin's work in London became the model for infant schools in both Europe and North America. He publishes 'On the importance of educating the infant poor' in 1823, and the translation into German is published in 1826 (Erning 2004, p. 29ff).

There is a very different series of events in France, where the 'École maternelle' for children under school age is introduced in 1848 (Plaisance 1996, p. 17). In the hands of Pauline Kergomard, the 'Salle d'Asile', or infant school, after 1880 transforms into the state-controlled non-confessional 'École maternelle' (Chalmel 1996, p. 298ff) where there also are influences from Fröbel. ECEC remains a conflict area in most countries for quite a long time, though it slowly begins to be accepted decades after the Second World War, when the development towards the full provision we anticipate today begins.

69.4 Life in the First Kindergarten in Bad Blankenburg

First a few words about Fröbel's educational materials used in the kindergarten, the 'Spielgaben' or play gifts together with occupations. They are developed during the 1840s and build directly upon his earlier work in reforming school education. His idea was to develop abstract educational materials; there should be no ready-made toys. The gifts start with three-dimensional objects. The first gift is a set of six small woollen balls, for infants to play with. The second gift is a ball, cube and cylinder in wood and then comes building boxes with blocks (gifts number three to six), followed by two-dimensional surfaces. At the end of the series of gifts are lines and points. The gifts are all abstract, geometrical materials. The occupations are different; they consist of everyday material, like paper, clay, straws and peas, etc. They start with points and lines, followed by surfaces, and develop towards three-dimensional constructions where straws are joined with peas or modelling with clay. Brosterman (1997) and Rockstein (1999), for instance, presents more of the gifts and occupations.

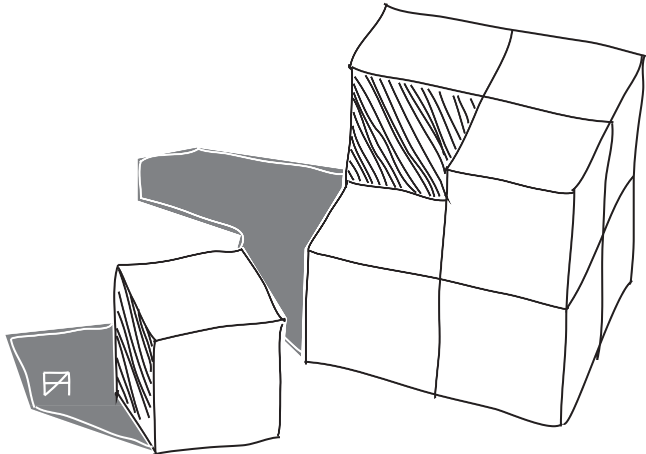

Fig. 69.1 The third gift with eight cubes

The third gift (Fig. 69.1) is presented with instructions in 1844 (Fröbel 1986) and is one of the most important according to Fröbel himself and introduces the geometrical aspect of the other gifts.

This is a wooden box with eight cubes that children can use freely or as instructed by the teacher. There are three different ways to build: as forms of life, forms of knowledge and forms of beauty. Forms of life are everyday objects from the world around the child. Forms of knowledge build upon geometry, and with the gifts children acquire mathematical experiences. Forms of beauty concern the creation of symmetrical, abstract patterns connecting to crystallography but are also a way to make the invisible visible and to introduce religion. The third gift is a way for the child to understand the world. This gift is crystallographic, mathematical structures revealed, in which knowledge grows in a process of interaction between child and adult (Heiland 2002).

There is limited information about how Fröbel worked in the first kindergarten in Bad Blankenburg in eastern Germany. Grace Owen (1906) provides a picture based upon available sources, for example, from Die Kindergärten (Middendorf 1848), which was a petition to the German national assembly, in which a description is given of the newly developed kindergarten. Wilhelm Middendorf (1793–1853) was Fröbel's close friend and colleague. Decades later Ida Seele Vogeler (1825–1901) one of the first kindergarten teachers to be educated by Fröbel and Middendorf, in 1887/1888, presents her memories of a day in Fröbel's kindergarten (in Heiland 2002, p. 256ff). The kindergarten they describe is organized around a group of children. The original idea to train mothers is left behind, but the intention to reform upbringing in families remains. There are three central components: gifts and occupations, movement games and gardening.

Seele describes how the kindergarten in Bad Blankenburg starts without confessional prayers and songs. The children do not stand in rows before going into

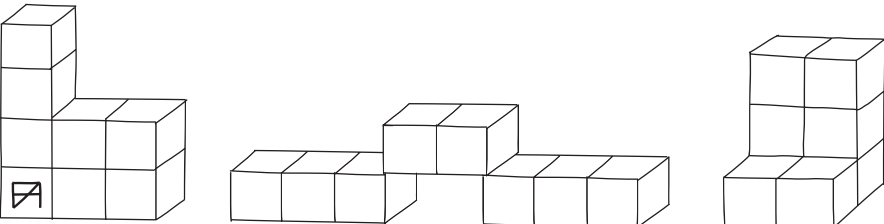

Fig. 69.2 Three examples of forms of life: church, garden wall and chair

the classroom; they sit down when they arrive and immediately receive one of the gifts, since they must never be inactive. This free activity then changes into circle time when all children have arrived (Middendorf 1848, p. 6) and are greeted with 'Thou who hast given us our life: a morning hymn of thanksgiving'.[6]

Children start freely to build new forms with the gift they have received (Seele in Heiland 2002, p. 256). When a child builds a form of special interest, Fröbel asks all children to build this very form. The aim here is to make inventing a joyful activity for the child and to encourage all children to feel the joy of construction. The children are then instructed to build one specific form: a house, a staircase etc., and all are encouraged to eagerly participate (Fig. 69.2). Children have to start with the full cube which is formed by the eight smaller cubes together and use all eight cubes when building a new form, in stepwise changes. When the children build the specific forms, they do not reproduce reality but build structural resemblances (cf. Heiland 2002).

Fröbel often sings a song during the activities, and there are many such songs (Middendorf 1848, p. 6ff). According to Seele the children talk a lot and ask many questions and address their teachers as Mr. Fröbel or Mr. Middendorf and their student teachers by first names as Ida, Karoline, etc.

When the building activity is finished, the children put the blocks back into their boxes and are not permitted to leave until this is done. This is then followed by a ball game, or a game with geometrical forms, involving, for example, the sphere and the cube. At the end, there would be a movement game, introduced and ended with a song.

Wheelbarrows, which all children love, are in use and all walk outside in a row singing songs. Every barrow is loaded according to the child's wishes with stones, soil, blocks, grass, etc. They are put back in their places afterwards. There is a daily visit to the small garden for some pretend garden work, where children offer a helping hand in carrying out simple tasks. Middendorf, Fröbel, teachers and boys 10–12 years old do the real gardening, and their work is watched by the younger children, who also observe the growing garden (Heiland 2002, p. 257f).

[6] Translated from Middendorf by Grace Owen (1906, p. 206).

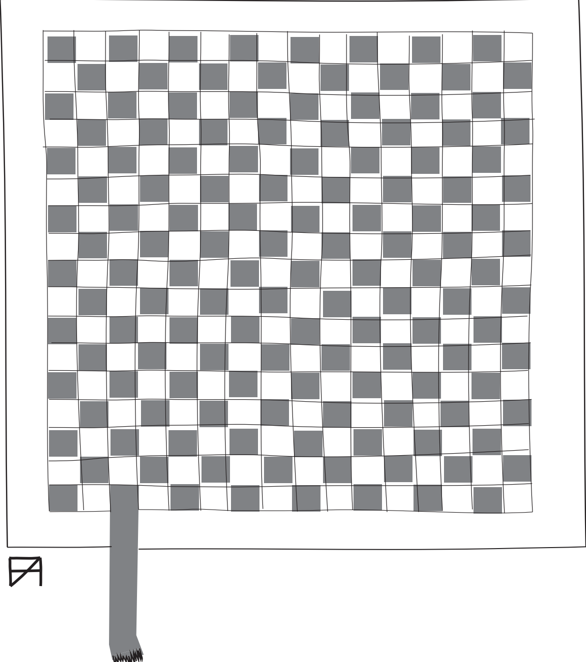

Fig. 69.3 Paper weaving

Fröbel focused upon the introduction of every new child into the existing group of children. Seele says that Fröbel disliked direct teaching, the telling of stories and the memorization of poems or songs. He preferred the teacher to sing a song accompanying block building, and then after a few times the children learn to sing this song themselves (Middendorf 1848, p. 9). Learning, Fröbel thought, should be through the guidance of immediate activities of children (Heiland 2002, p. 260f), but Middendorf is more positive about his view of storytelling. In the end of the kindergarten day, children stood pairwise in a circle and sang 'Forwards, homewards, have a good time'.

The afternoons are much the same as the mornings, except that Fröbel's occupations such as weaving (Fig. 69.3), plaiting, stitching and paper folding (Fig. 69.4) are the focus. The papers usually had the colours of the rainbow to foster the children's perception of colours. What children produced was supposed to make parents and relatives happy. In those days, paper was an exclusive material.

Later in the afternoon children play games outside once again and make another visit to the garden. Seele describes the end of the day and says that even children in poor clothing, perhaps without shoes, come to the kindergarten well mannered and obedient. The day for the older children ends at 6 or 7 o'clock when they sing a final song in the playground (Heiland 2002, p. 263).

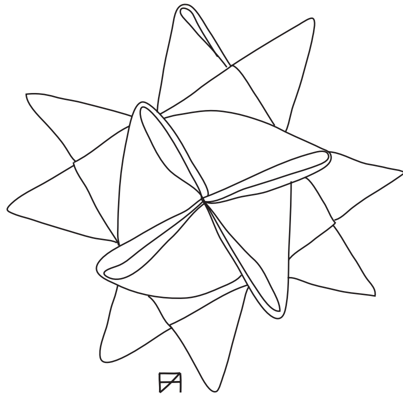

Fig. 69.4 The Fröbel star folded in paper

69.5 A Playful Programme

Fröbel's programme for children before school age is different to other models used in Germany, for instance, Theodor Fliedner and his Protestant version of the infant school (Erning 1987, p. 33f). The German infant schools were almost an antithesis to Fröbel's kindergarten and its panentheist foundation. They were based upon confessional religion, Protestant or Catholic (Erning 2004, p. 29ff).

Think of a full day of play with blocks and other gifts together with activities such as paper folding, singing, dancing, games, rhymes, finger play, working and walking in the garden, etc. An important step in Fröbel's work on play is his book *Mutter- und Koselieder* published in 1844, *Mother-Play and Nursery Songs*, in English in a number of versions (e.g. Froebel 1895). It is an illustrated handbook, with rhymes, finger play and songs, aimed at toddlers but also suitable for older children. One aim of the book is to connect the child's everyday life to rhymes, songs and finger play, recreating the close bond between mother and child. Another is to connect the child to the basic cycles of nature such as when the grass is cut, the cow eats the grass and then the animal is milked. It is also about mother and infant unity and the tension between a child wanting freedom and yet also to remain close to the mother.

The daily programme and the materials are not intended for direct early training in reading, writing, arithmetic and confessional religion. The role of the teacher and the tasks of the child in their interaction are different too. Fröbel's idea was to build a firm grounding for later learning in primary school, starting with the child's anticipation of clear knowledge as a cognitive process. This new programme is one in which the teacher is guiding rather than prescribing and one in which the child is allowed a relative amount of freedom. Boys and girls work together in the children's group, and women are accepted as teachers. His idea is to support the child to consider itself as the centre, building knowledge about the real structures of the world, and to go from ignorance to reflected knowledge about objects and the world.

69.6 Principles Behind Fröbel's Kindergarten Programme

It is a complex task to follow the thinking behind Fröbel's kindergarten. Heiland (2002) focuses on three principles, the first being related to Pestalozzi and the Enlightenment philosophy. The second principle concerns Fröbel's worldview based upon crystallography and inspired by Weiss. The third is the holistic view of life and education expressed in Fröbel's own spherical law.

The 'play care' principle is another important component, in which Fröbel tries to combine the spherical founded play with Pestalozzi's model and with crystallography as in the geometrical gifts: the ball, the cube and the building boxes.

69.7 Pestalozzi and the Enlightenment

In 1805 Gottlieb Anton Gruner (1778–1844), a follower of Pestalozzi in Frankfurt am Main, opened Fröbel's eyes to teaching after which Fröbel visited Pestalozzi in Yverdon for 2 weeks of the same year. Johann Heinrich Pestalozzi (1746–1827) develops educational programmes for poor children in Switzerland and is one of the founders of the primary school. In 1806 Fröbel starts to work in the von Holzhausen's family as a tutor and develops a very close relationship with the mother. In the autumn of 1808, he brings the three young sons to Yverdon and Switzerland where they all stay until August 1810 (Adelman 2000).

Fröbel becomes convinced that Pestalozzi's education is a way to follow, but later moderates his views. Pestalozzi works with object lessons, starting with real objects with a focus on three aspects: form, number and the naming of the objects. In Pestalozzi's theory of cognition, these three elements turn children's unclear observations into well-defined concepts. This cognitive process is natural according to Pestalozzi, but his focus is at a higher level, removed from the child's lifeworld relationship to objects. His model ends in a formal teacher child interaction in which there is no place for learning from everyday experiences. Fröbel does not fully accept Pestalozzi's model, it is too distant from the lifeworld of children, and the random character of nature is exchanged for a more precise abstraction of reality. Pestalozzi's focus is on the general and so in the process the concrete is lost (Heiland 2002, p. 20ff). Behind Pestalozzi's teaching model lies Enlightenment philosophical worldviews and, more particularly, Immanuel Kant and his dictum 'Sapere Aude'. Kant wants us to dare to know and to release us from our self-incurred tutelage, i.e. the inability to use our own understanding. Heiland argues that categorizing Fröbel as a Romantic thinker, as suggested by Otto Bollnow in 1952 (Bollnow 1977), is mistaken. However, the German Romantic movement influences some of Fröbel's thinking at this time, through an interest in history, nation, language and individual development. You find such components in Fröbel's thinking, for instance, in *The Education of Man* (e.g. Froebel 1974), his first book published in 1826.

69.8 Crystallography

Fröbel has a particular understanding of the world rooted in studies of mineralogy with Professor Weiss in Berlin. Fröbel followed lectures by Weiss in 1812, and 2 years later Fröbel becomes his assistant. Christian Samuel Weiss (1780–1856) is a mineralogist who develops aspects of modern crystallography and connecting it to mathematics (Holser 2008). Fröbel generalizes the idea of crystallographic axes into a system in which not only the mineral non-organic world but all living, plants, animals and mankind are included and come into play as materials as his gifts and occupations. How does Fröbel combine this mathematical and geometrical world-view with the programme of study established by Pestalozzi? The answer lies in a theory that connects the whole universe to all its component parts.

69.9 The Sphere

Fröbel argues that all humans may consciously develop and live a spherical life (Heiland 2012, p. 356). He outlines his spherical law in 1811 and publishes it in 1821. It is the integration of life, teaching and context, in order to unite the individual, knowledge and life in a universe upheld by the creative powers of God—which is how Pestalozzi and crystallography are connected to each other. The task is to support children finding their own way in the world, through the interaction between the child and the teacher aiming at the child's reflection of itself as the foundation of knowledge, closely connected to the world and understanding its structure (Heiland 2002, p. 40). Hence, Fröbel is no passive follower of the child's development. However, he also criticizes teaching of dead facts, aiming instead at the integration and internalization of knowledge. The child is the knowing subject, and in the world there are objects to be recognized by the child. For pre-school ages this means that reflection upon learning is important, a process that does not arise by itself.

During the 1830s Fröbel no longer refers to the spherical law, or to the law of the unification of the 'internal' and 'external'. He introduces the idea of 'unity of life' or 'Lebenseinigung' (Heiland 1993), people living and working together in unity, harmony and mutual respect (Liebschner 1992, p. 27). This idea is also represented, when the cylinder is uniting the two antagonistic forms, the cube and the sphere as in the second gift (Fig. 69.5), since the cylinder is both round as a sphere and flat as a cube. He also develops this idea as an 'intermediary law'; however, the general application of this law was much debated, and some saw it as impossible (Denner 1988, p. 49). Heiland argues that Fröbel, regardless of concepts, 'refers to the same process of idealistic access to the world by the individual through self-recognition of the human forces which create the world and, at the same time, remains bound by religious and metaphysical roots in the Christian idea of creation' (Heiland 1993, p. 6).

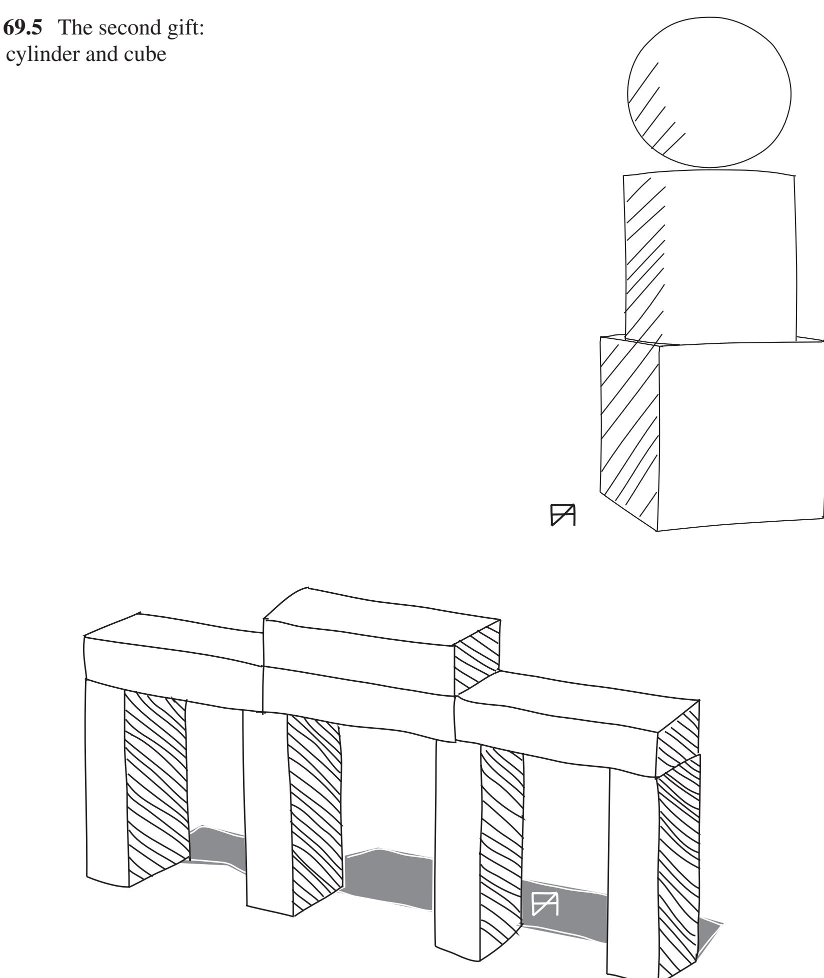

Fig. 69.5 The second gift: ball, cylinder and cube

Fig. 69.6 The fourth gift: building a form of life

69.10 Play Care

When Fröbel starts to work with children under school age, the self-instructive materials he already had developed for primary school children did not work the way he expected. He observes a need for direct, close interaction between the child and adult. He introduces the idea of 'Spielpflege' or play care (Erning 1987, p. 37). The teacher's task is to support children's anticipations to develop into self-reflected knowledge about the world before school starts (Heiland 2002, p. 18). An instance of play care is when Fröbel shows how mother and child can build forms of life with the eight wooden bricks of the fourth gift (Fig. 69.6) that together make a cube (Heiland 1990, p. 31).

When a mother builds forms of life together with the child, she tells a story of the family, about the father's everyday life and about mother and child and how they find themselves when the stories and the forms they build come together. The oven turns into a table with chairs and then to four benches in the yard and into the garden shed with an open door, which is closed during rain (cf. Middendorf 1848). They interpret their own life, and in so doing this helps the child transform the constructed form of blocks into a symbol, to which social life and love connect to the creation, i.e. religion, which is anticipated and experienced (Heiland 2002). Religion is understood as panentheism and inspired by Krause, ideas that are important in the development of Fröbel's thinking.

The child's self-inventing and constructing take place in the context of participation in interpretive educational play. Adults and children should invent construction forms together and understand what is played and expressed, as part of their own lifeworld context. This reality and richness of forms are experienced and created by the child and should be made transparent by the adult. The communication between child and adult supports the child's concentration and imagination in the process of construction (Heiland 1990, p. 31).

The interaction between entity, variation and unity is one of Fröbel's tools for children to see the structure of the world. The task is not to stay with simple, dead facts and concrete details, but to aim at the whole unity of reality. Fröbel wants to give the child direct knowledge about the inner truth of each object, in order to bridge the gap between the child and the object (Heiland 2002, p. 70). His educational materials, based upon crystallography, are the starting point for this process of understanding the world through the application of the spherical law and Pestalozzi's theory. The spherical law aims at the generation of clear concepts for the child in relation to objects and what they represent.

69.11 The Fröbel Followers

In Germany Bertha von Marenholtz-Bülow (1810–1893) and Henriette Schrader-Breymann (1827–1899) understand Fröbel's theory and practice from their own starting points, their understanding of society and their working contexts (Denner 1988, p. 88ff). Like Robert Owen they both relate to the general situation in which the working class becomes larger and capitalism and industrialism expand, but in two different ways. Both had direct experience of working with Fröbel, but it is about 30 years between Marenholtz-Bülow's adaption of Fröbel and the educational context of the 1850s and Schrader-Breymann's version of Fröbel, which takes place from the 1880s.

Bertha von Marenholtz-Bülow was a member of an old aristocratic family and started to work with education after a separation from her husband. She meets Fröbel in 1849 and immediately starts to introduce the kindergarten in many countries. She is a strong, charismatic person, and Schrader-Breymann was one of her first agents. Marenholtz-Bülow lived often outside Germany, travelled, published

books, organized unions and associations and was interested in teacher education. Her social position, economic independence and intellect meant a lot for the Fröbel movements (Brosterman 1997, p. 90ff). Her focus was on the need for poor children to qualify for future life as workers. She included work preparation and training in her 'Volkskindergarten' a 'free kindergarten' aimed at the poor working class, departing from Fröbel's idea of a unified kindergarten for all social classes (Denner 1988, p. 102ff). In her eye's Fröbel's programme was impossible to implement. Because of the harsh conditions for working-class families and children, she thought it necessary to adapt Fröbel's model to accommodate this new situation. She developed a social-pedagogic kindergarten, in which working-class children, she thought, could learn their place in society, their duties as citizens and preparations for their future tasks in the labour market.

Henriette Schrader-Breymann is a distant relative of Fröbel and was trained in 1848–1849 by Fröbel as one the first kindergarten teachers. She finishes working with him after a personal conflict in 1849 in which she saw him as too authoritarian (Augustin 2012, p. 148). During the 1880s she starts the Pestalozzi-Fröbel-Haus in Berlin as a pre-school teacher education institution, which becomes influential in Germany and other countries. She departs from central aspects of Fröbel's kindergarten in her plan, her aim being to compensate poor children for their lack of motherly care and to reduce the influence of the labour movement (Augustin 2012, p. 283). Among the characteristics of her model are the theme of the month (perhaps one of the four seasons or a holiday like Christmas), household work and the idea of spiritual or intellectual motherhood. She argues that her ideas are drawn from Fröbel in order to give support to her own model. In Pestalozzi, she takes the home-education ideology and the mother as a teacher in the home but does not use his object lesson model. The direct goal of her critique is not Fröbel but Marenholtz-Bülow, who tried to stay closer to the authentic Fröbel programme and to the primary school. Schrader-Breymann criticizes parts of Fröbel's theory, in particular his way of playing with children. Her model is different, and the gifts and occupations are not applied according to Fröbel's play theory. She does not connect with the three aspects of the gifts as forms of life, learning and beauty. She sees a limited value in gifts and occupations as a way for the child to understand the world. Neither does she focus on Fröbel's play care relationship with children (Denner 1988, p. 109) nor the role of crystallography in his thinking (Augustin 2012, p. 332ff).

In her programme there are still components of Fröbel, such as the idea of the externally passive teacher who is internally active. She also focuses on the didactic dimension of Fröbel's principle of the external becoming internal and the internal external again, i.e. how children internalize external experiences, which in turn results in creative work. She also points to the need for small child groups, which is close to Fröbel's ideal of a family life (Augustin 2012, p. 424).

The women's movement in Germany is important for the development of the kindergarten. An example from 1850 is the 'Hochschule für das weibliche Geschlecht'. It was a college for women, founded in Hamburg by Bertha Traun (later married to Johannes Ronge) and Emilie Wüstenfeld, with students who had liberal, radical worldviews. This initiative came from Johannes Ronge, the founder

of the dissident German Catholic movement (Allen 1982; Prelinger 1987). Friedrich Fröbel and his nephew Karl were among the teachers in this school, which closed in 1852 because of economic and political problems.

Fröbel's idea was to reform family life and upbringing providing parents and mothers with support. Everyday motherly care at home was not enough for Fröbel. The concept 'Geistiges mütterlichkeit', which translates as spiritual or intellectual motherhood, is central, for instance, to the idea of the mother as a teacher and of the home as an educational arena. This idea is founded in Fröbel (cf. Jacobi 1990, p. 209) and is developed further by Schrader-Breymann among others, as described by Allen (1991). The concept opened the door to life outside home for bourgeois women (Moltmann-Wendel 2003), as when Ellen Key introduced societal motherhood in her book *Century of the Child* (Key 1909). Schrader-Breymann adopts a middle political position, which led to conflicts with the labour movement on one side and right wing politicians on the other. Still her conception of motherhood becomes the norm for the education of mothers in the German nation from this time (Denner 1988, p. 97).

69.12 Revision

The differences between model builders inside the Fröbel tradition are apparent. Friedrich Fröbel and Wilhelm Middendorf developed the everyday practical work with children in the first kindergarten during the 1840s. They died a few years later, Fröbel in 1852 and Middendorf in 1853, and the kindergarten develops without their participation. There is a clear contrast between Fröbel's work (cf. Middendorf 1848; Seele in Heiland 2002) and, for instance, Johannes and Bertha Ronge's handbook *A Practical Guide to the English Kindergarten* (Ronge and Ronge 1858) published already in 1855.[7] The Ronges' description of their method and their detailed focus on gifts and occupations leaves limited room for Fröbel's and Middendorf's 'playing child'. Fröbel's educational materials seem to elicit an almost irresistible temptation to systematize and classify.

In Fröbel's use of the gifts for the child's understanding of itself and for building knowledge, there is a classical dilemma of freedom and control. How does the teacher balance the children's creative freedom inside a crystallographic world ruled by God? Fröbel's children could be poor but for him all children should live the same inclusive kindergarten life. One difficulty was that there might be a lack of mathematical competence and crystallographic creativity among staff, combined with the demands of using the handbooks compiled by his followers who believed in the method they saw in Fröbel's work (Denner 1988, p. 48f). This often led to a loss of freedom for the working-class child who was supposed to be reformed by the experience of a Fröbel education. In the transformation of Fröbel's programme,

[7] The practical guide is available at https://archive.org/stream/practicalguideto00rong#page/n1/mode/2up

Marenholtz-Bülow and Schrader-Breymann added components that could end up as straitjackets: too much preparation for adult work by Marenholtz-Bülow and too much of a focus upon the monthly theme and on cooking in the Schrader-Breymann model—the result being that the child's opportunity for free activity was lost.

In the debate between those who focused upon Fröbel's original method and those who wanted revision, the concept of orthodoxy appears in 1873 in Germany (Denner 1988, p. 13f) when Bertha von Marenholtz-Bülow tried to stay close to Fröbel's original theory and practice. Others thought it was necessary to reform and update his thinking. An instance is how the academic conflicts, starting in the USA in the child study movement, develop in the UK (cf. Brehony 2009). The earlier philosophical foundation of the kindergarten is substituted by empiricist programmes, which are based upon physiology, educational psychology, education and statistics. The foundation is revised with the help of new empirical understandings of the child in a new synthesis. However, the followers of the original programme were allowed to redefine their positions and adopt the revised programme.

There are also adaptions of programmes to poor working-class children, as in Germany. Brehony analyses a case in the UK in his study of the development of revisionist Fröbel pedagogies (Brehony 2000, p. 183f). He describes the orthodoxy developed by the early pioneers in the UK who worked with middle-class children and how their programme was later revised for working-class children. Read (2006) studies how the original use of kindergarten materials in the UK is transformed with the new aim of reaching out to poor working-class children. Fröbel's gifts were then used in teacher-controlled group activities, and there was no longer room for child-centred initiatives. Nawrotzki (2009) describes the introduction of free kindergartens for the poor in the USA during the 1870s. She illustrates how the need for social reform and support to the poor in the free kindergartens ends in poor children being forced to participate in reform exercises in order to show the efficacy of the programme. These examples are but a few instances of the revisions of Fröbel's original programme.

69.13 The Fröbel Impulse

Fröbel initiated a fast developing chain of events, with a lot of followers and critics who went on to revise the kindergarten in series of different versions and permutations. If we follow their arguments and their practices, the reception of Fröbel can be seen as a web of family resemblances and conflicts. Marenholtz-Bülow and Schrader-Breymann are part of this Fröbel web of practice and theory, together with thousands of other participants. There were very few direct followers of Fröbel who directly implemented his educational theory and practice, which means that the connections between the different Fröbel revisions might be weak. However, we may see a process of a continuous development of the Fröbel revisions, of the same kind that Basalla (1988) observes in many technological fields. It is possible then to accept the idea of a continuous Fröbel tradition as a descriptive and analytical

framework, which helps us trace and understand the historical development of ECEC.

The accelerated and early kindergarten development in the UK and in the USA after 1850 is impressive (cf. Nawrotzki 2007, 2009); one indication is the huge production of Fröbel materials in the USA (Prochner 2011). However, there is no unified American understanding of Fröbel; there are a number of different revisionist versions (cf. Chung and Walsh 2000, p. 230). This contrasts strongly in the Nordic countries Denmark, Finland, Norway and Sweden where the kindergarten arrived around about 50 years later but was implemented on a small scale and influenced mainly by Pestalozzi-Fröbel-Haus and Henriette Schrader-Breymann (Hatje 1999).

The academic status of the ECEC sector has been low in many countries, regardless of national differences in the development of the kindergarten. A study of kindergarten pioneers in conservative states such as Germany and the Netherlands compares with the more open and democratic context of the UK and the USA. Female ECEC pioneers were excluded from the academic world, regardless of differences in national contexts, being associated with domesticity and thus with amateurism (van Drenth and van Essen 2003, p. 263). Hence, it has not been easy for staff to meet the need for continuous and advanced knowledge development in ECEC, because of limited resources and status. When ECEC expands today, staff education only slowly becomes a part of higher education. The Innocenti Report Card (UNICEF 2008) evaluated ECEC staff education in a number of countries, and only few nations had well-qualified staff with a 3-year university degree. ECEC teacher education is only recently beginning to reach the Bachelor's level, and it is has taken years, for instance, in Germany (cf. Pasternack 2008) and Austria.

Another issue is that Fröbel's theory is not directly visible; you cannot directly observe the intellectual framework behind his work with children (cf. G. Owen 1906). From some primary school perspectives, the Fröbel tradition might be hard to recognize. This is evident also in the paradox that Fröbel's contemporary audience had problems in understanding his theory and lacking his interest in play in practice (Denner 1988, p. 109). It might also be hard to see beyond the motherly, externally passive, following teacher within the Pestalozzi-Fröbel-Haus, and to realize that Schrader-Breymann's homelike kindergarten is not a real home with children and mothers. With Ervin Goffman (1959) we may look for what is going on backstage behind the observed practice. Then it is possible to see that Pestalozzi-Fröbel-Haus produced a pretend home as an educational arena, based upon a detailed motherly and homely curriculum with an internally active and controlling teacher. The Fröbel programme, then, is a whole web of ideas and activities, and it is impossible to know which kindergarten you observe without looking for both actions and ideas together.

The expansion of the ECEC sector aiming at full provision for all children means that the relationship with the primary school comes into focus in many countries. There are many different ways to relate ECEC to the formal school system. A possible scenario is that primary school models will influence many ECEC systems. One example is when David Elkind talks about a conversion of the kindergarten from a focus on play to educational activity that is more formal and includes such

things as tests and homework (Elkind 1997, September 7). However, the debate on free play versus structured school preparation is not new. The French 'Salle d'Asile' (infant school) established new explicit goals in 1833 to prepare working-class children directly for primary school through enforcing moral, 'decent' behaviour and literacy (Plaisance 1996, p. 16f). This developed in a different direction when Pauline Kergomard gave children's play a well-defined place in the 'École maternelle' towards the end of the nineteenth century. However, the school controls École maternelle since 1989, and there are indications of a reduction of children's play (Brougère et al. 2008). Another instance is the 1984 reform in the Netherlands. With the school starting age lowered to the age of four, there was no need for well-trained pre-school teachers any longer, and today a reduction of ECEC quality in the Netherlands can be observed (Vermeer et al. 2008). This is but two limited reports, which indicate what could happen if traditional ECEC models are exchanged for more direct school preparation or for a programme of care and education with limited quality.

Friedrich Fröbel does not seem to inspire much empirical research today. One possible field could be his educational materials and its use in learning Mathematics (cf. Leeb-Lundberg 1983), even though this might be too optimistic (cf. Saracho and Spodek 2009a, b). A second field might be Fröbel's play care principle. His focus on the interaction between world, child and adult has similarities with educational research today. Iram Siraj-Blatchford's development of the concept of sustained shared thinking is one parallel (Siraj-Blatchford 2009), and it may be thought of as a playful and intellectual interaction between teacher and child and associated with good ECEC practice as clarifying concepts, evaluating, etc. The studies of caregiver and child interaction in the Netherlands are also important (cf. Helmerhorst et al. 2014). Ragnar Rommetveit's interest in dialogism (cf. Linell 2003) is a connection, as is studies of the dialogue between child and adult by Berit Bae (2012). There are classic works, such as Lev Vygotsky's view that we live in a common socio-cultural world in which adults play important roles (cf. Hakkarainen et al. 2013), not to forget Jerome Bruner, Jean Piaget or Paolo Freire. However, the task to relate Fröbel to today's research context remains a challenging one.

There are lost opportunities in Fröbel's authentic programme; his model was revised early, because of the political and religious contexts. His programme was for all children regardless of gender, class or religion, and his view on school preparation intended to support the child's cognitive development through reflecting on learning and not the acquisition of dead facts. Today when school systems build upon democratic systems, we should revisit his model and its qualities again, for instance, his focus on nature, garden and play—and once again try out his play theory in order to support the child's understanding and reflecting upon the world and its own learning.

The reception of Fröbel and its rich and controversial history is a key to understanding ECEC. Inside ECEC, there is more than 170 years of interrelated worldwide development, debate and revision of Fröbel's thinking and practical work. In order to understand ECEC within a national context, a comparative, transnational and historical perspective is necessary.

References

Adelman, C. (2000). Over two years, what did Froebel say to Pestalozzi? *History of Education, 29*(2), 103–114. doi:10.1080/004676000284391.

Albisetti, J. C. (1982). Could separate be equal: Helene Lange and women's education in imperial Germany. *History of Education Quarterly, 22*(3), 301–317.

Albisetti, J. C. (2009). Froebel crosses the Alps: Introducing the kindergarten in Italy. *History of Education Quarterly, 49*(2), 159–169. doi:10.1111/j.1748-5959.2009.00193.x.

Albisetti, J. C. (2012). The Empress Frederick and female education in the late nineteenth century: Germany, England and Italy. *Paedagogica Historica, 48*(3), 345–355. doi:10.1080/00309230.2012.659261.

Allen, A. T. (1982). Spiritual motherhood: German feminists and the kindergarten movement. *History of Education Quarterly, 22*(Fall), 319–340.

Allen, A. T. (1991). *Feminism and motherhood in Germany 1800–1914*. New Brunswick: Rutgers University Press.

Allen, A. T. (2006). The kindergarten in Germany and the United States, 1840–1914: A comparative perspective. *History of Education, 35*(2), 173–188. doi:10.1080/00467600500528040.

Augustin, B. (2012). Henriette Schrader-Breymann: Biografische Rekonstruktion unter besonderer Berücksichtigung ihres Beitrages zur Professionalisierung der pädagogischen Berufsarbeit für Frauen im Deutschland des 19. Jahrhunderts. Kiel: Buchwerft.

Baader, M. S. (2004). Froebel and the rise of educational theory in the United States. *Studies in Philosophy & Education, 23*(5/6), 427–444. doi:10.1007/s11217-004-4453-0.

Bae, B. (2012). Children and teachers as partners in communication: Focus on spacious and narrow interactional patterns. *International Journal of Early Childhood, 44*(1), 53–69. doi:10.1007/s13158-012-0052-3.

Basalla, G. (1988). *The evolution of technology*. Cambridge: Cambridge University Press.

Beatty, B. (2009). Resistance as a lens for understanding the international preschool movement. *History of Education Quarterly, 49*(2), 156–158. doi:10.1111/j.1748-5959.2009.00192.x.

Bollnow, O. (1977). *Die Pädagogik der deutschen Romantik: Von Arndt bis Fröbel*. Stuttgart: Klett-Cotta.

Brehony, K. (1987). *The Froebel movement and state schooling 1880–1940: A study in educational ideology*. Milton Keynes: Open University.

Brehony, K. (2000). English revisionist Froebelians and the schooling of the urban poor. In M. Hilton & P. Hirsch (Eds.), *Practical visionaries: Women, education, and social progress, 1790–1930* (pp. 183–199). Harlow: Longman.

Brehony, K. (2009). Transforming theories of childhood and early childhood education: Child study and the empirical assault on Froebelian rationalism. *Paedagogica Historica, 45*(4–5), 585–604. doi:10.1080/00309230903100965.

Brehony, K. (2010a). *A critical review of alternative and oppositional elements in Froebel's thought and their impact on the early kindergarten movement*. Paper presented at the Fourth Conference of the International Froebel Society, Froebelian Pedagogy in a Modern Context: Education and Social Action, Friedrich-Schiller-University of Jena

Brehony, K. (2010b). Froebel's religious beliefs: The transition from alternative to oppositional and its bearing on the diffusion of the diffusion of the kindergarten post 1848. In K. Neumann, U. Sauerbrey, & M. Winkler (Eds.), *Fröbelpädagogik im Kontext der Moderne: Bildung, Erziehung und soziales Handeln* (pp. 73–92). Jena: IKS Garamond.

Brehony, K., & Jarvis, J. (2001). *The origins of nursery education: Frederich Froebel and the English system: Vol. 3. Friedrich Froebel's pedagogics of the kindergarten*. London: Routledge.

Brosterman, N. (1997). *Inventing kindergarten*. New York: Abrams.

Brougère, G., Guénif-Souilamas, N., & Rayna, S. (2008). Ecole maternelle (preschool) in France: A cross-cultural perspective. *European Early Childhood Education Research Journal, 16*(3), 371–384. doi:10.1080/13502930802295893.

Bruce, T. (Ed.). (2012). *Early childhood practice: Froebel today*. London: SAGE.

Chalmel, L. (1996). *La petite école dans l'école: Origine piétiste-morave de l'école maternelle française*. Bern: Lang.

Chung, S., & Walsh, D. (2000). Unpacking child-centredness: A history of meanings. *Journal of Curriculum Studies, 32*(2), 215–234. doi:10.1080/002202700182727.

Claeys, G. (1989). *Citizens and saints: Politics and anti-politics in early British socialism*. Cambridge: Cambridge University Press.

Denner, E. (1988). *Das Fröbelverständnis der Fröbelianer: Studien zur Fröbelrezeption im 19. Jahrhundert*. Bad Heilbrunn: Klinkhardt.

Dewey, J. (1915). *Froebel's educational principles (Chapter 5 in The school and Society, pp 111–127)*. Chicago: University of Chicago.

Elkind, D. (1997). Play's the thing. *The New York Times* on the web.

Erning, G. (1987). Geschichte der öffentlichen Kleinkindererziehung von den Anfängen bis zum Kaiserreich. In G. Erning, K. Neumann, & J. Reyer (Eds.), *Geschichte des Kindergartens: Band I: Entstehung und Entwicklung der öffentlichen Kleinkindererziehung in Deutschland von den Anfängen bis zur Gegenwart* (pp. 13–41). Freiburg im Breisgau: Lampertus.

Erning, G. (2004). Bildungsförderung in einem klassischen frühpädagogischen Konzept: Die Entwicklung des Kindergartens. In G. Faust, M. Götz, H. Hacker, & H.-G. Roßbach (Eds.), *Anschlussfähige Bildungsprozesse im Elementar- und Primarbereich* (pp. 27–48). Bad Heilbrunn: Julius Klinkhardt.

Erning, G., & Gebel, M. (1999). "Kindergarten": Nicht von Fröbel? Zur wortgeschichte des "Kindergartens". In H. Heiland, K. Neumann, & M. Gebel (Eds.), *Aspekte international vergleichender Historiographie* (pp. 83–101). Weinham: Deutscher Studien Verlag.

Fahlbusch, E., Bromiley, G. W., & Barrett, D. B. (1999). *The Encyclopedia of Christianity*. Grand Rapids: Eerdmans.

Fröbel, F. (1986). Anleitung zum Gebrauche der in dem Kindergarten zu Blankenburg bei Rudolstadt ausgeführten dritten Gabe (1844). In R. Boldt, E. Knechtel, & H. König (Eds.), *Friedrich Wilhelm August Fröbel: Kommt laßt uns unsern Kindern Leben, aus dem Pädagogischen Werk eines Menschenerziehers* (Band 3, pp. 120–129). Berlin: Volk und Wissen.

Fröbel, J., & Grünewald, W. (1971). *Lebensschicksale eines Achtundvierzigers in der Alten und Neuen Welt* (Abenteuerliche Lebensläufe). Heidenheim an der Brenz: Heidenheimer Verlagsanstalt.

Froebel, F. (1895). *The songs and music of Friedrich Froebel's mother play* (Mutter- und Kose Lieder) (S. E. Blow, Trans.). New York/London: Appleton.

Froebel, F. (1974). *The education of man* (W. N. Hailmann, Trans.). Clifton: Kelley.

Giel, K. (1979). Friedrich Fröbel. In H. Scheuerl (Ed.), *Klassiker der Pädagogik* (Band I, pp. 249–273). München: Beck.

Goffman, E. (1959). *The presentation of self in everyday life*. New York: Doubleday.

Hakkarainen, P., Brėdikytė, M., Jakkula, K., & Munter, H. (2013). Adult play guidance and children's play development in a narrative play-world. *European Early Childhood Education Research Journal, 21*(2), 213–225. doi:10.1080/1350293x.2013.789189.

Hatje, A.-K. (1999). *Från treklang till triangeldrama: Barnträdgården som ett kvinnligt samhällsprojekt under 1880–1940-talen* (From a harmonic triad to a triangel drama: The Kindergarten as a female societal project from the 1880s to the 1940s). Lund: Historiska media.

Hebenstreit, S. (2003). *Friedrich Fröbel: Menschenbild, Kindergartenpädagogik, Spielförderung*. Jena: IKS Garamond.

Heiland, H. (1990). 150 Jahre Kindergarten: Zur Gründung des Kindergartens am 28. Juni 1840 durch Friedrich Fröbel. *Erziehen heute, 40*(2), 28–31.

Heiland, H. (1991). Zum Verhältnis von Politik und Pädagogik bei Friedrich Fröbel. *Pädagogische Rundschau, 45*(4), 433–450.

Heiland, H. (1993). Friedrich Fröbel. *Prospects: The Quarterly Review of Comparative Education, 12*(3/4), 473–491.

Heiland, H. (1998). *Die Spielpädagogik Friedrich Fröbels* (Beiträge zur Fröbelforschung, Vol. 5). Hildesheim: Olms.

Heiland, H. (Ed.). (2002). *Friedrich Wilhelm August Fröbel (1782–1852)* (Basiswissen Pädagogik). Baltmannsweiler: Schneider-Verlag Hohengehren.
Heiland, H. (Ed.). (2012). *Fröbelforschung aktuell: Aufsätze 2001–2010*. Würzburg: Königshausen & Neumann.
Heiland, H., & Neumann, K. (Eds.). (2003). *Fröbels Pädagogik verstehen, interpretieren, weiterführen: Internationale Ergebnisse zur neueren Fröbelforschung*. Würzburg: Königshausen & Neumann.
Heiland, H., Neumann, K., & Gebel, M. (Eds.). (1999). *Aspekte international vergleichender Historiographie (Duisburg 1998)*. Weinham: Deutscher Studien Verlag.
Helmerhorst, K. O. W., Riksen-Walraven, J. M., Vermeer, H. J., Fukkink, R. G., & Tavecchio, L. W. C. (2014). Measuring the interactive skills of caregivers in child care centers: Development and validation of the caregiver interaction profile scales. *Early Education and Development, 25*(5), 770–790. doi:10.1080/10409289.2014.840482.
Hilton, M. (2001). Revisioning romanticism: Towards a women's history of progressive thought 1780–1850. *History of Education, 30*(5), 471–487. doi:10.1080/00467600110064744.
Holser, W. (2008). *"Weiss, Christian Samuel"*. Complete dictionary of scientific biography.
Jacobi, J. (1990). *"Geistige Mütterlichkeit": Bildungstheorie oder strategischer Kampfbegriff gegen Männerdominanz in Mädchenschulwesen?* Die Deutsche Schule: Zeitschrift für Erziehungswissenschaft: Bildungspolitik und pädagogische Praxis, Beiheft, 209–224.
Key, E. (1909). *The century of the child*. New York: Putnam.
Köhler, A. (1868). *Der Kindergarten in seinem Wesen dargestellt: 28 Fragen für Freunde und Gegner desselben*. Weimar: Herman Böhlau. Retrieved from Google Books.
König, H. (1984). Friedrich Fröbels Verbindungen zur kleinbürgerlichen Demokratie in der ersten Hälfte des 19. Jahrhunderts. Teil 1. *Jahrbuch für Erziehungs- und Schulgeschichte, 24*, 51–157.
Leeb-Lundberg, K. (1983). Friedrich Fröbel als Lehrer der Mathematik. Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität Jena. *Gesellschaft und Sprachwissenschaftliche Reihe, 32*, 593–598.
Liebschner, J. (1992). *A child's work: Freedom and play in Froebel's educational theory and practice*. Cambridge: Lutterworth.
Lilley, I. (1967). *Friedrich Froebel: A selection from his writings*. Cambridge: Cambridge University Press.
Linell, P. (2003). Dialogical tensions: On Rommetveitian themes of minds, meanings, monologues, and languages. *Mind, Culture, and Activity, 10*(3), 219–229. doi:10.1207/s15327884mca1003_4.
Manning, E. A. (2005). Rediscovering Froebel: A call to re-examine his life and gifts. *Early Childhood Education Journal, 32*(6), 371–376. doi:10.1007/s10643-005-0004-8.
Middendorf, W. (1848). *Die Kindergärten: Bedürfnis der Zeit: Grundlage einigender Volkserziehung: Der detschen Nationalversammlung zur Würdigung vorgelegt*. Blankenburg bei Rudolstadt: Verlagsanstalt der Kindheit- und Jugendbeschäftigungsanstalt. Retrieved from Google Books.
Moltmann-Wendel, E. (2003). *Macht der Mütterlichkeit: Die Geschichte der Henriette Schrader-Breymann*. Berlin: Wichern.
Münchow, K. (2006). The relationship between the kindergarten movement, the movement for democracy and the early women's movement in the historical context of the revolution of 1848–49, as reflected in "Die Frauen-Zeitung". *History of Education, 35*(2), 283–292. doi:10.1080/00467600500528677.
Nawrotzki, K. D. (2007). 'Like sending coals to Newcastle': Impressions from and of the Anglo-American kindergarten movements. *Paedagogica Historica, 43*(2), 223–233. doi:10.1080/00309230701248321.
Nawrotzki, K. D. (2009). "Greatly changed for the better": Free kindergartens as transatlantic reformance. *History of Education Quarterly, 49*(2), 182–196. doi:10.1111/j.1748-5959.2009.00195.x.
Owen, G. (1906). A study of the original kindergartens. *The Elementary School Teacher, 7*(4), 202–213. doi:10.2307/992571.

Pasternack, P. (2008). *Elementar- bzw. Frühpädagogik an deutschen Hochschulen*. Halle-Wittenberg: Institut für Hochschulforschung, Martin-Luther-Universität.

Plaisance, E. (1996). *Pauline Kergomard et l'école maternelle*. Paris: Presse Universitaires de France.

Prelinger, C. M. (1987). *Charity, challenge, and change: Religious dimensions of the mid-nineteenth century women's movement in Germany*. New York: Greenwood.

Prochner, L. (2011). 'Their little wooden bricks': A history of the material culture of kindergarten in the United States. *Paedagogica Historica, 47*(3), 355–375. doi:10.1080/00309230.2010.513688.

Read, J. (2003). Froebelian women: Networking to promote professional status and educational change in the nineteenth century. *History of Education, 32*(1), 17–33. doi:10.1080/0046760022000032396.

Read, J. (2006). Free play with Froebel: Use and abuse of progressive pedagogy in London's infant schools, 1870–c.1904. *Paedagogica Historica, 42*(3), 299–323. doi:10.1080/00309230600622717.

Read, J. (2011). *The Froebel movement in Britain 1900–39*. Roehampton: Roehampton University.

Rockstein, M. (1999). Spiel und Spielgaben. In M. Rockstein & J. Lauterbach (Eds.), *Anfänge des Kindergartens* (pp. 33–52). Bad Blankenberg: Friedrich-Fröbel-Museum.

Ronge, J., & Ronge, B. (1858). A practical guide to the English kinder-garten (children's garden): For the use of mothers, nursery governesses, and infant teachers: Being an exposition of Froebel's system of infant training: Accompanied by a great variety of instructive and amusing games, and industrial and gymnastic exercises, also numerous songs, set to music and arranged to the exercises (2nd ed.). London: Hodson.

Saracho, O., & Spodek, B. (2009a). Educating the young mathematician: A historical perspective through the nineteenth century. *Early Childhood Education Journal, 36*(4), 297–303. doi:10.1007/s10643-008-0292-x.

Saracho, O., & Spodek, B. (2009b). Educating the young mathematician: The twentieth century and beyond. *Early Childhood Education Journal, 36*(4), 305–312. doi:10.1007/s10643-008-0293-9.

Siraj-Blatchford, I. (2009). Conceptualising progression in the pedagogy of play and sustained shared thinking in early childhood education: A Vygotskian perspective. *Educational and Child Psychology, 26*(2), 77–89.

Stolz, G. (2007). *Das Leben der Margarethe Meyer Schurz*. Husum: Husum.

UNICEF. (2008). *The child care transition*. Florence: UNICEF Innocenti Research Centre.

Valkanova, Y. (2009). The passion for educating the "New man": Debates about preschooling in Soviet Russia, 1917–1925. *History of Education Quarterly, 49*(2), 211–221. doi:10.1111/j.1748-5959.2009.00197.x.

Valkanova, Y., & Brehony, K. (2006). The gifts and 'contributions': Friedrich Froebel and Russian education (1850–1929). *History of Education, 35*(2), 189–207. doi:10.1080/00467600500528065.

van Drenth, A., & van Essen, M. (2003). Shoulders squared ready for battle with forces that sought to overwhelm: West-European and American women pioneers in the educational sciences, 1800–1910. *Paedagogica Historica, 39*(3), 263–284. doi:10.1080/00309230307471.

Vermeer, H., van Ijzendoorn, M., de Kruif, R., Fukkink, R., Tavecchio, L., Riksen-Walraven, M., et al. (2008). Child care in the Netherlands: Trends in quality over the years 1995–2005. *Journal of Genetic Psychology, 169*(4), 360–385. doi:10.3200/GNTP.169.4.360-385.

Wollons, R. L. (2000). *Kindergartens and cultures: The global diffusion of an idea*. New Haven: Yale University Press.

Woodham-Smith, P. (1952). History of the Froebel movement in England. In E. Lawrence (Ed.), *Friedrich Froebel and English education* (pp. 34–94). New York: Schocken.

Chapter 70
Educational Tenets of the Highscope Curriculum

Ann S. Epstein and Lawrence J. Schweinhart

Abstract The HighScope Curriculum and Assessment System is the integrated set of educational practices, content, and assessment procedures developed, disseminated, and supported by the HighScope Educational Research Foundation. While some educators use the word "curriculum" to refer to a particular content area such as reading or science, HighScope uses the term to describe all the components of a comprehensive and integrated early development program. Curriculum thus entails a set of teaching practices for adults, learning goals for children, a professional development model for practitioners, and assessment tools to monitor program quality and children's progress. A HighScope learning environment is quite different from that in the typical classroom. It is made by recognizable activity areas, where different purposes are identified (such as the areas for reading, making artwork, and playing with blocks). The central educational tenet of this curriculum is active participatory learning. That means through this curriculum young children are able to actively participate in their knowledge generation by means of their interactions with the HighScope learning environment. This will be specifically illustrated in this chapter.

Keywords Curriculum • Teaching practices • Learning goals • Professional development • Children's progress • Active participatory learning

70.1 Overview

Active learning gives children the opportunity to develop their own interests, talents, and goals [and] provides experiences that are developmentally appropriate. Children accomplish and retain what they learn and relate it to previous experiences and future goals, through hands-on activities, where children and teachers communicate with one another and parents become involved in their children's education.

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We as teachers need to design our programs to fit the children. The HighScope active-learning approach does this; it is made for children—.[1]

This teacher is expressing her understanding of, and enthusiasm for, the ways that children and adults share in the lively dance that is HighScope. HighScope was first developed in the 1960s for the HighScope Perry Preschool Program in Ypsilanti, Michigan, and documented by Weikart et al. (1971) as the Cognitively Oriented Curriculum. It was further developed and documented by Hohmann et al. (1979), Hohmann and Weikart (1995, 2002), Epstein (2007a; 2013), Hohmann et al. (2008), and Epstein and Hohmann (2012). It originally centered on early childhood education for children 3–5 years old, but within its first decade was extended from infancy (Post et al. 2011) to the elementary years of childhood (Fewson 2008).

The curriculum's central tenet is active participatory learning, in which young children construct their understanding of the world by interacting with objects, people, ideas, and events. This type of learning contrasts with passive learning, in which children receive or are given information by an adult without directly acting upon it themselves. Most education involves this type of passive learning. In active learning, by contrast, teachers interact as partners with children. They set up a learning environment with diverse and engaging materials, establish a consistent daily routine, and use ongoing assessment to scaffold (support and gently extend) children's learning. As explained by another HighScope teacher:

Children will construct their own learning if allowed to do so. An autocratic, directive teaching style does not allow children to engage with materials and people in a way that is meaningful to them. Teachers who respect and support children's ideas and creative endeavors engage them in exciting learning experiences by providing an environment full of developmentally appropriate opportunities.

The tenets of the active-learning approach are rooted in constructivist psychology, particularly the work of Jean Piaget (Piaget and Inhelder 1966/1969). Although Piaget recognized that some learning was receptive, he held that young children build or construct knowledge through their own engagement with the world. Put another way, Piaget believed "the child explains the man as well as and often better than the man explains the child" (p. ix). Direct experience, mediated by adults who understand development, is the basis for meaningful learning. What has always set HighScope apart from other theoretically based models of early childhood education is its insistence that both adults and children play an active role in the educational process. Adults do not didactically force-feed information to young children, but neither do adults stand by passively while children educate themselves. Rather, adults provide interesting materials and ask challenging questions to scaffold the child's emerging mental structures.

A HighScope learning environment is generally either a classroom or rooms in a home that are specially prepared to support children's active participatory learning. The environment looks quite different from the typical classroom arranged to support teacher-directed instruction with rows of desks facing the teacher. A HighScope

[1] Quotes are excerpted, with permission, from the implementation journals and course evaluations of practitioners (teachers and supervisors) who attended HighScope training.

learning environment is divided into recognizable activity areas with different purposes, such as a house area, a block area, an art area, and a reading area. Areas are identified (with drawings, photos, letters, and/or words), and the materials within each area are similarly labeled so children can find, use, and return the items they need to support their play and learning.

The HighScope daily routine takes place every day except for the occasional preannounced special event. The largest segment of the daily routine is HighScope's signature plan-do-review sequence. During planning time, the teaching adults meet with small groups of children and have each child present a plan of what he or she is going to do in the "do" or work time that follows. Young preschoolers may simply point to an area of the room where they want to play. Older preschoolers may describe the materials they plan to work with and what they will do with them. The teacher may ask the child follow-up questions to clarify the plan. Next comes work time, during which children carry out their plans and otherwise engage in child-initiated learning activities. Teaching adults interact with the children within their activities during this time. Clean-up time comes next, as children return their toys and materials to their storage spaces. At review or recall time, teaching staff reconvene the children in small groups; each child shares (demonstrates and/or describes) what he or she did during work time. For example, younger children might simply bring to the table something they played with. Older children might describe what they did with a set of materials, who else was involved, and how they solved a problem they encountered (e.g., getting the car to race down the ramp "really, really fast!"). Other parts of the daily routine are greeting time (with a message board, e.g., noting a new material in the classroom or a visitor that day), snack and/or meal time, small-group time, large-group time, and outside time. Even during those parts of the day planned and initiated by adults (e.g., small- and large-group times, transitions), children are encouraged to make choices, carry out their own ideas, and reflect on their actions.

The plan-do-review routine creates interdependent relationships between adults and children. [It] establishes patterns of reflection, critical to long-term successful learning and living. Merely selecting and playing without recall lacks a vital element for growth and development—HighScope teacher.

Staff felt the plan-do-review cycle helped them learn about the children's development level more quickly. Teachers interact with children more positively and have developed their skills in entering children's play, asking open-ended questions, and using problem-solving situations to help children learn how to think rather than what to think—HighScope supervisor.

Adult-child interaction in the HighScope Curriculum is a two-way rather than a one-way process, a model HighScope calls "shared control." Adults and children engage in conversational give and take rather than having children listening to teachers talking most of the time. Adults give control to children when they follow each statement by a child with a contribution of their own or an acknowledgment of what the child said, rather than with a question. When adults ask questions, especially closed-ended ones (with a correct or expected answer), they control the conversation because it shapes the child's response. Contributions and acknowledg-

ments allow children to direct the conversation toward their interests and concerns. For example, consider this exchange between Karla and her teacher when Karla is unable to make ball made of play dough bounce (adapted from Epstein and Hohmann 2012, p. 70):

Karla: It doesn't bounce!
Teacher: I see. It doesn't bounce. (Acknowledgment)
Karla: It sticks to the floor. It's … it's … flat!
Teacher: When you throw it, it doesn't bounce. It sticks to the floor and it's flat. (Acknowledgment)
Karla: Maybe I need to make a different kind of ball.
Teacher: I wonder what you could use. (Contribution)
Karla: (Looks around the room) I know! I can cover a cotton ball with lots of tape.
Teacher: That's an idea. Let's see what happens when you try to bounce it. (Contribution)

Adults are intentional about guiding children's activities based on their knowledge of child development and effective pedagogy, which are both stressed in HighScope training. In addition, adults learn how to observe children and plan around their interests to build on the young child's intrinsic motivation to learn. When adults support children's interests, children are willing to try new things that build on what they already know and do. Consider Greg, who loves to play with trucks. At first glance, he seems to be doing the same thing over and over. But as his teachers observe Greg's play, they discover his repertoire of truck sounds is growing; he pretends his truck has five gears and makes a unique sound for each gear as it negotiates a "really steep grade." Because his teachers have observed that Greg enjoys making noises, they add a music area to the classroom, in which Greg (and several other children) becomes very interested. He often makes up songs on the xylophone about taking his truck on "long hauls" (anecdote adapted from Epstein and Hohmann 2012, p. 71). (For more on intentional teaching, see "How adults support active learning.")

The content of the HighScope Curriculum is a set of 58 key developmental indicators in eight domains—approaches to learning; social and emotional development; physical development and health; language, literacy, and communication; mathematics; creative arts; science and technology; and social studies. Each domain has five to ten indicators. For example, approaches to learning has indicators for initiative, planning, engagement, problem-solving, use of resources, and reflection; language, literacy, and communication has indicators for comprehension, speaking, vocabulary, phonological awareness, alphabetic knowledge, reading, concepts about print, book knowledge, writing, and English language learning. (ELL children are supported on all the indicators in their home language, as well as in English. For example, children might learn numeral names in both Spanish and English.) Child development theory and research undergirds these key developmental indicators, and they align closely with national and state early learning standards. HighScope adopters in other countries report that the indicators also align easily with the early learning standards in their communities.

HighScope teachers assess children's development using the Child Observation Record (COR). The COR grew out of HighScope's curriculum content and is used to record children's meaningful developmental progress in all domains of early development. The instrument identifies multiple levels for each item, from earlier (younger) to later (older) levels of development. For example, the item for "pretend play" identifies the following eight levels from infancy through kindergarten:

Level 0. Child watches and listens to another person.
Level 1. Child imitates an action of an animal, an object, or a person.
Level 2. Child uses one object to stand for another.
Level 3. Child pretends by using words and actions to take on the role of a character or animate a figure.
Level 4. Child engages in repetitive pretend-play scenarios.
Level 5. Child plays with one or two more children, stepping out of the pretend play to give directions to another person.
Level 6. Child creates a specific prop or costume having five or more details to support and extend pretend play.
Level 7. Child performs in a group dramatization of a familiar story, myth, or fable, adding his or her own ideas.

The teacher-observer watches children in the program, takes objective anecdotal notes on each child's behavior, and scores the appropriate developmental level for the child, using the descriptions and examples provided in a scoring guide to help them complete the COR reliably. Earlier and separate versions for preschool and infant-toddler (HighScope Educational Research Foundation 2000, 2003a, respectively) were consolidated and expansded into one continuous online assessment, called COR Advantage, which covers young children from birth through kindergarten on 36 items, including two for ELL (HighScope Educational Research Foundation and Red-E-Set Grow 2013). Because the COR is based on universal trajectories of child development, the instrument is also used by non-HighScope programs.

The Program Quality Assessment (PQA), also developed by HighScope for its own and other child development programs, is used to observe the quality of a setting's structural and process components. Based on proven best practices (Copple and Bredekamp 2008), the PQA identifies five levels of quality (low to high) for each indicator and produces ratings for each classroom and the agency's overall management capability. It has center-based versions for preschool and infant-toddler programs (HighScope Educational Research Foundation 2003b, 2011, respectively) and a family child care version (HighScope Educational Research Foundation (2009). Like the COR, the PQA is available in print and online formats.

Teachers using the HighScope Curriculum work in partnership with parents and other family members to promote children's development. They provide information about the curriculum and early learning, invite family members to participate in classroom activities and parents workshops, discuss children's progress on the COR, and share ideas for extending classroom learning in the home. As a result,

teachers report that parents have a better understanding of how the children are developing and learning.

Parents have seen the value of play in learning about the world. They have seen how HighScope deals with many conceptual skills that are prerequisites to the academics to come. The comment "All they do is play" is becoming a thing of the past as parents gain insights into the developmental appropriateness of HighScope—HighScope Teacher.

HighScope trains teachers throughout the USA and around the world to implement the HighScope Curriculum and Assessment System. Professional development programs range from a one-day introduction to a 20-day intensive course and also include shorter workshops to explore specific topics in depth. A step-by-step model permits practitioners to take the training in smaller parts, over as much time as is needed. HighScope offers a wide range of in-person and facilitated online training options, as well as publications, a website and online newsletters, and regional and international conferences.

There is evidence that the HighScope Preschool Curriculum has lifetime effects and produces strong economic return on investment; that its education effects are as good as other preschool curricula and better than teacher-directed instruction in preventing emotional disturbance and crime; that training in it has positive effects on teacher trainers, teachers, and children; and that it has stronger effects than other curricula in Head Start classrooms on children's literacy and social skills.

70.2 The Roots of the HighScope Curriculum

The HighScope Curriculum is grounded in child development theory, research, and practice. As noted above, it originally drew extensively on the epistemological work pioneered by Jean Piaget and Inhelder (1966/1969), which was in turn influenced by the progressive educational philosophy of John Dewey (1938/1963). Dewey did not believe it was the role of schools to merely pass down to each generation of students a fixed body of knowledge. He believed children learned by doing, particularly when they were encouraged to follow their own interests. Dewey is thus often considered the father of child-centered education, an approach whereby the curriculum is tailored to the child, rather than insisting the child be molded by the curriculum. Dewey, moreover, recognized the critical role that adults play in mediating the child's learning. The child's existence is "a world of persons … rather than a realm of facts and laws" (Dewey 1902, p. 5). Adults may compartmentalize learning into categories (reading, mathematics, science, and so on), but to the child, knowledge is all of a piece and comes about through meaningful interactions with significant people. This holistic view characterizes HighScope, which is conceived as an integrated and comprehensive curriculum. That is, HighScope addresses all areas of learning, and the ideas and experiences in one content area are seen as being interconnected with those of other areas.

Piaget also saw the acquisition of knowledge as being child-driven rather than adult-imposed. In the cognitive-developmental model he put forth, embraced by constructivism more generally, knowledge "evolves from an internal psychological core through an interaction or dialogue with the physical and social environment rather than by direct biological maturation or direct learning of external givens from the environment" (DeVries and Kohlberg 1987/1990, p. 7). Piaget's observations of the stages of logical thinking in young children provided evidence that most learning did not occur through direct cultural transmission. Children created their own understanding through a complex system of accommodation and assimilation, as their experiences contradicted their beliefs. In a constructivist approach, however, adults still play a critical role in early learning. They supply the materials and hands-on activities that allow children to construct an evolving system of logic. In fact, children may not initially become aware of the inconsistencies in their thinking (e.g., with regard to conservation of matter) unless gently questioned or challenged by adults. Adults thus supply one impetus for the development of thought.

Since these beginnings, the curriculum has been updated based on cognitive-developmental research, which emphasizes developmental pathways or trajectories as they relate to learning specific content (e.g., vocabulary or counting) rather than broad developmental stages (Clements 2004; Gelman and Brenneman 2004; Goswami 2002; National Research Council 2005; Smith 2002). Brain research further supports this developmental approach to early learning (Shore 2003; Thompson and Nelson 2001). Interestingly, challenges to rigid stage theories never presented a significant problem for the HighScope Curriculum. This was likely due to a difference in emphasis. Piaget emphasized what children could not do as a rationale for not attempting to teach them what they could yet understand. HighScope, going back to Dewey's progressive roots as well as reflecting the liberal era (1960s) in which it was conceived, focused on children's strengths, i.e., what they could do.

Rather than prejudge a child's abilities, HighScope from the beginning emphasized that adults should observe children and base their teaching strategies on children's demonstrated capabilities and interests. "This contrasts with approaches in which adults look for children's weaknesses and prescribe activities designed to correct them. Generally, in such deficit-based approaches, adults must motivate children to do things they have no desire to do. The more adults try to pressure children into action, the more defensive and anxious children become. By focusing on children's strengths, however, adults do not have to motivate children; the children have already motivated themselves" (Epstein and Hohmann 2012, pp. 70–71). For example, a HighScope caregiver would applaud the fact that a toddler is feeding him or herself rather than correcting the child's "spoon" technique to make less of a mess. When children are criticized or corrected, they often stop trying or focus their behavior on pleasing adults. Left to explore, children show remarkable persistence and a drive toward mastery for its own sake.

The curriculum's teaching practices, particularly the idea that development occurs within social and cultural settings, were initially derived from the work of Lev Vygotsky (1934/1962) and later expanded to include Jerome Bruner's (1986)

concept of scaffolding. The pedagogy continues to be updated based on current research (Rowe and Wertsch 2002). Vygotsky referred to the zone of proximal development as the area between what children can accomplish on their own and what they can do with the help of an adult or a more advanced child. HighScope teachers observe children to determine when and how to enter this zone. To scaffold learning, adults then support each child's current level of thinking and gently extend it to the next developmental level.

Scaffolding has played an increasingly important role in the evolution of the HighScope Curriculum in recent years. In the latest iteration of the comprehensive curriculum manual (Epstein and Hohmann 2012) and the volumes detailing the eight content areas (Epstein 2012a, b, c, d, e f, g, h), each key developmental indicator is accompanied by a chart describing what children at different developmental levels might say and do as they engage with materials, people, and ideas, and how adults can scaffold learning at each level. For example, to scaffold learning in "ecology," a preschool teacher might encourage children at an early level to take care of personally meaningful objects and spaces (shelving toys, putting things in their cubbies). With children at a middle level, the teacher would model and describe other ways of caring for the environment (recycling and reusing materials). For children at a later level, the adult could ask for their suggestions ("If we saved these boxes, what could we do with them?") and help them reflect on how their actions (such as planting a garden) can help the environment.

This pedagogical approach allows HighScope teachers to individualize learning for children with a broad range of abilities, including those with special needs, English language learners, and so on. Moreover, unlike some models in which learning is sequenced across activities (i.e., everyone moves onto the next "lesson" as a class), HighScope sequences learning within activities. Thus, a teacher can work with a small group of children and tailor the interactions to match each child's zone of proximal development. For example, in the mathematics indicator of "patterns," a small-group time sequenced across activities might require that all children be able to extend a simple pattern (ABABAB) before the adult introduced patterns with doubles (AABBAABBAABB) or three elements (ABCABCABC). By contrast, in a small group sequenced within the activity, one child might simply begin by sorting the materials into A and B piles, another children might create a simple pattern, while a third child might extend a pattern as complex as ABBCABBCABBC. The adult would provide materials, offer support (such as copying a child's pattern), and pose challenges (such as deliberately making an error and seeing if the child noticed). Every child would be part of the same activity and succeed at whatever level he or she was functioning. Moreover, children would have the opportunity to observe and learn from one another, not only from the adult.

Additionally, it should be noted that the HighScope Curriculum was also a product of the seminal book Intelligence and Experience by J. McV. Hunt (1961). For half a century preceding its publication, human intelligence was presumed to be predetermined and fixed by heredity. The research compiled by Hunt challenged psychologists and educators to consider the role that experience played in shaping children's intellectual growth. No longer were some children "born" to be inferior

to their peers. Instead, we as a society had within our power the ability to provide them with the tools to fulfill their full intellectual potential. It was with this ambitious goal in mind that the Perry Preschool Program (the forerunner of the HighScope Foundation) was conceived in the city of Ypsilanti, Michigan. Three years later, the USA would embark on a national initiative—Head Start—to better the lives of all children at risk of school failure. Just as Head Start today considers itself a "laboratory" for child development research, constantly seeking to improve it services, so too does HighScope continue to evaluate the curriculum's effectiveness and update its content based on theoretical and practical advances in the field.

Finally, while HighScope shares many "best practice" features with other early education models (such as the use of hands-on learning materials and whole-child focus), the curriculum is also recognized as a pioneer in promoting active participatory learning. Moreover, its signature plan-do-review component is unique and helps to explain the curriculum's proven effectiveness in promoting school readiness and life success. The theoretical and research roots of these distinctive elements are described below.

70.3 Active Participatory Learning

Active participatory learning is defined as "learning in which the child, by acting on objects and interacting with people, ideas, and events, constructs new understanding" (Epstein and Hohmann 2012, p. 17). The cornerstone of the HighScope approach to early childhood education is the belief that active participatory learning is fundamental to the full development of human potential and that active learning occurs most effectively in settings that provide diverse developmentally appropriate learning opportunities. Implementation of the curriculum rests on three assumptions:

Human beings develop capacities in predictable sequences throughout their life span. As people mature, new capabilities emerge.

Despite the general predictability of human development, learning always occurs in the context of each person's unique characteristics, abilities, and opportunities.

There are times during the life cycle when certain things are learned best or most efficiently and when certain teaching methods are more appropriate in the developmental sequence.

These patterns of development unfold in the context of interactions with the environment when "early experiences have a decisive impact on the architecture of the brain, and on the nature and extent of adult capacities. They directly affect the way the brain is 'wired'" (Shore 2003, p. 18). These connections are not rigidly locked in place after a certain point in development, however. Rather, the brain continues to change (a process called "plasticity") throughout the life span (Black et al. 1998). Active engagement thus plays a critical role in learning from cradle to

grave! Combining neuroscience research with HighScope's fundamental principles, an educational experience can therefore be called developmentally appropriate if it:

Exercises and challenges the capacities that are emerging in the learner at a given level

Encourages and helps the learner to develop a unique pattern of interests, talents, and goals

Presents learning experiences when learners are best able to master, generalize, and retain what they learn and can relate it to previous experiences and future expectations

Furthermore, HighScope views learning as a social experience involving meaningful interactions among children and adults. These social experiences occur in the context of real-life activities that children have planned and initiated themselves (e.g., "writing" an invitation to a birthday party rather than filling in letters on a worksheet) or adult-initiated experiences that afford children ample opportunity for choice, leadership, and individual expression (e.g., a large-group time where children take turns suggesting ways for others to move to the music rather than the entire class copying a movement made by the teacher). Thus, when HighScope says children actively build their ideas about reality through their direct experiences with "people, materials, events, and ideas," people come first.

Vygotsky also saw the social environment as being particularly crucial in how language and thinking develop. In adults, for example, the character of a people is shaped by their community's values, beliefs, and modes of expression. When schools, as well as families, engage children in real-life challenges, they discover their own callings and develop empathy for helping others achieve their personal goals too (Damon (2002). With young children, this idea is supported by the study of vocabulary development in home settings whereby early language exposure affects subsequent literacy skills (Hart and Risley 1995, 1999) and research on the impact of social conventions upon moral development (Smetana 2006). Consistent with an active-learning approach, there is no evidence that direct instruction (hearing lectures about good behavior or memorizing maxims) positively affects the growth of character. Rather, efforts to solve social problems that emerge naturally in the classroom and school community are the foundation of a child's early character development (Vincent and Grove 2012).

70.4 The Ingredients of Active Learning

To provide a practical framework for programs using an active-learning philosophy, HighScope articulated five essential ingredients of active learning:

Materials—There are abundant, age-appropriate materials that the child can use in a variety of ways. Learning grows out of the child's direct actions on the materials.

Manipulation—The child has opportunities to explore, manipulate, combine, and transform the materials chosen.

Choice—The child chooses what to do. Since learning results from the child's pursuit of personal interests and goals, the opportunity to choose activities and materials is essential.

Child language and thought—The child communicates verbally and nonverbally, describing what he or she is seeing and doing. The child reflects on actions, integrating new experiences into existing knowledge, and modifies his or her thinking accordingly.

Adult scaffolding—Adults support the child's current level of development and gently extend the child's ability to observe, understand, reason, and create.

70.5 How Children Engage in Active Learning

Active participatory learning embodies four critical elements in young children:

Direct actions on objects—Active learning begins as young children manipulate objects, using their bodies and all their senses to find out about them. Acting on objects gives children something "real" to think about and discuss with others. Educators have long recognized that young children use concrete experiences to gradually form abstract concepts (Flavell 1963).

Reflection on actions—Action alone is not sufficient for learning. To understand the world, children must interact thoughtfully with it. A young child reaching for a ball is pursuing an internal question, such as "What does this thing do?" By acting (tasting, pushing, grasping, rolling) and then reflecting on these actions, the child begins to answer the question and to construct a personal understanding of what balls do. Put another way, the child's actions, and reflections on those actions, result in the development of thought and understanding.

Intrinsic motivation, invention, and generativity—The impetus to learn arises from within the child. Active learners are questioners and inventors. They generate hypotheses and test them out by using and combining materials ("The block fell off when I tied it with string, but tape made it work"). While children's creations may appear messy, unstable, or unrecognizable to adults, the solutions reflect children's current understanding and make sense to them.

Problem-solving—When children encounter real-life problems, the process of reconciling the unexpected with what they already know stimulates learning. For example, Roberto, while pretending to cook soup, covers the pot with a lid that is too small. It falls into the soup (water) and splashes his hand. Roberto knows from experience that the lid is supposed to stay on top of the pan, so he tries several lids until he finds one that fits. Through repeated experiences like this, he will learn to consider the size of any cover in relation to the size of an opening.

70.6 How Adults Support Active Learning

While children learn through their own experiences and discoveries, adults play a critical role in guiding and supporting early development. In carrying out this role, adults are not only active and participatory but also observational and reflective. Put another way, teachers act intentionally with young children. An intentional teacher "define[s] learning objectives for children, employs learning strategies likely to help children achieve the objectives, and continually assesses progress and adjusts the strategies based on that assessment (Epstein 2007b, p. 4). Intentionality describes especially to how teachers should interact to "purposefully challenge, scaffold, and extend children's skills" (Pianta 2003, p. 5).

In HighScope settings, adults intentionally support active participatory learning in children by:

Organizing environments and routines for active learning
Establishing a climate for positive social interactions
Encouraging children's own intentional actions, problem-solving, and verbal reflection
Observing and interpreting the actions of each child in terms of the eight curriculum content domains and key developmental indicators (KDIs)
Planning experiences that build on the child's actions and interests

70.7 Plan-Do-Review

In addition to active participatory learning, the other hallmark of the HighScope Curriculum is the plan-do-review process. John Dewey (1938/1963) said education revolves around the child's participation "in the formation of the purposes which direct his or her activities in the learning process" (p. 67). This position influenced the decision to include purposeful planning by the child as part of the HighScope Perry Preschool Project. In 1964, psychologist Sara Smilansky, a consultant to the program, urged curriculum developers to also incorporate a recall process into the planning and work-time sequence to strengthen children's ability to reflect on their intentions and actions. Research later showed planning and reviewing to be the two program components most positively and significantly associated with children's scores on measures of developmental progress (Epstein 1993). Supported by theory and research, therefore, every day children in HighScope programs express their intentions during planning time (make plans about materials, actions, and people), carry out their ideas during an extended work time (do things to achieve their goals), and reflect on the experience during recall time (review what they did and learned).

70.8 Planning Time ("Plan")

The HighScope practice of encouraging young children to make and carry out plans is based on educational theory, child development research, and 50 years of teaching experience and classroom observation. While many programs encourage young children to make choices, in the HighScope Curriculum, "Planning is choice with intention. That is, the chooser begins with a specific goal or purpose in mind that results in the choice" (Epstein 2003, p. 29).

Planning has both cognitive and social-emotional components. Cognitively, a child must have in mind a mental picture of what he or she wants to do. This ability to imagine what has not yet happened is facilitated by the development of language. Researchers describe the mental tools children use to plan as "executive control structures" (Case 1985) or "executive function" (Zelazo and Mueller 2002), that is, the inner blueprints for framing a problem and using existing knowledge and skills to plan, try out, and evaluate a solution. Current research supports the importance of executive function in the child's ability to successfully complete tasks and solve problems (Rothbart et al. 2007; Zelazo et al. 2003). The ability to plan—to anticipate what needs to be done and how to do it—helps young children remain engaged in the goals they set for themselves. Likewise, planning helps with emotional self-regulation, which Bodrova and Leong (2007) describe as children's "ability to act in a deliberate planned manner in governing much of their own behavior" (p. 127).

From the perspective of social-emotional development, children's capacity to plan is evident in their struggle with what psychoanalyst Erik Erikson (1950) called "initiative versus guilt." Preschoolers have many ideas they want to try out. When they are successful in carrying out their intentions, they develop a sense of initiative. If they consistently meet with failure, or are made to feel bad about their attempts, they may feel guilty about taking the initiative. By encouraging children's initiative, exploration, and independent problem-solving, HighScope teachers give children the social-emotional support they need to become competent and confident planners.

Strikingly, the ability to plan appears to have life-long implications. The Longevity Project—an 80-year study that followed the lives of 1,500 boys and girls—found that being planful in childhood and adulthood was associated with living longer and enjoying better physical and psychological health (Friedman and Martin 2011). In fact, a measure of being "prudent, persistent, and planful" was the strongest individual predictor of longevity.

HighScope was the first comprehensive curriculum to include planning by children as a major component. Today, the importance of planning in development is recognized in the Head Start Performance Standards (US Department of Health & Human Services 2002), the best practices advocated by the National Association for the Education of Young Children (NAEYC 2005), and many state early learning standards (Gronlund 2006).

70.9 What Children Do When They Plan

Children's ability to plan develops along the following lines: at first they focus on the here and now ("want block"); next they begin to focus on now and not now, with reference to past or future ("At work time, I'm going to play with Max"); then they relate two points in time ("My painting is wet now, but it will be dry if I wait a bit"); and finally, they coordinate the sequence of events across several points in time ("I'll get scissors to cut the string. Then I'll tie the string to the fence for the birds to sit on") (Weist 1989; Benson 1997).

HighScope believes that understanding how children plan helps adults appreciate their growing initiative, sense of anticipation, and complex reasoning. Planning has these characteristics:

Children express their intentions through gestures, actions, and words. Young children indicate their plans both nonverbally and verbally. When asked, older toddlers point to an area of the room, a material, and/or a person they want to play with. Preschoolers, anticipating the planning process, spontaneously state their intentions aloud.

Children make increasingly detailed plans. At first a child's plans are minimal or vague (pointing to an area or saying "Go over there" or "Make something"). Over time, plans can include multiple steps, a variety of materials and/or people, and the child's plans for solving potential problems.

Two-year old Vanessa points and shouts out "Block area" with great gusto. When her teacher asks what she will do in the block area, Vanessa acts out building a tower and then raises both arms and says "Big!"

Tomas says to his preschool teacher, "My plan is to make a card for my daddy. I'm going to use the blue paper and markers. On the front I'm going to draw our house and Bono [the family dog], and inside I'm going to write I LOVE YOU."

70.10 How Adults Support Children's Planning

Children plan with the same teacher and small group of peers every day. This consistency allows children to feel comfortable expressing their ideas and allows the adult to get know each child's interests and developmental and ability level. Some of the ways in which teachers encourage children to create and share their plans include:

Adults plan where children can see the materials and people available to them. Because preschoolers are concrete, it helps them to see all their choices. Early in the year, the group may "tour" the classroom so children can become familiar with all the areas, equipment, and materials. As they get older, children access their own mental images to make plans. If adults see a friendship emerging between children, they might encourage them to plan together.

Adults respect children's plans. Teachers do not pressure children to change their plans. While a plan may seem simple or repetitive, adults who honor children's choices gain their trust. This relationship allows them to support and gently extend the planning process.

Adults use a variety of strategies to plan with children. Teachers use different planning strategies so nonverbal (including ELL and those with special needs) as well as verbal children can express their plans. For example, the adult might put several materials on the table so children can point to one from the area where they plan to play or make a "train" that goes around the room as children "get off" at the stop of their choice. Children might be given a bag or basket to "collect" an item or two from the area they will play in. The teacher might give each child a "spyglass" (such as a paper tube) and ask them to look through it and name an area or material related to their plan. The teacher and child might talk on a toy telephone about the child's plan. Or children might draw a picture or write a letter or word to represent their plans. The options are limitless.

Adults converse with children about their plans. Teachers talk one-on-one with children at their level. They begin with open-ended questions such as "What would you like to do today?" With older planners, adults might follow up with statements or questions such as "I wonder how will you build your race track" or "What will you use to cook the soup?" Adults talk with nonverbal children too, accepting the child's use of facial expressions or gestures in reply.

The whole point of planning is to turn an intention into an action. Once children have made a plan, they move immediately into work time, the "do" part of the plan-do-review sequence.

70.11 Work Time ("Do")

What differentiates HighScope "work" time from the "free choice" time found in other programs is the sense of purpose that children bring to their play. Because they carry out plans they make for themselves, preschoolers approach play as a way to accomplish something important to them. Moreover, when adults play and converse with children based on the children's interests, early language learning increases (Tomasello and Farrar 1986).

Educators and psychologists recognize the value of purposeful play. Dewey (1933) observed "To be playful and serious at the same time is possible, and it defines the ideal mental condition" (p. 286). Michael Ellis (1988) sees play as a problem-solving strategy that helped our species adapt in the past and helps us deal with an unpredictable future. The emphasis on academic preparation in the last two decades has often overshadowed the many benefits of play. Recently, however, prominent organizations such as the American Academy of Pediatrics (2006) and the National Research Council (2001) have emphasized that play is vital to children's social and emotional development, which in turn becomes the springboard for learning in every other content area.

It is work time. Donnette is "reading" a story to Ruth, an adult. Kathryn is folding a cardboard roof for her birdhouse. Nearby, Colin searches for just the right paper for creating baby wasps, while Dom "writes" out tickets for a show Linda and Kerry are staging in the block area. Will and Max have converted the rocking boat into a "net fishing" boat, and they are talking with Ann, an adult, about what they might use for their net. "It's got to have holes," Will says, "but not too big holes or the fish will get out" (Epstein and Hohmann 2012, p. 275).

70.12 What Children Do When They Work

During work time, which lasts at least 45 min, children carry out their intentions, engage in different types of play, interact with adults and peers, explore curriculum content, and solve problems. In a HighScope classroom, you will see the following:

Children initiate, work on, modify, complete, and change their plans. Children spend varying amounts of time executing their initial plans, from 2 to 15 min, to all of work time, to two or three consecutive work times. However, research and experience show that once children start their plans, they are likely to see them through. A study of the plan-do-review process (Berry and Sylva 1987) found that 91 % of children completed their plans.

Children participate in various forms of play. Humans play more than any other species. Our brains shape how we play, and play in turn shapes our brains (Brown and Vaughn 2009). Preschoolers engage in four types of play (Smilansky and Shefatya 1990): exploratory play (manipulating materials, trying out new actions), constructive play (building and creating with materials), pretend play (imitating, role-playing, acting out "what if" situations), and simple games (played cooperatively, not competitively, with little regard for rules). Preschoolers are most likely to be involved in constructive play, followed by exploratory and pretend play, and finally simple games (Bergen 1988).

Children play in a variety of social contexts. During work time, children may watch others, play alone (solitary play), play next to others (parallel play), and play in pairs and groups (collaborative play). These categories were described decades ago by Mildred Parten (1932) and confirmed by decades of research (Howes 1988; National Research Council and Institute of Medicine 2000). Over time, solitary play tends to decrease, while interactive play increases.

Children engage with curriculum content. Children spontaneously construct knowledge as they engage with the HighScope key developmental indicators (KDIs) in eight content areas (listed in the Curriculum Overview). For example:

- "I think I need the really strong tape to make it stick" (Use of resources, a KDI in the area Approaches to Learning).
- "He's crying because Ellie's got the truck, and he wants it for his garage" (Empathy, a KDI in the area Social and Emotional Development).

- "I put together the puzzle with all the little pieces" (Fine-motor skills, a KDI in the area Physical Development and Health).
- "I bet that fox is going to get Rosie. Turn the page!" (Book knowledge, a KDI in the area Language, Literacy, and Communication)
- "Look how high I climbed. Now I'm taller than you!" (Measuring, a KDI in the area Mathematics)
- "I'm the mom and you're the baby, and we're going to the farmers' market" (Pretend play, a KDI in the area Creative Arts).
- "I think it will turn green when I add blue" (Predicting, a KDI in the area Science and Technology).
- "I'm going to put the rest back in the paper tray. Maybe someone will want to draw on it" (Ecology, a KDI in the area Social Studies).

Children solve problems. Children's work-time pursuits are likely to lead to unforeseen events and problems—paint drips, another child is using the computer. Encountering and dealing with such unexpected difficulties can lead children to a new and more complete understanding of physical and social realities. With development, and support from adults, children become more persistent and flexible solving problems with materials and people.

70.13 How Adults Support Children's Work

Supporting children at work time is both an active and a reflective process. In addition to providing appropriate work spaces and materials, and recording their observations of children for planning and assessment, HighScope teachers do the following:

Adults participate as partners in children's play. To act as a partner, rather than dominate, children's play, HighScope teachers look for natural openings, join at the children's physical level, refer children to one another for ideas and help, engage in parallel play, follow the children's leads, and occasionally suggest new ideas within children's ongoing play themes. For example, if children are pretending to be different zoo animals, the teacher might ask whether they could each do something with their hair or make a prop to show which animal they are.

Adults converse with children. Adults listen patiently and look for natural openings to talk with children. They follow their leads and ask questions sparingly (e.g., "How will you do that?") so children retain control of the dialogue. The more children converse, the more they put into words their own thoughts and experiences and the more involved they are in interpreting and understanding their world.

Adults encourage children to solve problems. HighScope teachers see material challenges and social conflicts as learning opportunities. They don't rush in to solve the problem but solicit ideas from children (e.g., "What else could you use to make the beads stick to the paper?" or "So you both want to be the daddy. I wonder how we can solve this problem"). Problem-solving helps children learn

firsthand how things work, promotes understanding multiple perspectives, and builds self-confidence.

Adults help children clean up. The organization and labeling of room areas and materials (see Curriculum Overview) allows children to return things to the same location where they found them (e.g., by referring to the tracings of different size measuring cups in the house area). If children are in the middle of a project they want to continue, they can store it in a safe place with a "work-in-progress" sign (a drawing of hands with a line through them, meaning "do not touch"). The sign also serves as reminder at planning time the following day.

70.14 Recall Time ("Review")

Recall comes immediately after cleanup. Children gather with the same adult and group of children with whom they planned to share what they did during work time. Recall is when children reflect on and make sense of their purposeful play. Extending the child's memory is a common early learning goal. "Reflection, however, is more than memory or a rote recitation of completed activities. Reflection is remembering with analysis" (Epstein 2003, p. 29).

When children talk about their actions, they are engaged in a storytelling process. Psychologist Roger Schank (1990) says, "Creating the story also creates the memory structure that will contain the gist of the story for the rest of our lives. Talking is remembering" (p. 115). Thus, the memories children create when they review their activities bring about permanent changes in their understanding of the world. Further, memory itself involves multiple thinking processes, each associated with a different brain structure (Bourtchouladze 2002; Kagan and Kagan 2003). Recall of facts (What did you do?) engages semantic memory; recall of procedures (How did you do that?) engages procedural memory; recall of events (What did you do first?) engages episodic memory; and recall of path or route (How did you get there?) engages spatial memory.

The capacity for reflection is a major foundation for later learning. Reflection, like planning, is decontextualized language (focused on non-immediate events), which in turn predicts reading success (Dickinson and Smith 1994). Early childhood specialist Sue Bredekamp (2010) says that "reflecting on and analyzing experiences … are metacognitive processes that build self-regulation and executive functioning" (p. 51). Sometimes our emphasis on making sure that children have diverse materials to work with overlooks the child's equally important need to engage with ideas. Reflection is a higher level process that children "superimpose" upon objects, actions, and interactions. Science educators Worth and Grollman (2003) say that "Direct experience with materials is critical but is not enough. Children also need to reflect on their work. They need to analyze their experiences, think about ideas such as patterns and relationships, try out new theories, and communicate with others. These processes allow children to think in new ways about what they did, how they did it, and what is significant to them" (p. 5).

Thus, as children reflect on their plans and actions in concrete terms, they begin to generalize the lessons they learned in more abstract ways. Berry and Sylva (1987) underscored the importance of recall with this succinct observation: "Recall provides a rich potential for language use, discussing means-ends relationships, and exploring connections" (p. 35). Consider this example, in which a teacher helps a child reflect on how she solved a problem during work time:

Child: I was playing in the sand but it was too dry!
Adult: Too dry?
Child: It wouldn't stay in a cake so I made it very muddy!
Adult: Oh. How did you do that?
Child: I put in lots of water!
Adult: I saw you put in lots of water.
Child: Then it sticked in a cake and it sticked (looks at hands) on me, too!

70.15 What Children Do When They Reflect

Like planning, children's ability to reflect with more detail and critical analysis increases over time. In HighScope programs, one can observe the following:

Children associate plans, actions, and outcomes. Children begin to associate what they did with what they planned and realize that planning prior to doing gives them control of their actions. Berry and Sylva (1987) noted "children frequently included comments indicating that they were aware of the difference between activities they had planned and others they had not planned" (p. 16).

Children talk about personally meaningful experiences. The process of talking about their intentions and actions actually helps children create memories (Bolles 1988). Recalling is also social, as others listen to the child and add their own observations. Public discourse, even at this simple level, is an essential part of any culture. Eisner (1990) explains: "The process of representation is a way to enter the lives of others and to begin to understand what others have thought and felt. Without representation, culture itself would not be possible" (pp. 53–54).

Children form, talk about, and represent mental images. Children employ gestures and words, build models, and make drawings. Older preschoolers may also use writing to represent what they did, beginning with the initial of a toy or person they played with (P for puzzle), later writing a simple verb or adjective (RUN, BIG). They may dictate a longer "story" to the teacher, "Write that I played on the computer and made the rabbit pop up in five holes!"

Children expand their consciousness beyond the present. When they reflect, children use what educator Anthony Pellegrini (1986) called the language of absence, "language that takes people away from their immediate surroundings" (p. 83). Preschoolers consciously look back in time and search for the images and words to express their interpretation of the near past. Their ability to look farther back, add detail, and sequence events expands with development.

70.16 How Adults Support Children's Reflection

Reflection does not come naturally to children. However, with minimal encouragement, they are eager to share their activities and thoughts. Adults in HighScope programs use the following strategies to support this review process.

Adults invite children to talk about what they have done. Simply showing an interest in what children did at work time encourages them to recall and share their experiences. Having played as partners, adults can open the conversation by mentioning something they observed a child do and then encourage the child to continue the narrative. As with planning strategies, children who are not yet verbal (or ELL or have special needs) might reply to adults' conversational openers with facial expressions or gestures. However, when a child responds, the teacher shows interest.

Adults use questions thoughtfully and sparingly. While a question helps to begin the recall process, questioning generally put adults rather than children in control of the conversation. HighScope teachers therefore ask questions sparingly and use open-ended language, such as "How did you do that?" and "Why did you decide to use tape instead of glue?"

Adults acknowledge (rather than praise) children's work-time experiences. Adults often use praise as a management tool or to boost children's self-esteem. However, praise steals a child's sense of accomplishment (Kohn 1993) and decreases intrinsic motivation (Filcheck et al. 2004). Instead, HighScope teachers emphasize children's efforts and what they are learning, not whether the adult is pleased. For example, the teacher might repeat the colors a child recalled using rather than saying, "I liked the picture you painted."

Active participatory learning and the plan-do-review sequence are at the heart of the HighScope Curriculum. They help young children develop initiative, self-confidence, responsibility, and problems-solving skills. Despite the evidence supporting this claim (see Evidence of Effectiveness), HighScope is occasionally met with skepticism about the appropriateness of preschoolers planning and reflecting as part of their play. Some ask whether making plans runs counter to children's natural spontaneity. Planning makes play more purposeful (Sylva 1992) but not less spontaneous. In fact, by pursuing goals they have set for themselves, children are often more spontaneous—less repetitive and conventional—in their choice of materials, the way they use them, and how they engage with others as they work to fulfill their desires. As to whether preschoolers are capable of recall, we can look to the recent addition of "history" as a component of social studies in the early childhood curriculum. Young children are very interested in the past, provided it relates to them. Children enjoy sharing with others what they did and what they learned. Research on decontextualized talk (e.g., Dickinson and Tabors 2001) supports the assertion that preschoolers can and do talk about the "there and then," as well as the "here and now."

The children work in centers with a specific purpose. They carry out plans to completion and are very happy. This happiness is reflected throughout their discus-

sions, [in] how they get along with peers and adults, [and in] talking and explaining to their parents at pick-up time what their day was like—HighScope Teacher.

The last section of this chapter describes the evidence in support of the curriculum's effectiveness, which these signature features help to explain.

70.17 Evidence for the Effectiveness of the HighScope Curriculum

Four studies provide key evidence of the value of the HighScope Preschool Curriculum. Together they found that:

A preschool program using HighScope had lifetime program effects and large economic return on investment.

HighScope had education effects as good as other preschool curricula, but did better than Direct Instruction in preventing emotional disturbance in school and commission of felonies in early adulthood.

HighScope training had positive effects on teacher trainers, teachers, and children.

HighScope had stronger effects than other curricula in Head Start classrooms on children's literacy and social skills.

70.18 The HighScope Perry Preschool Study

David Weikart and his colleagues in the Ypsilanti, Michigan, Public Schools operated the HighScope Perry Preschool program for 3- and 4-year-olds living in poverty to help them avoid school failure and related problems. They embedded the program in an experimental study to determine its effects. Project staff identified 123 young African-American children living in poverty and assessed to be at high risk of school failure and randomly assigned about half of them to a no-program group that received no preschool program and the other half to a program group that received a high-quality preschool program using the HighScope Curriculum. They collected data on both groups annually from ages 3 through 11, at ages 14, 15, 19, 27, and again at age 40 (Schweinhart et al. 2005). An age 50 study is underway.

The variety of findings of program effects through age 40 spans the domains of education, economic performance, crime prevention, and family and health. All findings reported herein for this study are statistically significant with a probability of less than .05, using a one-tailed test because the obvious direction of the hypothesis is that the preschool program group is doing better than the no-program group, not vice versa. Figure 70.1 presents group differences for these variables.

The study's internal validity is strong because of the random assignment of study participants to the program and no-program groups. Heckman et al. (2010a) reanalyzed the study using innovative statistical procedures to correct for the study's

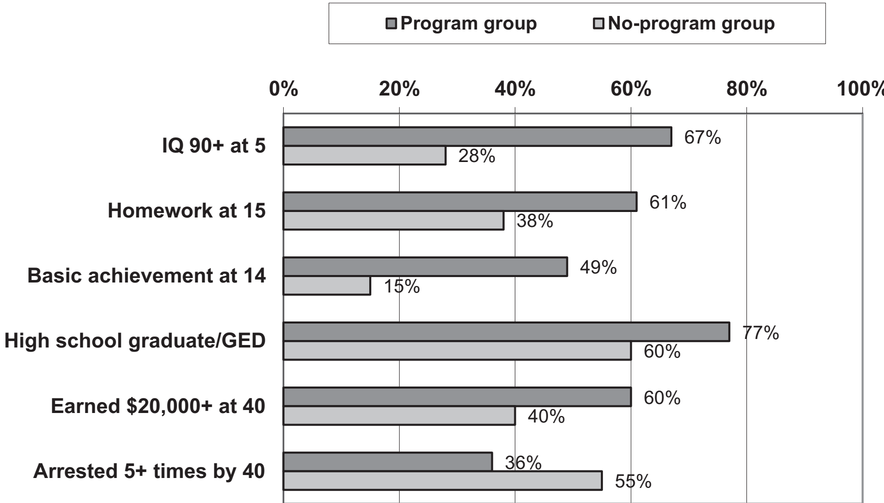

Fig. 70.1 Major findings: HighScope Perry Preschool Study at 40

small sample size, departures from random assignment, and multiple hypothesis testing. Their reanalysis confirms the program's pattern of short- and long-term effects. It reaffirms the study's internal validity and provides even greater scientific confidence in its results.

More of the program group than the no-program group graduated from high school or received a GED. This difference was due to a 42 percentage-point difference between program and no-program females in high school graduation rate. This difference was related to earlier differences between program and no-program females in the rates of treatment for mental impairment and retention in grade. Earlier, the program group outperformed the no-program group on various intellectual and language tests from their preschool years up to age 7, school achievement tests at 7–14, and literacy tests at 19 and 27. The program group had better attitudes toward school than the no-program group as teens, and program-group parents had better attitudes toward their teen children's schooling than did no-program-group parents. The preschool program affected children's performance and attitudes, regardless of their gender, but this common effect seems to have led school staff to track girls, but not boys. As will be seen, however, the program had long-term effects on boys as well.

At 27 and 40, more of the program group than the no-program group were employed, and the program group had higher median earnings than the no-program group, both annually and monthly. More of the program group than the no-program group owned their own homes and had a car at 27 and 40. At 40, significantly more of the program group than the no-program group had a savings account. At 27, fewer in the program group than the no-program group reported receiving social services at some time in the previous 10 years.

By 40, fewer in the program group than the no-program group were arrested five or more times, and a fewer were arrested for violent, property, or drug crimes, particularly dangerous drug possession, assault and battery, and larceny under $100. Fewer in the program group were sentenced to time in prison or jail by 40.

More program than no-program males raised their own children. The two oldest children of those in the program group did not differ significantly from the two oldest children of those in the no-program group in education, employment, arrests, or welfare status. At 40, more of the program group than the no-program group said they were getting along very well with their family.

In constant 2012 dollars discounted at 3%, the estimated economic return to society for the program was $318,402 per participant on an investment of $19,725 per participant—$16.14 per dollar invested. A reanalysis by Heckman et al. (2010b) estimated a return of $7.10 per dollar invested. Four-fifths of that return went to the general public, and one-fifth went to each participant. Most of the public return came from crime savings, and the rest came from education and welfare savings and increased taxes due to higher earnings. Most of the public return was due to males, because of the large program effect of reducing male crime. This finding for males stands in stark contrast to the large program effect on the high school graduation rates of females. Preschool program participants earned 14% more per person than they would have otherwise. Male program participants cost the public 41% less in crime costs per person, $953,202 less in undiscounted 2012 dollars over their lifetimes.

An important question raised by this study is whether a preschool program must use the HighScope Curriculum or could use some other educational model in order for its participants to experience long-term benefits. This question led to the next study.

This study shows that a high-quality preschool program using the HighScope Curriculum contributes lasting benefits to the development of young children born in poverty, benefits that affect their adult economic status and social responsibility. More generally, it shows that early childhood education can make an important contribution to the lives of all children. But it does not show that this contribution is specifically attributable to the HighScope Curriculum. This question led to the next study.

70.19 The HighScope Preschool Curriculum Comparison Study

The HighScope Preschool Curriculum Comparison Study (Schweinhart and Weikart 1997a, b) suggests that curriculum has a lot to do with a preschool program's long-term benefits. Since 1967, the study has followed the lives of 68 young people born in poverty who were randomly assigned at ages 3 and 4 to one of three groups, each experiencing a different curriculum model.

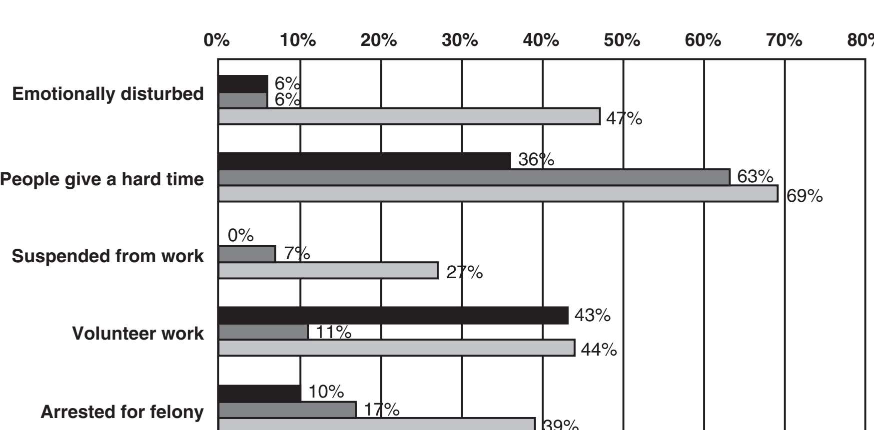

Fig. 70.2 Major findings: HighScope Preschool Currriculum Study at 23

In the Direct Instruction model, teachers followed a script to directly teach children academic skills, rewarding them for correct answers to the teacher's questions.

In the HighScope Curriculum model, teachers set up the classroom and the daily routine so children could plan, do, and review their own activities and engage in key active-learning experiences.

In the traditional Nursery School model, teachers responded to children's self-initiated play in a loosely structured, socially supportive setting.

Except for the curriculum model, all aspects of the program were nearly identical (class size, teacher-child ratio, length of treatment, and so on). The findings presented here are corrected for differences in the gender makeup of the groups.

Figure 70.2 presents the major findings of this study at age 23. By age 23, the HighScope and Nursery School groups had ten significant advantages over the Direct Instruction group. However, the HighScope and Nursery School groups, after controlling for gender makeup, did not differ significantly from each other on any outcome variable (Schweinhart and Weikart 1997b).

By age 23, the HighScope and Nursery School groups both had two significant advantages over the Direct Instruction group:

Only 6% of either group needed treatment for emotional impairment or disturbance during their schooling, as compared to 47% of the Direct Instruction group.

Forty-three percent of the HighScope group and 44% of the Nursery School group had ever done volunteer work, as compared to 11% of the Direct Instruction group.

The HighScope group had six additional significant advantages over the Direct Instruction group:

Only 10% had ever been arrested for a felony, as compared to 39% of the Direct Instruction group.
None had ever been arrested for a property crime, as compared to 38% of the Direct Instruction group.
Twenty-three percent reported at age 15 that they had engaged in ten or more acts of misconduct, as compared to 56% of the Direct Instruction group.
Thirty-six percent said that various kinds of people gave them a hard time, as compared to 69% of the Direct Instruction group.
Thirty-one percent of the group had married and were living with their spouses, as compared to none of the Direct Instruction group.
Seventy percent planned to graduate from college, as compared to 36% of the Direct Instruction group.

The Nursery School group had two additional significant advantages over the Direct Instruction group:

Only 9% had been arrested for a felony at ages 22–23, as compared to 34% of the Direct Instruction group.
None of them had ever been suspended from work, as compared to 27% of the Direct Instruction group.

Through age 10, the main finding of this study had been that the overall average IQ of the three groups rose 27 points from a borderline impairment level of 78 to a normal level of 105 after 1 year of their preschool program and subsequently settled in at an average of 95, still at the normal level. The only curriculum group difference through age 10 was measured as the preschool programs ended: the average IQ of the Direct Instruction group was significantly higher than the average IQ of the Nursery School group (103 vs. 93). Throughout their school years, curriculum groups did not differ significantly in school achievement, nor did their high school graduation rates differ significantly. The conclusion at that time was that well-implemented preschool curriculum models, regardless of their theoretical orientation, had similar effects on children's intellectual and academic performance. Time has proved otherwise. Scripted Direct Instruction, the passive model described at the beginning of this chapter and touted by some as the surest path to school readiness, seems to purchase a temporary improvement in academic performance at the cost of a missed opportunity for improvement in long-term citizenship and life success.

However, the sample for this study was small, and its conclusions call for replication in larger studies.

70.20 The Training for Quality Study

The HighScope Training for Quality Study (Epstein 1993, 1999) offers evidence of the effectiveness of the HighScope preschool education model as practiced throughout the USA today. This multi-study national evaluation surveyed 203 certified HighScope teacher trainers, surveyed and systematically observed the classrooms of 244 HighScope and 122 comparison teachers operating under diverse auspices (Head Start, public school, private nonprofit, and for-profit settings) and serving diverse populations (varying in ethnicity, family income, geographic location, and so on), and systematically observed and tested 97 HighScope and 103 comparison children in these classrooms.

HighScope and comparison classrooms differed significantly in classroom environment, daily routine, adult-child interaction, and overall quality of implementation, as assessed by the HighScope Program Implementation Profile (a precursor of the PQA; HighScope, 1989) adapted for generic use. In programs that had HighScope training, there were significantly better supervisory and teaching practices than in non-HighScope settings. Independent observers rated the HighScope classrooms as higher on the following dimensions: overall program quality, organizing and labeling the room to promote children's independence, providing diverse materials that were easily accessible to children, encouraging children to plan activities based on their interests, encouraging children to review and reflect on their actions and experiences, and using observations and open-ended questions to extend children's play.

Furthermore, children in HighScope programs outscored their non-HighScope peers in initiative, social relations, cognitive development, motor development, and overall development. The findings especially showcased the importance of the plan-do-review sequence in children's learning. The more teachers provided opportunities for children to plan and review activities of their own choice—a hallmark of the HighScope Curriculum—the higher children scored on measures of the academic and social skills needed for school success. Independent research in other countries confirms that preschool children attending HighScope programs do better than those in other settings. Studies in the UK (Sylva 1992) and the Netherlands (Veen et al. 2000) found that when children plan, carry out, and review their own learning activities, they play with more purpose and perform better on measures of language and intellectual development.

This study provides a variety of evidence of the effectiveness of HighScope Curriculum training, but it was not experimentally designed with random assignment of teachers or children so its findings are suggestive rather than definitive.

70.21 The Head Start FACES Study

The Head Start Family and Child Experiences Survey (FACES; Zill et al. 2003) was a study of a national random sample of Head Start programs. The first cohort of 3200 children entered Head Start in Fall 1997; the second cohort of 2800 children entered Head Start in Fall 2000.

Conducted independently of the HighScope Foundation, the FACES study found that 4-year-olds in Head Start classes that used the HighScope Curriculum improved from fall to spring in letter and word identification skills and cooperative classroom behavior and decreased their behavior problems (Zill et al. 2003).

On a scale of letter and word recognition, children in HighScope classes registered a highly significant gain ($p < 0.01$) of 12.6 scale points, significantly more ($p < 0.05$) than children in other classes.

On teacher ratings of cooperative classroom behavior, children in HighScope classes experienced a highly significant gain ($p < 0.01$) of half a standard deviation, significantly more ($p < 0.05$) than children in other classes.

On teacher ratings of total behavior problems, particularly hyperactive behavior problems, children in HighScope classes dropped significantly ($p < 0.05$) during the year, significantly more ($p < 0.05$) than did children in other classes.

Of the 91% of the teachers who used one or more curriculum models, 39% used Creative Curriculum, 20% used HighScope, and 41% used some other curriculum, such as High Reach, Scholastic, or Los Cantos Los Ninos. The quality of Creative Curriculum and HighScope classes was significantly higher than the quality of classes that used other curricula, particularly with respect to language. On a quality composite, the average scores for HighScope and Creative Curriculum were nearly half a standard deviation higher than the average scores for other curricula—clearly an educationally meaningful difference.

It is striking that any curriculum results were found in this study, given that the curriculum models used were simply declared rather than having their proper usage confirmed by observers.

Taken together, these studies make a strong case that the HighScope Curriculum contributes greatly to children's development throughout their lives. The HighScope Perry Preschool Study presents evidence that a preschool program using the HighScope Curriculum prepares young children living in poverty for schooling and leads them to greater commitment to school and school achievement. As a result, they achieve a higher level of educational attainment and greater adult earnings and commit fewer crimes. The HighScope Preschool Curriculum Comparison Study shows that while preschool programs can do a good job of preparing young children living in poverty for school whether they use HighScope or Direct Instruction, it is the HighScope Curriculum that provides the crucial ingredients that prevent later emotional problems and commission of crimes. The Training for Quality Study shows that HighScope trainers can train teachers to implement successful HighScope preschool programs; in other words, the HighScope Curriculum can go beyond demonstration programs to full-scale, service programs. It also demonstrates the critical role that the plan-do-review sequence plays in promoting early leaning. The independently conducted Head Start FACES Study shows that Head Start teachers who use the HighScope Curriculum contribute to children's literacy and social skills to a greater extent than other Head Start teachers do. Founded on strong theoretical roots, implemented by well-trained practitioners, and evaluated with validated assessment procedures, the HighScope Curriculum is a powerful model of early education in the USA and abroad.

References

American Academy of Pediatrics. (2006). *The importance of play in promoting healthy child development and maintaining strong parent-child bonds. Clinical report*. Elk Grove Village: American Academy of Pediatrics. doi:10.1542/peds.2006-2697.

Benson, J. B. (1997). The development of planning: It's about time. In S. L. Friedman & E. L. Scholnick (Eds.), *The developmental psychology of planning: Why, how, and when do we plan?* (pp. 43–75). Mahwah: Lawrence Erlbaum.

Bergen, B. (1988). Stages of play development. In D. Bergen (Ed.), *Play as a medium for learning and development* (pp. 27–44). Portsmouth: Heinemann.

Berry, C. F., & Sylva, K. (1987). *The plan-do-review cycle in HighScope: Its effects on children and staff. The plan-do-review cycle in HighScope: Its effects on children and staff*. Unpublished manuscript, available from HighScope Educational Research Foundation, Ypsilanti, MI, USA.

Black, J. E., Jones, T. E., Nelson, C. A., & Greenough, W. T. (1998). Neuronal plasticity and the developing brain. In N. E. Alessi, J. T. Coyle, S. I. Harrison, & S. Eth (Eds.), *Handbook of child and adolescent psychiatry*, *Basic science and psychiatric treatment* (Vol. 6, pp. 31–53). New York: Wiley.

Bodrova, E., & Leong, D. (2007). *Tools of the mind: The Vygotskian approach to early childhood education* (2nd ed.). New York: Prentice Hall.

Bolles, E. B. (1988). *Remembering and forgetting: An inquiry into the nature of memory*. New York: Walker and Company.

Bourtchouladze, R. (2002). *Memories are made of this: How memory works in humans and animals*. New York: Columbia University Press.

Bredekamp, S. (2010). Learning and cognitive development. In V. Washington & J. D. Andrews (Eds.), *Children of 2020: Creating a better tomorrow*. Washington, DC: Council for Professional Recognition.

Brown, S., & Vaughn, C. (2009). *Play: How it shapes the brain, opens the imagination, and invigorates the soul*. New York: Penguin Group.

Bruner, J. S. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Case, R. (1985). *Intellectual development: Birth to adulthood*. Orlando: Academic Press.

Clements, D. H. (2004). Major themes and recommendations. In D. H. Clements, J. Sarama, & A.-M. DiBiase (Eds.), *Engaging young children in mathematics: Standards for early childhood mathematics education* (pp. 7–72). Mahwah: Lawrence Erlbaum.

Copple, C., & Bredekamp, S. (2008). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3rd ed.). Washington, DC: National Association for the Education of Young Children.

Damon, W. (2002). *The roots of character and the role of community. The roots of character and the role of community*. Paper presented at the White House Conference on Character and Community. http://www2.ed.gov/admins/lead/safety/character/damon.doc

DeVries, R., & Kohlberg, L. (1987/1990). *Contructivist early education: Overview and comparison with other programs*. Washington, DC: National Association for the Education of Young Children.

Dewey, J. (1902). *The child and the curriculum*. Chicago: University of Chicago Press.

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: Heath.

Dewey, J. (1938/1963). *Experience and education*. New York: Macmillan.

Dickinson, D. K., & Smith, M. W. (1994). Long-term effects of preschool teachers' book reading on low-income children's vocabulary and story comprehension. *Reading Research Quarterly, 29*(2), 105–122.

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Baltimore: Brookes.

Eisner, E. W. (1990). The role of art and play in children's cognitive development. In E. Klugman & S. Smilansky (Eds.), *Children's play and learning: Perspectives and policy implications* (pp. 43–58). New York: Teachers College Press.

Ellis, M. J. (1988). Play and the origin of species. In D. Bergen (Ed.), *Play as a medium for learning and development* (pp. 23–25). Portsmouth: Heinemann.
Epstein, A. S. (1993). *Training for quality: Improving early childhood programs through systematic inservice training*. Ypsilanti: HighScope Press.
Epstein, A. S. (1999). Pathways to quality in Head Start, public school, and private non-profit early childhood programs. *Journal of Research in Childhood Education, 13*(2), 101–119.
Epstein, A. S. (2003). How planning and reflection develop young children's thinking skills. *Young Children, 58*(5), 28–36.
Epstein, A. S. (2007a). *The intentional teacher: Choosing the best strategies for young children's learning*. Washington, DC: National Association for the Education of Young Children.
Epstein, A. S. (2007b). *Essentials of active learning in preschool: Getting to know the HighScope Curriculum* (1st ed.). Ypsilanti: HighScope Press.
Epstein, A. S. (2012a). *Approaches to learning*. Ypsilanti: HighScope Press.
Epstein, A. S. (2012b). *Creative arts*. Ypsilanti: HighScope Press.
Epstein, A. S. (2012c). *Language, literacy, and communication*. Ypsilanti: HighScope Press.
Epstein, A. S. (2012d). *Mathematics*. Ypsilanti: HighScope Press.
Epstein, A. S. (2012e). *Physical development and health*. Ypsilanti: HighScope Press.
Epstein, A. S. (2012f). *Science*. Ypsilanti: HighScope Press.
Epstein, A. S. (2012g). *Social and emotional development*. Ypsilanti: HighScope Press.
Epstein, A. S. (2012h). *Social studies*. Ypsilanti: HighScope Press.
Epstein, A. S. (2013). *Essentials of active learning in preschool: Getting to know the HighScope Curriculum* (2nd ed.). Ypsilanti: HighScope Press.
Epstein, A. S., & Hohmann, M. (2012). *The HighScope Preschool Curriculum*. Ypsilanti: HighScope Press.
Erikson, E. (1950). *Childhood and society*. New York: Norton.
Fewson, S. (2008, Fall/Winter). *HighScope in the elementary school classroom* (pp. 10–16). HighScope ReSource.
Filcheck, H. A., McNeil, C. B., Greco, L. A., & Bernard, R. S. (2004). Using a whole-class token economy and coaching of teacher skills in a preschool classroom to manage disruptive behavior. *Psychology in the Schools, 41*, 351–361.
Flavell, J. H. (1963). *The developmental psychology of Jean Piaget*. D. Van Nostrand Company: Princeton.
Friedman, H. S., & Martin, L. R. (2011). *The longevity project: Surprising discoveries for health and long life from the landmark eight-decade study*. New York: Hudson Street Press.
Gelman, R., & Brenneman, K. (2004). Science learning pathways for young children. *Early Childhood Research Quarterly, 19*(1), 150–158. doi:10.1016/j.ecresq.2004.01.009.
Goswami, U. (Ed.). (2002). *Blackwell handbook of child cognitive development*. Malden: Blackwell.
Gronlund, G. (2006). *Making early learning standards come alive*. St. Paul/Washington, DC: Redleaf Press/National Association for the Education of Young Children.
Hart, B., & Risley, T. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore: Brookes.
Hart, B., & Risley, T. (1999). *The social world of children learning to talk*. Baltimore: Brookes.
Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P. A., & Yavitz, A. Q. (2010a). Reanalysis of the Perry Preschool Program: Multiple-hypothesis and permutation tests applied to a quasi-randomized experiment. *Quantitative Economics, 1*, 1–49.
Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P. A., & Yavitz, A. (2010b). The rate of the return to the HighScope Perry Preschool Program. *Journal of Public Economics, 94*, 114–128.
HighScope Educational Research Foundation. (1989). *Program Quality Assessment*. Ypsilanti: HighScope Press.
HighScope Educational Research Foundation. (2000). *Infant-toddler child observation record*. Ypsilanti: HighScope Press.
HighScope Educational Research Foundation. (2003a). *Preschool program quality assessment* (2nd ed.). Ypsilanti: HighScope Press.

HighScope Educational Research Foundation. (2003b). *Preschool child observation record*. Ypsilanti: HighScope Press.
HighScope Educational Research Foundation. (2011). *Infant-toddler program quality assessment*. Ypsilanti: HighScope Press.
HighScope Educational Research Foundation. (2009). *Family child care program quality assessment* (2nd ed.). Ypsilanti: HighScope Press.
HighScope Educational Research Foundation, & Red-E-Set-Grow (2012). OnlinePQA (Computerized assessment system). Online at http://www.onlinepqa.net/
HighScope Educational Research Foundation, & Red-E-Set-Grow. (2013). COR Advantage. Online at http://www.onlinecor.net/
Hohmann, M., & Weikart, D. P. (1995). *Educating young children: Active learning practices for preschool and child care programs* (1st ed.). Ypsilanti: HighScope Press.
Hohmann, M., & Weikart, D. P. (2002). *Educating young children: Active learning practices for preschool and child care programs* (2nd ed.). Ypsilanti: HighScope Press.
Hohmann, M., Banet, B., & Weikart, D. P. (1979). *Young children in action: A manual for preschool educators*. Ypsilanti: HighScope Press.
Hohmann, M., Weikart, D. P., & Epstein, A. S. (2008). *Educating young children: Active learning practices for preschool and child care programs* (3rd ed.). Ypsilanti: HighScope Press.
Howes, C. (1988). *Peer interactions of young children. Monographs of the Society for Research in Child Development* (Serial No. 217, Vol. 53, No. 1).
Hunt, J. M. V. (1961). *Intelligence and experience*. New York: The Ronald Press Company.
Kagan, M., & Kagan, S. (2003). *The five major memory systems SmartCard*. San Clemente: Kagan Publishing.
Kohn, A. (1993). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes*. Boston: Houghton, Mifflin.
National Association for the Education of Young Children. (2005). *Early childhood program standards and accreditation performance criteria*. Washington, DC: National Association for the Education of Young Children.
National Research Council. (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academies Press.
National Research Council. (2005). *Mathematical and scientific development in early childhood*. Washington, DC: National Academies Press.
National Research Council & Institute of Medicine. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academies Press.
Parten, M. B. (1932). Social participation among preschool children. *Journal of Abnormal and Social Psychology, 27*(3), 243–269.
Pellegrini, A. D. (1986). Communicating in and about play: The effect of play centers on preschoolers' explicit language. In G. Fein & M. Rivkin (Eds.), *Reviews of research* (Vol. 4, pp. 79–91). Washington, DC: National Association for the Education of Young Children.
Piaget, J., & Inhelder, B. (1966/1969). *The psychology of the child*. New York: Basic Books.
Pianta, R. C. (2003). *Standardized classroom observations from pre-k to 3rd grade: A mechanism for improving access to consistently high quality classroom experiences and practices during the P–3 years*. New York: Foundation for Child Development.
Post, J., Hohmann, M., & Epstein, A. S. (2011). *Tender care and early learning: Supporting infants and toddlers in child care settings* (2nd ed.). Ypsilanti: HighScope Press.
Rothbart, M. K., Sheese, B. E., & Posner, M. (2007). Executive function and effortful control: Linking temperament, brain networks, and genes. *Child Development Perspectives, 1*(1), 2–7.
Rowe, S. M., & Wertsch, J. V. (2002). Vygotsky's model of cognitive development. In U. Goswami (Ed.), *Blackwell handbook of child cognitive development* (pp. 539–554). Malden: Blackwell.
Schank, R. C. (1990). *Tell me a story: A new look at real and artificial memory*. New York: Scribner.
Schweinhart, L. J., & Weikart, D. P. (1997a). *Lasting differences: The HighScope Preschool Curriculum Comparison Study through age 23* (Monographs of the HighScope Educational Research Foundation, 12). Ypsilanti: HighScope Press.

Schweinhart, L. J., & Weikart, D. P. (1997b). The HighScope Preschool Curriculum Comparison Study through age 23. *Early Childhood Research Quarterly, 12*, 117–143.
Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C., & Nores, M. (2005). *Lifetime effects: The HighScope Perry Preschool Study through age 40* (Monographs of the HighScope Educational Research Foundation, 13). Ypsilanti: HighScope Press.
Shore, R. (2003). *Rethinking the brain: New insights into early development* (Rev ed.). New York: Families and Work Institute.
Smetana, J. G. (2006). Social domain theory: Consistencies and variations in children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 119–154). Mahwah: Erlbaum.
Smilansky, S., & Shefatya, L. (1990). *Facilitating play: A medium for promoting cognitive, socio-emotional and academic development in young children*. Gaithersburg: Psychosocial & Educational Publications.
Smith, L. (2002). Piaget's model. In U. Goswami (Ed.), *Blackwell handbook of child cognitive development* (pp. 515–537). Malden: Blackwell.
Sylva, K. (1992). Conversations in the nursery: How they contribute to aspirations and plans. *Language and Education, 6*(2), 141–148.
Thompson, R. A., & Nelson, C. A. (2001). Developmental science and media: Early brain development. *American Psychologist, 56*(1), 5–15. doi:10.1037//0003-066X.56.1.5.
Tomasello, M., & Farrar, M. (1986). Joint attention and early language. *Child Development, 57*(6), 1454–1463.
US Department of Health and Human Services, Administration for Chldren and Families, Hear Start Bureau. (2002, October). *Program Performance Standards and other regulations*. Washington, DC: US Government Printing Office.
Veen, A., Roeleveld, J., & Leseman, P. (2000). *Evaluatie van Kaleidoscoop en Piramide Eindrapportage*. Amsterdam: SCO Kohnstaff Instituut, Universiteit van Amsterdam.
Vincent, P., & Grove, D. (2012). Character education: A primer on history, research, and effective practices. In P. M. Brown, M. W. Corrigan, & A. Higgins-D'Alessandro (Eds.), *Handbook of prosocial education* (pp. 115–136). Lanham: Rowman & Littlefield Publishers.
Vygotsky, L. S. (1934/1962). *Thought and language*. Cambridge, MA: MIT Press.
Weikart, D. P., Rogers, L., Adcock, C., & McClelland, D. (1971). *The cognitively oriented curriculum: A framework for preschool teachers*. Urbana: University of Illinois.
Weist, R. M. (1989). Time concepts in language and thought: Filling the Piagetian void from two to five years. In I. Levin & D. Zakay (Eds.), *Time and human cognition: A life-span perspective* (pp. 63–118). North-Holland: Elsevier.
Worth, K. & Grollman, S. (2003). *Worms, shadows, and whirlpools: Science in the early childhood classroom*. Portsmouth/Washington, DC: Heinemann/National Association for the Education of Young Children.
Zelazo, P. D., & Mueller, U. (2002). Executive function in typical and atypical development. In U. Goswami (Ed.), *Blackwell handbook of child cognitive development* (pp. 445–469). Malden: Blackwell.
Zelazo, P. D., Muller, U., Frye, D., & Marcovitch, S. (2003). The development of executive function. *Monographs of the Society for Research in Child Development*, *68*(3), (Serial No. 274). doi:10.1111/j.0037-976X.2003.00261.x
Zill, N., Resnick, G., Kim, K., O'Donnell, K., Sorongon, A., McKey, R. H., Pai-Samant, S., Clark, C., O'Brien, R., & D'Elio, M. A. (2003). *Head Start FACES (2000): A whole child perspective on program performance – Fourth progress report*. Prepared for the Administration for Children and Families, U.S. Department of Health and Human Services (DHHS) under contract HHS-105-96-1912, Head Start Quality Research Consortium's Performance Measures Center. Retrieved February 8, 2013, at http://www.acf.hhs.gov/sites/default/files/opre/faces00_4thprogress.pdf

Chapter 71
Developmentally Appropriate Practice in the Twenty-First Century

Kay Sanders and Flora Farago

Abstract Developmentally appropriate practice (DAP) is a set of early childhood curricular recommendations published by the National Association for the Education of Young Children (NAEYC). DAP was introduced in the United States in the late 1980s through Bredekamp's (1987) seminal work, "Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8." Since the initial publication, DAP has been widely accepted as the standard for early childhood educational practice in the United States and in Westernized countries around the world. Whereas proponents of DAP assert its positive influence on children, those more critical of DAP question whether it supports experiences for all young children equally. The aim of this chapter is to (a) describe a developmentally appropriate practice and its theoretical underpinnings, (b) to describe the conceptualization of the child and the role of the adult in DAP, and (c) to synthesize critiques of and recommended changes to DAP.

Keywords Developmentally appropriate practice • Culturally appropriate practice • Early childhood education • NAEYC • Child-centered curriculum • Piaget • Vygotsky • Developmental psychology • Constructivism

71.1 Introduction

Developmentally appropriate practice (DAP) is a set of early childhood curricular recommendations published by the National Association for the Education of Young Children (NAEYC). DAP was introduced in the United States in the late 1980s through Bredekamp's (1987) seminal work, "Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8."

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Since the initial publication, DAP has been widely accepted as the standard for early childhood educational practice in the United States and in Westernized countries around the world. Whereas proponents of DAP assert its positive influence on children (e.g., Charlesworth 1998; Dunn and Kontos 1997), those more critical of DAP question whether it supports experiences for all young children equally (e.g., Bloch 1992; for a review see Brown and Lan 2015; Grieshaber and Cannella 2001; Langford 2010; Lubeck 1998; Mallory and New 1994). The aim of this chapter is to (a) describe a developmentally appropriate practice and its theoretical underpinnings, (b) to describe the conceptualization of the child and the role of the adult in DAP, and (c) to synthesize critiques of and recommended changes to DAP.

71.2 History of DAP: What Has Changed?

Since its initial publication in the late 1980s, the authors of DAP revised the volume twice, most recently in 2009. DAP represents a "framework for best practice" in early childhood settings that "promotes young children's optimal learning and development" (NAEYC Position Statement on DAP 2009, p. 1). DAP is and has always been a child-centered pedagogy, undergirded by Piagetian cognitive-developmental principles, and this has not changed much throughout the years (Dickinson 2002; Langford 2010). However, advances in research and demographic changes have affected the interpretations of what is appropriate practice (Dickinson 2002); throughout the years, focus has shifted to ensuring that early childhood practice serves the needs of all children. Specific examples of how DAP has been broadened to expand the definition of appropriate practice are outlined next.

Initially, the NAEYC Position Statement on DAP (1986) warned against the increasing academic pressures placed on early childhood educators. However, 10 years later, emphasis turned to programs serving children and families from diverse cultural and linguistic backgrounds and accommodating children with disabilities (NAEYC 1996). In the most recent position statement (NAEYC 2009), DAP places increased emphasis on issues of inclusivity, such as home language, culture, and second-language learning (Cochran 2007). DAP encourages teachers to ensure that classroom experiences are "responsive to all children and their needs – including children who are English language learners, have special needs or disabilities, live in poverty or other challenging circumstances, or are from different cultures" (NAEYC 2009, pp. 19–20). Additionally, teachers are urged to encourage inclusive behaviors and interactions among peers (NAEYC 2009, p. 20). In the most recent position statement, emphasis is placed on reducing learning gaps and increasing the achievement of all children (NAEYC 2009, pp. 2–3). Teachers are encouraged to provide special assistance to children who "may have missed some of the learning opportunities necessary for school success" (p. 19), such as children from low-income households.

In addition to increased emphasis on inclusivity and cultural diversity over the years, DAP has been revised to acknowledge the complexity of early childhood practice. In the first edition, developmentally appropriate and inappropriate practices were presented as polar opposites; a practice was presented as either appropriate or inappropriate (Bredekamp 1987). In the second edition, the "either/or" discourse was replaced with "both/and" terminology to reflect the multifaceted nature of early childhood practice (Bredekamp and Copple 1997). Another major theoretical shift over the years has been conveying that learning is not an individualized process, as presented in the first edition of DAP (i.e., Bredekamp 1987). Later editions (i.e., Bredekamp and Copple 1997; Copple and Bredekamp 2009) emphasize the roles of culture, community, and relationships in children's learning. For instance, in the second edition, the term "creating a caring community of learners" was introduced (Bredekamp and Copple 1997), and in the third edition, additional emphasis is placed on the importance of developing positive and secure relationships with adults and peers (Copple and Bredekamp 2009).

Despite changes throughout the past 28 years, scholars continue to question whether the principles of child development and learning which undergird DAP can be universally applied to all children across the world (e.g., see Brown and Lan 2015; Grieshaber and Cannella 2001; Ryan and Grieshaber 2004). The issues of whether and how DAP meets the multifaceted needs of culturally and linguistically diverse children across the world remain a controversial one (e.g., Adair and Bhaskaran 2010; see Brown and Lan 2015; Hedge and Cassidy 2009; Langford 2010). One question that immediately comes to mind is what does the term "developmentally appropriate" mean? Does "appropriate" look identical across contexts? Who benefits from appropriate and who defines it? These were some of the questions raised by reconceptualist scholars in the early 1990s (see Swadener and Kessler 1991) and continue to be raised by scholars today.

71.2.1 What Is Developmentally Appropriate?

A developmentally appropriate pedagogy is a program that takes a developmental approach toward the education of young children. It applies to aspects of an early childhood program such as the materials and furniture provided and the activities and interactions between adults and children. All the experiences within this program should be developmentally appropriate. What this means is that the early childhood environment and what occurs in it need to be structured to accommodate both the developmental age and stage of the children. DAP relies on three assumptions to guide decision-making regarding what is appropriate practice: (a) research in developmental psychology is a valid source of children's learning, (b) individual pathways are evident in developmental research results, and (c) programs must be sensitive toward the social and cultural context in which children develop (Bredekamp and Copple 1997; Copple and Bredekamp 2009).

71.2.2 *Reliance on Developmental Psychology Theories and Research*

Regarding the first assumption, DAP strongly relies on developmental psychological research and theory concerning childhood growth and development. Although there are several theories that undergird DAP, the Piagetian constructivist theory is the most pervasive theoretical foundation. The conceptualization of children's thinking according to Piagetian theory assumes that biological maturation must occur for children to process information about the world in a progressively sophisticated manner (Ginsburg and Opper 1988). From the Piagetian perspective, the maturation associated with thinking includes biological growth and direct, concrete experiences with the environment (Piaget 1960). When a child interacts with objects within the environment, dissonance between the direct experience and the former cognitive structures is created. Through this dissonance with what is understood versus what is experienced, children's cognition, when biologically ready, expands and grows into qualitatively distinct structures from one period to the next. Cognitive growth, therefore, is not a result of cognitive structures becoming better at processing information but rather a result of fundamental distinctions between cognitive structures from one stage to the next (Piaget 1960).

Piagetian theory is a theory of cognitive development, not of learning (Ginsburg and Opper 1988). Piaget was not as interested in how children learn but more interested in how their thinking becomes increasingly sophisticated as they mature. Translating this theory to learning, maturational readiness from the DAP perspective is central to childhood learning. A child's readiness for information or experience, therefore, is the key to developmental appropriateness. A child must be mature enough biologically to obtain the optimal learning experience from interaction with a physical object. Therefore, practices in early childhood environments should be in tune with the developmental levels present in the classroom. A learning experience that is beyond the child's biological maturational level is in contrast to DAP, while a learning experience that complements a child's maturational level is appropriate according to DAP. The term "in contrast" was introduced in the latest edition of DAP "…to aid reflection by helping readers see clearly the kinds of things that well-intentioned adults might do but that are not likely to serve children well" (Copple and Bredekamp 2009, p. 75).

To illustrate, a developmentally appropriate literacy activity for a group of preschool-age children is perceived to be appropriate when children are able to express freely their ideas after listening to a story by using a diverse array of materials and articulating in their own words their unique perspectives on the story. For example, a painting activity in which each child uses different colors of paint to create unique, individualized interpretations of the story may be part of this literacy activity. Once completed, the teacher may discuss the process and the picture with each child individually or in small groups and record the statements children make about their artwork. The emphasis is on the process of the activity and children's articulations of that process. During this activity, children experience creative

expression and the articulation of that creative expression through the teacher's focus on words, both verbal and written. This type of activity falls within the developmentally appropriate paradigm because of the adult's orientation toward the child's active involvement with the learning.

A literacy experience in contrast to DAP would be one which is perceived to be strongly teacher-driven. Perhaps the teacher requires the children to complete identical worksheets and forbids the use of their individual experiences and perspectives to motivate their work. All work is uniform, and the teacher's attention is focused more on the product rather than on the process; the work is either right or wrong, depending on the assessment of the teacher. In this instance, the child is not viewed as an autonomous and active participant in the learning process. Piagetian principles adapted to the learning context use the concept of "discovery learning," meaning that children must construct their understanding of the world by interacting concretely and actively with it. Therefore, developmentally appropriate activities are structured to allow for optimal interaction with the physical environment. The child should have ample opportunity to create a coherent understanding of the environment. In the practices that are in contrast to DAP, the child experiences instruction that dictates right versus wrong.

In addition to Piagetian constructivist theory, revised DAP also incorporates sociocultural or Vygotskian principles (Bredekamp and Copple 1997; Copple and Bredekamp 2009). Unlike Jean Piaget's (1896–1980) cognitive-developmental theory, Lev Vygotsky's (1896–1934) theory is a theory of learning rather than development. Vygotsky's primary focus was to articulate how children learn best. From this perspective, biological and environmental factors are still important. However, the role of culture in learning is distinctly highlighted. Unlike Piaget's theory, sociocultural theory assumes that nature and nurture manifest themselves through culture. Therefore, children acquire learning as a culturally mediated experience (Rogoff 2003; Vygotsky 1978). To illustrate, Saxe (1981), Saxe and Esmonde (2005) reported on the mathematical system of the Oksapmin of Papua New Guinea, who used a method of counting that incorporated 27 specific parts of the body to indicate quantity. An elbow, a finger, a wrist, etc. have a specific numerical meaning. This method of counting is a suitable and functional practice for the Oksapmin people, much like the Western, industrialized system of abstract counting and numeracy is a functional practice for the people of the United States and Europe. Culture, in both instances, structures the way in which biological maturation and environmental factors interact.

From a sociocultural perspective (Vygotsky 1978), learning occurs through social interaction, and children's learning becomes optimal when they are able to experience learning within what is referred to by sociocultural theorist as the zone of proximal development. Learning experiences that are just beyond the child's acquired abilities are seen as critical for learning. In other words, the assistance provided by a more advanced peer or a teacher extends slightly beyond the child's current abilities. The child is able to develop skills beyond the original level of functioning.

Translating this perspective to a DAP classroom, social activity, cultural sensitivity, and teacher engagement with learning are valued practices. In terms of social activity, DAP classrooms are contexts in which children have ample opportunity to work and play collaboratively with each other. Teachers are encouraged to structure the environment to allow for small and large groupings that "children informally create or the teacher organizes" (Bredekamp and Copple 1997, p. 125). According to the recommendations regarding appropriate practice, "as each child encounters what others in the group think, say, and create, the child's own knowledge and understanding grow and change" (p. 125).

During these social activities, teachers engage with children to extend their learning or, from a sociocultural perspective, seek opportunities to capitalize on children's learning by working within a child's zone of proximal development. A range of strategies are employed for this which include: modeling, asking questions, providing suggestions, adding complexity to a task, posing problems, coaching, and scaffolding. The intent behind these methods will "enable a child to consolidate learning and to move to the next level of functioning" (Bredekamp and Copple 1997, p. 128).

Cultural sensitivity is part of DAP, as well, and the emphasis on cultural sensitivity is consistent with a sociocultural perspective to a certain extent. It is unclear, however, whether the DAP philosophy perceives culture as mediating learning as outlined in sociocultural theory. Cultural bias is one of the main criticisms directed at DAP (see Brown and Lan 2015 for a review). Although DAP strives to be culturally sensitive toward divergent traditions and practices, and underscores that home culture and language should be part of the classroom culture, the values and culture of Western schooling remain predominant.

71.2.3 Sensitivity Toward Individual Pathways in Development

The second assumption underlying DAP is that, while developmental research indicates that there are sequences of development that are universal, individual pathways are also important. Child development research demonstrated fairly extensively the need to understand individual pathways of development. Brain research, for example, indicates that the development of complexity in brain structures is dependent upon the types of experiences an individual has, as well as upon genetic inheritance (National Research Council and Institute of Medicine 2000). Negative factors, such as, "toxic stress" (nutrition, maternal depression, family violence) can result in damage to brain structures (Garner et al. 2011). Research regarding infant sensorimotor development also indicates the importance of individual pathways. Body weight, environment, muscle mass and other highly individualized properties of musculature, daily experience, and several additional factors contribute to sensorimotor development. Because of the interplay of these factors, Esther Thelen (1941–2004) (2005) suggested that it is impossible to predict the development of children accurately. Therefore, development is not a genetic progression that is

primarily universal. Rather, the way in which development occurs is highly individualized and dependent upon multiple, nonlinear systems (Fischer and Paré-Blagoez 2000).

Translating this assumption into education, discovery learning remains a central feature of developmentally appropriate practice. The environment should be one that provides enough diversity in activities and materials to allow for children, at whatever their stage of development, to benefit educationally. During the early childhood period, development can be idiosyncratic (Kostelnick 1992; NAEYC Position Statement on Developmentally Appropriate Practice 2009). Two children of the same age can display different developmental capabilities and still be "on-track" developmentally. The pedagogy of developmental appropriateness is sensitive to the idiosyncrasy within each child's developmental progression and hence educational capabilities.

71.2.4 Connections to the Social and Cultural Context

The final assumption connected to DAP is that the social and cultural contexts in which children develop result in unique manifestations of particular practices and achievements. There are two theoretical formulations that support the third supposition of DAP, which include Uri Bronfenbrenner's (1917–2005) ecocultural theory (1979, 1995) and Barbara Rogoff's sociocultural theory (2003). Bronfenbrenner (1979) proposed a model of development in which the varying levels of interaction between the individual and society are an integral part of a person's development. According to Bronfenbrenner, development of the individual is situated within a web of concentric circles in which historical events, societal changes, institutions, and interpersonal interactions interact to influence development of the individual. Bronfenbrenner's ecocultural theory described these influences in terms of systems. There is the overarching macrosystem, which includes the cultural beliefs, norms, and policies of a society. Living in poverty, violence, and historical, systemic racism are macrosystem elements of growing up in poor, urban, ethnic minority communities in the United States. Within Bronfenbrenner's macrosystem is the exosystem or the settings that indirectly affect the environments that contain the developing person. In preschool programs, for example, there may be an administrative body that the child does not have direct contact with but whose influence on curricula, hiring and firing of staff, etc. impact the child's experiences in that educational program. The third level, the mesosystem, represents the interrelations between two or more settings in which the developing person directly participates. Typical and obvious settings are the family and the child's peer group. Both are settings in which the child directly engages on a regular basis. Finally, there is the microsystem, which represents the ongoing activities and interactions between individuals and the developing person. For example, within the early childhood classroom, interactions between the preschool teacher and the child are microsystems, as are interactions between a child and her friends.

Relying on the perspective of ecocultural systems theory, DAP incorporates both a sensitivity toward children's unique experiences and a system of practices that are geared toward acceptance and acknowledgement of families' unique historical and cultural experiences. Teachers are considered part of the microsystem of children's worlds; therefore, they must work in partnership with parents. Developing positive relationships with parents through openly communicating with parents, involving parents in the decision-making of the school, maintaining open-door policies, and providing seamless connections between the home and school environments are integral parts of DAP (NAEYC Position Statement on Developmentally Appropriate Practice 2009).

Rogoff (2003) provided a different approach to Bronfenbrenner's concentric circle view of development by emphasizing the centrality of culture and social history on human development. Rogoff interpreted culture as the participation of individuals with each other. Culture, in this sense, is not static but a "mutually constituting" (p. 51) process in which the individual is not viewed as nested or influenced by cultural processes but rather as a participant in the creation of cultural communities. Culture transcends ethnic, national, and racial boundaries, and an individual participates in more than one cultural community. Culture is not separate from the individual but created by the individual. DAP establishes a broader understanding of culture beyond ethnic or racial categories consistent with Rogoff's theory: "Because culture is often discussed in the context of diversity or multiculturalism, people fail to recognize the powerful role that culture plays in influencing the development of all children" (Bredekamp and Copple 1997, p. 12).

Additionally, the most current DAP position statement highlights, "When young children are in a group setting outside the home, what makes sense to them, how they use language to interact, and how they experience this new world depend on the social and cultural contexts to which they are accustomed" (NAEYC Statement on Developmentally Appropriate Practice 2009, p. 10). The quote from the 2009 DAP Position Statement indicates that DAP understands that culture is an interconnected whole that manifests itself in all aspects of life. The early childhood programs that incorporate DAP are creating their own unique cultural community with a specific value set and belief system that guides practices within the community (Sanders et al. 2007). Akin to layers of an onion, culture is the interconnected and overlapping element central to the individual: a way of doing and being.

Cultural context is more than a variable that influences development; it is a "conceptualization of culture-as-a-system-of-meanings" (Göncü 1999, p. 10). The development of children is embedded within the local value system and understanding of what childhood is. In this sense, children's development becomes adaptive rather than optimal and local rather than universal. However, optimal and universal conceptualizations of development are pervasive in DAP. What is important for children is what is important for the cultural community in which children are reared. The work by Brice-Heath (1982), for example, demonstrated how three distinct cultural communities (a white middle-class community, a rural African-American community, and a white Appalachian-origin community) socialized young children toward literacy and school readiness. Each community provided

their children with highly unique language experiences and patterns that had implications for their children's development. Similarly, research revealed that parents' goals and expectations toward children vary culturally and are a driving force in parent-child interactions (Schulze et al. 2002) and parent-child attachment relationships (Carlson and Harwood 2010). Overall, the cultural context is fundamental to the everyday experiences of children (Driessen et al. 2010). These are just a few examples that reveal the importance of culture as systems of meaning. There is cross-cultural and national research revealing crucial connections between cultural context and development across multiple domains of development.

DAP establishes cultural sensitivity in its practices by stressing a need for teachers to employ curricula that "provide opportunities to support children's home language while also developing children's abilities to participate in the shared culture of the program and community" (Bredekamp and Copple 1997, p. 21). Assessments of children should be sensitive to language and cultural variation in learning styles and rates of learning. Additionally, teachers are encouraged to establish connections with families and to work in partnership with them. This partnership should be one in which strong, two-way communication is established between families and teachers, adult family members are welcome into the classroom at all times, and one in which teachers respect families' knowledge of their own children. The ethos of DAP in terms of cultural context is to treat all equally, be aware of cultural bias within one's self and in others, and to be respectful of diversity in all its forms (NAEYC Position Statement on Developmentally Appropriate Practice 2009).

Overall, the underlying assumptions of DAP outlined in this section (validity of developmental psychological research and theories, individual pathways in development, and the influence of cultural contexts on development) are closely tied to how the roles of the child and adult are conceptualized. Although DAP urges teachers to take their knowledge of child development, individual children, and each child's sociocultural context into account when interacting with children and designing activities, DAP is a child-centered curricular practice (Dunn and Kontos 1997). In the next section, we describe the way DAP defines the roles of the child and the adult, emphasizing the role of the teacher in a child-centered curriculum.

71.3 The Conceptualization of the Child and the Role of the Adult in DAP Early Childhood Classrooms

The developmental psychological orientation of DAP is connected to the conceptualization of the adult and the child. The discourse of DAP reflects this close tie in that teachers in DAP classrooms have been referred to as child development specialists (Elkind 1989) to emphasize the importance of child development knowledge to their training and practice. DAP is a child-centered curriculum (Dunn and Kontos 1997), meaning that children's interests and skills serve as foundations for learning, and teachers see children "as they are to make decisions that are developmentally appropriate for each of them" (NAEYC Position Statement on DAP 2009, p. 10).

Although the pace of learning is child-driven, arranging opportunities for learning, planning activities, and setting up the learning environment are dependent on the teacher. This way learning is child-driven yet adult-guided. The teacher is there to support the process of learning that the child is experiencing, but the child is the one in the driver's seat. The main responsibilities of teachers in a DAP environment are to promote responsibility, self-reliance, and self-regulation and to provide support. Teachers are positioned to be savvy decision-makers, who provide different types and levels of support to children, such as providing feedback, modeling skills, helping to express emotions, extending and challenging children's thinking and interests, redirecting behaviors that are disruptive to the classroom community, and guiding in conflict resolution (Copple and Bredekamp 2009). The DAP guidelines urge teachers to design learning goals that are challenging yet achievable, goals that require just enough support that children learn new skills, and goals that are not way above children's skill levels and frustrating to achieve.

A child-centered environment leaves room for interpretation in terms of how much leeway a teacher allows children to experience the learning environment independent from face-to-face teacher instruction. The degree of child independence may rely on the emphasis/endorsement an early childhood program holds regarding the two main philosophical orientations underlying DAP principles (Piagetian vs. Vygotskian) (Tzou 2007). A program with a stronger orientation toward Vygotskian principles may view the teacher's role as one in which teachers should have some control over and frequent direct interaction with children. There is an emphasis on social interaction and guided participation in this theory. Classrooms that are more Piagetian in nature, however, may view the role of the adult mainly as a creator of an enticing and enriching environment for children to navigate relatively independently. The control afforded to teachers in this context decreases in favor of children's independence (Tzou 2007).

In addition to the teacher being responsible for creating a child-centered environment, the teacher is also responsible for ensuring that the development of the child is holistic. DAP emphasizes the need for early education environments to support children's development across all domains, which includes social/emotional, cognitive, motor, language, and cultural. In addition, despite its heavily cognitive theoretical orientation, the development of DAP stems from research revealing how traditionally structured classrooms were problematic for children's social and emotional development. Teachers are encouraged to support the development across these areas through child-centered classrooms and through systematic observation of children's engagement within these environments. Again, the emphasis on developmental science is not only pervasive in terms of the outlook on education and appropriate practice but also in terms of the actual methods teachers are to employ in practice. Observational methodology is a classic method used by developmental researchers that is also part of the tool kit good teachers in developmentally appropriate classrooms should use expertly.

Because of the child-centered orientation by DAP, one of the main assumptions in practice is that children need to play in order to learn. To promote development,

a child's active exploration of a material-rich environment is valued. Active exploration of the environment is achieved when children can play with materials and with others while interacting with a teacher who supports and elaborates their play. Play is important for all aspects of children's development because it facilitates learning, as well as allows DAP teachers to assess children's developmental progression using authentic methods (Bredekamp 2005).

Given that the course of development from one child to the next during the early years is highly uneven and individualized, playing as learning allows for the support of multiple aspects of a child's development. For example, imagine a small group of preschool children at a table that can hold water. In addition to the water, the table contains different containers of varying sizes and functions; small plastic dolls representing different genders, occupations, and ethnicities; various miniature modes of transportation; and a large funnel with a wheel in which children can pour the water through which turns the wheel. The children work with these materials individually as well as with each other. What can happen here that relates to learning?

Children may decide to engage in social dramatic play and use the dolls and other equipment to construct an elaborate pretend play scheme. To do so, they require ample time to engage with the materials and with each other as this supports cognitive growth. They practice and construct language while interacting with peers and with responsive teachers who ask the right questions at the appropriate times. Social and emotional skills develop as children enact the play scheme, negotiate violations to mutually agreed-upon rules, deal with exclusion, and modulate their emotions to continue to play successfully with each other. Finally, children must also use their motor skills to move the materials in and among the various structures and to pour the water. Activation of systems connected to multiple domains occurs for these children through the simple act of playing with each other at a well-designed and well-equipped water table. The teacher in this example sets the stage for this experience, observes the process astutely, and elaborates the learning experience by involving herself when necessary. When done appropriately, according to DAP, the teacher is successful in "supporting children's developing sense of self" (p. 116), which allows for children to have "chances to take initiative, experience success in performing difficult tasks, and figure things out for themselves" (Bredekamp and Copple 1997, p. 116).

71.4 DAP and Developmental Psychology: A Problematic Relationship?

Since its initial publication three decades ago, scholars have questioned whether DAP is culturally sensitive to the needs of diverse cultural communities within the United States and across the world (Bloch 1992; Grieshaber and Cannella 2001; Lubeck 1998; Mallory and New 1994). Reconceptualist scholars in the early 1990s

critiqued the first edition of DAP for being ethnocentric (white, middle-class focus) and for relying on assumptions about universal, individualistic, and Westernized notions of development (Bloch 1991; Cannella 1997; Jipson 1991; Kessler 1991; Kessler and Swadener 1992; Lubeck 1991, 1994; Swadener and Kessler 1991; Walsh 1991). Many argued that DAP's reliance on developmental psychology silences and marginalizes alternative ways of knowing and learning (Bloch 1991; Cannella 1997). For instance, scholars argued that DAP culturally validates notions of autonomy, independence, and cognitive knowledge at the expense of social connections, interconnectedness, and emotional intelligence (see Jipson 1991; Kessler 1991). Although DAP has been revised since its initial publication, critiques of it persist (see Brown and Lan 2015 for a review).

DAP is based on the tenets of developmental psychology, and developmental psychology is checkered regarding cultural awareness and sensitivity toward diversity (Lubeck 1998), although this is changing as professional organizations are highlighting the impact of culture on development (e.g., American Psychological Association 2002). There continues to be much criticism regarding the acultural orientation of much developmental theory and research (Heinrich et al. 2010). This is mainly because the psychological study of development is based upon a highly restrictive and select set of values and samples. In fact, many of the theories, findings, and conclusions of psychology stem from samples and assumptions that have been called WEIRD (an acronym for Western, educated, industrialized, rich, and democratic), meaning that the discipline provides a profoundly unrepresentative portrait of human development (Heinrich et al. 2010).

How can the norms established by this discipline apply to children from diverse contexts and cultures? How can a pedagogy that is heavily reliant on the findings from restrictive samples be valid? This link between developmental research and the practical application of it to all children is one of the main criticisms leveled by critics of the DAP pedagogy (e.g., Fleer 2005). The foundational developmental research of DAP is based upon WEIRD samplings. The findings from these limited samplings undergird rationales for what are appropriate practices for all children and how discovery learning should be enacted. Moreover, children's learning is assumed to be hierarchical and linear, with one achievement building on another (for research studies that counter the Piagetian conceptualization of reasoning, see infant conceptual reasoning studies: Wynn 1992; Quinn et al. 2006).

Assuming that the Westernized notions of development and practices can be universally applied to all children is problematic; especially when cultural practices and norms contrast with DAP (see Brown and Lan 2015). Recently, via a qualitative meta-synthesis involving nine studies, Brown and Lan (2015) identified that the principles of DAP frequently contrasted with cultural expectations and practices of teachers in non-Western contexts. For instance, according to Confucian traditions practiced in Taiwan and elsewhere, taking the teacher's lead and respecting elders are top priorities (Hsue and Aldridge 1995). Practices such as teaching manners (e.g., bowing to teachers), respecting teachers' authority, staying silent during lunchtime, and using shame for discipline are common across Taiwan; however,

these may be deemed as suboptimal practices according to DAP (Hsieh 2004; Hsue and Aldridge 1995). Allowing teachers to take a nondirective role can be interpreted as negligent by Chinese parents (Cheng 2001). DAP values conflict with cultural values of certain Native American communities where listening and observing by children is seen as more important than initiating (Williams 1994). Similarly, practices such as eating on the floor and silent meditation are common across preschools in India, and such practices may be deemed undesirable according to DAP (Adair and Bhaskaran 2010). These examples demonstrate that seemingly universal principles about early childhood practices, which relied on WEIRD samples, can contrast with the practices of diverse cultural communities. Overall, Brown and Lan's (2015) review indicates that researchers who found that DAP contrasted with cultural practices in international contexts provided little to no resolution for the disconnect between DAP and local practices.

Furthermore, DAP's discouragement of rigorous academics may be seen as undesirable by diverse communities within and outside of the United States (e.g., see Brown and Lan 2015). For instance, African-American center directors in low-income communities view academic instruction as a buffer against the injustices their children encounter as a result of their racial and socioeconomic status (Sanders et al. 2007). One African-American center director interviewed by Sanders et al. (2007) noted that "These [poor, Black] children don't have the moms and dads that read to them all the time, or the nannies that can do all the grunt work while mommy and daddy go have fun. If we don't do it, these kids will be at a disadvantage in school….Why should we put our little Black children at a disadvantage?" (p. 400). Outside of the United States, in countries such as India, Taiwan and China, a rigorous academic focus is considered beneficial and desirable by parents and teachers (Cheuk and Hatch 2007; Hsue and Aldridge 1995; Ho 2008; Jambunathan and Caulfield 2008). These examples demonstrate that the diverse views of directors, teachers, and parents, as well as research measuring children's outcomes in diverse contexts, should all be taken into account when developing curricular recommendations. Recommendations developed by WEIRD researchers based on research on WEIRD samples are unlikely to fit the diverse needs of children and communities around the world.

In addition, the strong reliance on developmental constructivist theory in DAP indicates that the conceptualization of learning is reliant upon theories of cognition, to the exclusion of other equally relevant modes of learning practiced within non-WEIRD cultural communities. Although the growth of the whole child is supported in DAP, learning equals cognitive growth in the form of literacy, language fluency, and mathematical knowledge. Overall, DAP is culturally consistent with a pedagogy used within Westernized, industrialized contexts. This pedagogy emphasizes learning cognitive skills that promote readiness for what will be expected during the formative years of schooling. However, one can imagine alternative modes of learning. For example, why is it appropriate to emphasize children's language in written and verbal expression for an artistic activity? Is it appropriate, as Spodek (1991) articulated, that teachers write down children's words about their picture when the

act of doing it mars the artistic product produced by the child? When the orientation is literacy, this simple act by the teacher is seen as desired. What if, however, the intent is artistic development or spiritual expression? Is writing on the artwork appropriate then? Probably, it is not appropriate because it defaces the child's artistic interpretation and places higher value on the teacher's input than the child's artistic interpretation (Spodek 1991). Similarly, a didactic classroom would be deemed inappropriate, because in DAP, children are encouraged to construct their knowledge by active exploration. However, what if the cultural community in which this occurred is one in which adults do not believe in such a high level of autonomy for children and independent, silent thought is a valued marker of skill development? In this instance, the pedagogy of didactic instruction may make cultural sense and be appropriate within that cultural context.

Related to alternative modes of learning, DAP has been criticized for narrowly defining how knowledge is conceptualized and acquired (e.g., Langford 2010; Singer 1996). For instance, DAP fails to acknowledge the collaborative nature of knowledge construction and early childhood experiences (Langford 2010; Singer 1996). Langford (2010) suggests a democratic-centered pedagogy as an alternative, in which "Learning becomes understood as a process whereby both the child and teacher and children as peers are actively engaged in events that can be initiated by the child, by peers and by the teacher within an environment that has been set up collaboratively by children and teachers" (p. 122). Further, learning and interactions in DAP are supposed to be based on children's proclivities, which are assumed to serve their best interests. For example, children gender segregate from an early age (e.g., Maccoby and Jacklin 1987; Ruble and Martin 1998), and a teacher practicing DAP may be expected to support and extend these gender segregated peer interactions. However, gender segregation may limit children's opportunities to develop peer relationships with and learn from other-sex peers (see Leaper 1994; Maccoby 1998). This way, a child-centered curriculum may limit teacher intervention and may prevent teachers from addressing gender relations and power dynamics that children reproduce (Clark 1989; MacNaughton 1997).

A final critique related to the cultural sensitivity assumptions within DAP is whether the particular diversity orientation taken by DAP is appropriate for all children. Rogoff's and Bronfenbrenner's cultural frameworks are helpful to understand the interconnectedness of human development to cultural processes. However, these theories do not account for what Garcia-Coll et al. (1996) referred to as the "social position" (p. 1895) of children of color. Social positions are the aspects of an individual or group, such as race, sexual orientation, social class, or gender, which "societies use to stratify or place individuals in a social hierarchy" (p. 1895). These social position characteristics are used for social stratification through mechanisms such as racism, prejudice, segregation, and oppression. Social stratification mechanisms are pervasive and central barriers that families of color experience at all levels of life. Group-based social inequality is an aspect of American society historically. Slavery, Jim Crow laws, the struggle for suffrage by African-Americans and women,

and the concentration of African-Americans as the urban poor substantiate this claim. These inequalities function within and between all levels of society, from the political and economic sphere to the interpersonal domain (Fenton 1999).

DAP tends to interpret cultural context in terms of respect for diversity and equality for all; however, non-European American ethnic groups occupying unique social positions within societies may require early education contexts that do more than just promote respect for diversity. Children of groups who have been targets of racism historically and in modern society may need to experience socialization practices that actively, positively support their group identity and that counter the predominant negative messages from the wider society (Sanders et al. 2007). Although the DAP position statement demonstrates sensitivity toward the diverse experiences that children may bring with them, it is unclear whether DAP or the Anti-Bias Curriculum (ABC) supported by NAEYC (Derman-Sparks and the ABC Task Force 1989; Derman-Sparks and Edwards 2010) account for the stratifying social position that leads to the distinct everyday experiences of children who are ethnic minorities (Johnson et al. 2003).

Although the ABC provides a firmly grounded stance against bias of all forms and recommends a set of practices to counteract the influence of social position, it does not address practices such as support for positive ethnic or racial identity development or how to counteract negative messages about one's ethnic or racial group. Instead, the emphasis is on developing a lack of bias in children, and although the ABC does advocate for teachers to help children develop positive identities and pride in their heritage in general, it does not outline how these practices may be tailored to different groups of children in terms of supporting their positive ethnic and racial identity development. It may be useful for children who experience racism and prejudice toward their ethnic or racial group to adopt a positive bias toward their own group to counteract the negative messages received from the wider social context (Gaylord-Harden et al. 2012; Neblett et al. 2012). DAP does not distinguish between these unique developmental constraints for children of color.

In sum, even the third iteration of DAP seems to lack some sensitivity to the contextual and cultural variations of care (e.g., Langfrod 2010). Scholars critical of DAP worry that it provides a limiting set of guidelines that exclude the needs, perspectives, and experiences of particular communities (e.g., low-income communities, communities of color) and children within and outside of the United States. For a summary of recommendations that address the limitation of DAP, please see Box/Sidebar 71.1. Although critiquing DAP may lead to developmentally appropriate practices that are better aligned with the needs of diverse cultural communities, Brown and Lan (2015) conclude that it is important to move from critiquing DAP to problem solving and identifying ways in which tensions between DAP and cultural practices may be resolved. Ultimately, refocusing the conversation onto what practices best meet the needs of children and what can improve teaching practices across international contexts will ensure that the healthy development and effective learning of all children are prioritized.

Box 71.1: Recommendations Addressing DAP Limitations
Discussions with teachers, center directors, families, and children from diverse communities can help determine appropriate practices that are culturally sensitive and those that are insensitive. Dialogues among stakeholders can lead to solutions about how differences between DAP and cultural practices can be resolved (Hsue and Aldridge 1995).

- Measuring child outcomes across a wide range of cultural contexts can determine which practices are universally appropriate, and which are context-dependent, tailoring DAP to a variety of cultural contexts.
- Include theories of non-Western development (Hsue and Aldridge 1995).
- Include knowledge of diverse communities and communities of color, including their knowledge of and experiences with racial and ethnic discrimination, in DAP (Sanders et al. 2007).
- Develop culturally relevant definitions of practice that examine the racial socialization practices of early childhood settings (Johnson et al. 2003).
- Bring the needs of racial and ethnic minority children, such as the preparation for bias and positive ethnic identity development, to the forefront (Sanders et al. 2007).
- Examine dimensions of continuity and discontinuity between home and child care environments (Johnson et al. 2003).
- Recognize that practices are value-, belief-, and culture-dependent, and as a result what is appropriate may be renamed "adaptive," and "best practices" may be renamed optimal.
- Recognize that practices are value-, belief-, and culture-dependent, and as a result what is optimal may be renamed "adaptive," and what is universal may be renamed local.

71.5 DAP and Conventions on the Rights of the Child (CRC)

The recommendations listed in Box 71.1 are in line with articles outlined in the Convention on the Rights of the Child (CRC), an international treaty published by the United Nations (UN) that protects the rights of children across the world (Blanchfield 2013). Since its initial publication in 1989, 193 countries have ratified the CRC; however, the United States is not one of them (Blanchfield 2013). Rights protected under the CRC (UN General Assembly 1989) that are relevant to DAP include the right to education (Article 28); access to quality education that helps develop children's personalities, talents, and skills to their fullest potential; respect for their parents', their own, and other cultures (Article 29); the right to learn the language and customs of their family (Article 30); and the right to enjoy play and a wide range of cultural activities (Article 31). These articles of the CRC underscore

the importance of culturally responsive and relevant education practices that serve the best interests of children. Some of these practices are present in DAP, and some of them may be incorporated into future editions.

In many ways, DAP and the CRC guidelines are already in sync. For instance, both documents emphasize the importance of a child-centered education in which caregivers adjust the level of support and guidance they provide based on a child's rapidly developing physical, cognitive, social, and emotional functioning (NAEYC 2009; UN General Assembly 2001, 2006). Both DAP and CRC emphasize the importance of recognizing the individuality and uniqueness of each child, each child's cultural and social circumstances, and children's development-level and age-related characteristics when designing curricula. Further, both CRC and DAP guidelines emphasize the importance of educational environments that are respectful of the beliefs and values of children's families. The CRC also views education as an antidote to sexism, racism, and xenophobia, and encourages educators to teach children about bigotry in their own communities (UN General Assembly 2001). Teaching children about racism in their own communities, diverse values, and respect for differences is seen as important educational goals. DAP could incorporate more ways of addressing racism and bigotry in early childhood, as guidelines and optimal practices for addressing race and racism in early childhood settings are missing (see Farago et al. 2015).

The CRC recognizes the increasingly diverse ways in which childhood development is understood and enacted, including varying expectations placed on children, on child care, primary care providers, and early childhood education. However, much like DAP, CRC guidelines emphasize the importance of play-based curricula and discourage competitive, excessively academically focused environments (UN General Assembly 2006). In this way, both DAP and CRC principles entail contradictions; on the one hand, diversity and multiple perspectives are acknowledged, yet on another hand certain ways and methods of teaching are deemed superior to others. DAP incorporates much of the CRC principles; however, DAP guidelines could do more to address the ways in which early childhood education can be used as a tool to reduce social inequities tied to race, gender, and social class.

71.6 Conclusion

Developmentally appropriate practice is a set of guidelines that have transformed early educators' understandings and perspectives regarding early childhood education. DAP promotes a child- and play-centered curriculum, in which the focus is on the process rather than on the product and emphasis is on teachers being child development specialists with child development knowledge and observation skills enabling them to respond to the needs and interests of children. DAP improved the quality of education for children and helped to move the profession toward greater professionalization of early childhood education within the United States and abroad.

However, what makes DAP strong is also its Achilles' heel. DAP is heavily reliant upon a developmental approach that stems from the Western, middle-class, white, and industrialized perspective. This has opened DAP to criticism and called into question its curriculum. Additionally, DAP seems conflicted by its own stand on the role of culture. On the one hand, DAP publications provide lists and suggestions with great specificity regarding appropriate practices that are devoid of context, while simultaneously insisting that context and cultural expectations should drive decisions regarding appropriate practices for children. DAP needs to address this contradiction or dilemma of culture; NAEYC needs to support authentically, culturally embedded practices and the multiple manifestations of them.

Finally, one must question whether it is sufficient to have an equality-for-all orientation without sensitivity toward the social positions of both ethnic minority and majority children in early childhood classrooms. Further, discussions regarding social position are warranted, particularly in the United States, where ethnic, cultural, and language diversity are expected to increase exponentially over the next decades in early childhood classrooms. In closing, the main question for DAP is whether there are values and theories outside of traditional developmental psychology with which the education of young children should be concerned. Given the broad scope of DAP, it has the potential to adjust, revise, and develop with the growing complexity of our societies.

For full reviews of developmentally appropriate practice, see NAEYC Position Statements on DAP from 1986, 1988, 1996, and 2009. (Also: Bredekamp 1986, 1987; Bredekamp and Copple 1997; Copple and Bredekamp 2009.)

References

Adair, J. K., & Bhaskaran, L. (2010). Meditation, rangoli, and eating on the floor: Practices from an urban preschool in Bangalore, India. *Young Children, 65*, 48–52.

American Psychological Association. (2002). *Guidelines on multicultural education, training, research, practice, and organizational change for psychologists*. Retrieved from http://www.apa.org/pi/oema/resources/policy/multicultural-guidelines.aspx

Blanchefield, L. (2013). *The United Nations Convention on the Rights of the Child* (Congressional Research Service Report No. 7–0856). Retrieved from https://www.fas.org/sgp/crs/row/RL33608.pdf.

Bloch, M. N. (1992). Critical perspectives on the historical relationship between child development and early childhood education research. In S. Kessler & B. B. Swadener (Eds.), *Reconceptualizing the early childhood curriculum* (pp. 3–20). New York: Teachers College Press.

Bredekamp, S. (Ed.). (1986). *Developmentally appropriate practice*. Washington, DC: NAEYC.

Bredekamp, S. (1987). *Developmentally appropriate practice in early childhood Programs serving children from birth through age 8*. Washington, DC: NAEYC.

Bredekamp, S. (2005). Play and school readiness. *Educational Perspectives, 38*, 18–26.

Bredekamp, S., & Copple, C. (1997). *Developmentally appropriate practice in early childhood programs* (revised ed.). Washington, DC: NAEYC.

Brice-Heath, S. (1982). What no bedtime story means: Narrative skills at home and school. *Language in Society, 11*, 49–76.

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge: Harvard University Press.

Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. Elder, & K. Luscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 619–647). Washington, DC: American Psychological Association.

Brown, C. P., & Lan, Y. C. (2015). A qualitative metasynthesis of how early educators in international contexts address cultural matters that contrast with developmentally appropriate practices. *Early Education and Development, 26*, 22–45.

Cannella, G. (1997). *Deconstructing early childhood education: Social justice and revolution*. New York: Peter Lang.

Carlson, V., & Harwood, R. (2010). Attachment, culture, and the caregiving system: The cultural patterning of everyday experiences among Anglo and Puerto Rican mother-infant pairs. *Infant Mental Health Journal, 24*, 53–73.

Charlesworth, R. (1998). Developmentally appropriate practice is for everyone. *Childhood Education, 74*, 274–282.

Cheng, D. P. W. (2001). Difficulties of Hong Kong teachers' understanding and implementation of 'play' in the curriculum. *Teaching and Teacher Education, 17*, 857–869.

Cheuk, J., & Hatch, A. J. (2007). Teachers' perceptions of integrated kindergarten programs in Hong Kong. *Early Child Development and Care, 177*, 417–432.

Clark, M. (1989). Anastasia is a normal developer because she is unique. *Oxford Review of Education, 15*, 243–255.

Cochran, M. (2007). *Finding our way: The future of American early care and education*. Washington, DC: Zero to Three.

Copple, C., & Bredekamp, S. (Eds.). (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3rd ed.). Washington, DC: NAEYC.

Derman-Sparks, L., & Edwards, J. O. (2010). *Anti-bias education for young children and ourselves*. Washington, DC: NAEYC.

Derman-Sparks & the A.B.C. Task Force. (1989). *Anti-bias curriculum: Tools for empowering young children*. Washington, D.C.: NAEYC.

Dickinson, D. K. (2002). Shifting images of developmentally appropriate practice as seen through different lenses. *Educational Researcher, 31*, 26–32.

Driessen, R., Leyendecker, B., Scholmerich, A., & Harwood, R. (2010). Everyday experiences of 18 to 20 month old children from immigrant families: The influence of host culture and migration experience. *Early Child Development and Care, 180*, 1143–1163.

Dunn, L., & Kontos, S. (1997). Research in review: What have we learned about developmentally appropriate practice? *Young Children, 52*, 4–13.

Elkind, D. (1989). Developmentally appropriate practice: Philosophical and practical implications. *Early Care & Education*, 113–117.

Farago, F., Sanders, K., & Gaias, L. (2015). Addressing race and racism in early childhood: Challenges and opportunities. In J. Sutterby (Ed.), *Advances in early education and day care discussions on sensitive issues* (Vol. 19, pages unknown). Bingley: Emerlad.

Fenton, S. (1999). *Ethnicity: Racism, class and culture*. Lanham: Rowman & Littlefield Publishers.

Fischer, K., & Paré-Blagoev, J. (2000). From individual differences to dynamic pathways of development. *Child Development, 71*, 850–853.

Fleer, M. (2005). Developmental fossils – Unearthing the artifacts of early childhood education: The reification of "child development". *Australian Journal of Early Childhood, 30*, 2–7.

Garcia Coll, C., Crinic, K., Lamberty, G., Wasik, B., Jenkins, R., Garcia Vazquez, H., et al. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*, 1891–1914.

Garner, A., Shonkoff, J., Siegel, B., Dobbins, M., Earls, M., McGuinn, L., Pascoe, J., & Wood, D. (2011). Early childhood adversity, toxic stress, and the role of the pediatrician: Translating developmental science into lifelong health. *Pediatrics, 129*, 224–231.

Gaylord-Harden, N., Burrow, A., & Cunningham, J. (2012). A cultural-asset framework for investigating successful adaptation to stress in African American youth. *Child Development Perspectives, 6*, 264–271.

Ginsburg, H., & Opper, S. (1988). *Piaget's theory of intellectual development*. Englewood Cliffs: Prentice Hall.

Göncü, A. (Ed.). (1999). *Children's engagement in the world: Sociocultural perspectives*. Cambridge: Cambridge University Press.

Grieshaber, S., & Cannella, G. S. (Eds.). (2001). *Embracing identities in early childhood education: Diversity and possibilities*. New York: Teachers College Press.

Hegde, A. V., & Cassidy, D. J. (2009). Kindergarten teachers' perspectives on developmentally appropriate practices (DAP): A study conducted in Mumbai (India). *Journal of Research in Childhood Education, 23*, 367–381.

Heinrich, J., Heine, S., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–135.

Ho, C. W. D. (2008). Exploring the definitions of quality early childhood programmes in a market-driven context: Case studies of two Hong Kong preschools. *International Journal of Early Years Education, 16*, 223–236.

Hsieh, M. F. (2004). Teaching practices in Taiwan's education for young children: Complexity and ambiguity of developmentally appropriate practices and/or developmentally inappropriate practices. *Contemporary Issues in Early Childhood Education, 5*, 309–329.

Jambunathan, S., & Caulfield, M. (2008). Developmentally appropriate practices in Asian Indian early childhood classrooms. *Early Child Development and Care, 178*, 251–258.

Jipson, J. (1991). Developmentally appropriate practice: Culture, curriculum, connections. *Early Education and Development, 2*, 120–136.

Johnson, D. J., Jaeger, E., Randolph, S. M., Cauce, A. M., Ward, J., & NICHD Child Care Research Network. (2003). Studying the effects of early child care experiences on the development of children of color in the United States: Toward a more inclusive research agenda. *Child Development, 74*, 1558–1576.

Kessler, S. A. (1991). Early childhood education as development: Critique of the metaphor. *Early Education and Development, 2*, 137–152.

Kessler, S. A., & Swadener, B. B. (Eds.). (1992). *Reconceptualizing the early childhood curriculum: Beginning the dialogue*. New York: Teachers College Press.

Kostelnik, M. J. (1992)., Myths associated with developmentally appropriate programs. *Young Children*, 17–23.

Langford, R. (2010). Critiquing child-centered pedagogy to bring children and early childhood educators into the centre of a democratic pedagogy. *Contemporary Issues in Early Childhood, 11*, 113–127.

Leaper, C. (1994). Exploring the consequences of gender segregation on social relationships. In C. Leaper (Ed.), *Childhood gender segregation: Causes and consequences* (pp. 67–86). San Francisco: Jossey-Bass.

Lubeck, S. (1991). Reconceptualizing early childhood education: A response. *Early Education and Development, 2*, 168–174.

Lubeck, S. (1994). The politics of developmentally appropriate practice: Exploring issues of culture, class, and curriculum. In B. Mallory & R. New (Eds.), *Diversity and developmentally appropriate practice(s)* (pp. 17–43). New York: Teachers College Press.

Lubeck, S. (1998). Is developmentally appropriate practice for everyone? *Childhood Education, 74*, 283–292.

Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Belknap Press.

Maccoby, E. E., & Jacklin, C. N. (1987). Sex segregation in childhood. In H. W. Reese (Ed.), *Advances in child development and behavior* (Vol. 20, pp. 239–288). New York: Academic.

MacNaughton, G. (1997). Feminist praxis and the gaze in early childhood curriculum. *Gender and Education, 9*, 317–326.

Mallory, B. L., & New, R. S. (1994). *Diversity and developmentally appropriate practices: Challenges for early childhood education*. New York: Teachers College Press.

NAEYC. (1986). Position statement on developmentally appropriate practice in early childhood programs serving children from birth to age 8. *Young Children, 41*, 3–19.

National Association for the Education of Young Children. (1986). *A position statement of the National Association for the Education of Young Children: Developmentally appropriate practice in early childhood programs serving children birth through age eight*. Washington, DC: NAEYC.

National Association for the Education of Young Children. (1988). A position statement of the National Association for the Education of Young Children: Developmentally appropriate practice in the primary grades, serving 5- through 8-year-olds. *Young Children, 43*, 64–84.

National Association for the Education of Young Children. (1996). *A position statement of the National Association for the Education of Young Children: Developmentally appropriate practice in early childhood programs serving children birth through age eight*. Washington, DC: NAEYC.

National Association for the Education of Young Children. (2009). *A position statement of the National Association for the Education of Young Children: Developmentally appropriate practice in early childhood programs serving children birth through age eight*. Washington, DC: NAEYC.

National Research Council and Institute of Medicine. (2000). From neurons to neighborhoods: The science of early childhood development. Committee on Integrating the Science of Early Childhood Development. In J. P. Shonkoff & D. A. Phillips (Eds.), *Board on children, youth, and families, commission on behavioral and social sciences and education*. Washington, DC: National Academy Press.

Neblett Jr., E., Rivas-Drake, D., & Umaña-Taylor, A. (2012). The promise of racial and ethnic protective factors in promoting ethnic minority youth development. *Child Development Perspectives, 6*, 295–303.

Piaget, J. (1960). Equilibration and the development of logical structures. In J. M. Tanner & B. Inhelder (Eds.), *Discussions on child development* (Vol. IV). London: Tavistock Publications, Ltd.

Quinn, P. C., Westerlund, A., & Nelson, C. A. (2006). Neural markers of categorization in 6-month-old infants. *Psychological Science, 17*, 59–66.

Rogoff, B. (2003). *The cultural nature of human development*. Oxford: Oxford University Press.

Ruble, D. N., & Martin, C. L. (1998). Gender development. In W. Damon (Ed.), *Handbook of child psychology* (Vol. 3, 5th ed., pp. 933–1016). New York: Wiley.

Ryan, S., & Grieshaber, S. (2004). It's more than child development: Critical theories, research, and teaching young children. *Young Children: Young Children Journal of the National Association for the Education of Young Children, 59*, 44–52.

Sanders, K., Deihl, A., & Kyler, A. (2007). DAP in the 'hood: Perceptions of child care practices by African American child care directors caring for children of color. *Early Child Research Quarterly, 22*, 394–406.

Saxe, G. B. (1981). Body parts as numerals: A developmental analysis of numeration among the Oksapmin in Papua New Guinea. *Child Development, 52*, 306–316.

Saxe, G., & Esmonde, I. (2005). Studying cognition in flux: A historical treatment of Fu in the shifting structure of Oksapmin mathematics. *Mind, Culture, and Activity, 12*, 171–255.

Schulze, P., Harwood, R., Schoelmerich, A., & Leyendecker, B. (2002). The cultural structuring of parenting and universal developmental tasks. *Parenting: Science and Practice, 2*, 151–178.

Singer, E. (1996). Prisoners of the Method: breaking open the child-centred pedagogy in day care centres. *International Journal of Early Years Education, 4*, 28–40.

Spodek, B. (1991). Reconceptualizing early childhood education: A commentary. *Early Education and Development, 2*, 161–167.

Swadener, E. B., & Kessler, S. A. (1991). Reconceptualizing early childhood education: An introduction. *Early Education and Development, 2*, 85–94.

Thelen, E. (2005). Dynamic systems theory and the complexity of change. *Psychoanalytic Dialogues, 15*, 255–283.

Tzou, P. W. (2007). The tension between teacher control and children's freedom in a child-centered classroom: Resolving the practical dilemma through a closer look at the related theories. *Early Childhood Education Journal, 35*, 33–39.

UN General Assembly. (1989). *Convention on the Rights of the Child*. Retrieved from http://www.refworld.org/docid/3ae6b38f0.html

UN General Assembly. (2001), *Convention on the Rights of the Child: The aims of education* (General Comment No. 1). Retrieved from http://www2.ohchr.org/english/bodies/crc/docs/AdvanceVersions/GeneralComment7Rev1.pdf

UN General Assembly. (2006), *Convention on the Rights of the Child: Implementing child rights in early childhood* (General Comment No. 7). Retrieved from http://www2.ohchr.org/english/bodies/crc/docs/AdvanceVersions/GeneralComment7Rev1.pdf

Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Walsh, D. J. (1991). Extending the discourse on developmental appropriateness: A developmental perspective. *Early Education and Development, 2*, 109–119.

Williams, L. R. (1994). Developmentally appropriate practice and cultural values: A case in point. In B. L. Mallory & R. S. New (Eds.), *Diversity and developmentally appropriate practices: Challenges for early childhood education* (pp. 155–165). New York: Teachers College Press.

Wynn, K. (1992). Addition and subtraction by human infants. *Nature, 358*, 749–750.

Chapter 72
The Waldorf Kindergarten

Sara Frödén and Moira von Wright

'Receive the children in reverence, educate them in love, and let them go forth in freedom'

Abstract This chapter presents the early childhood education in Waldorf kindergartens. It consists of three major parts. The first part presents the history of the Waldorf kindergarten, its conceptual background and roots in the thinking of Rudolf Steiner. It also gives an overview of the basic ideas of Waldorf pedagogy, focusing on the curriculum in relation to the view of the human being, in particular the child up to the age of six. The second part discusses the role of the teacher, who primarily is seen as a self-reflective, supportive and non-judgemental role model, inspiring and guiding the children through tasks and activities rather than through formal teaching. The third section focuses on the formal organization and practice of the Waldorf kindergartens today and connects this to the ideas of the pedagogy previously presented. The main topics presented are the following: the general structure consisting of daily, weekly and yearly repetitive rhythms that permeate the whole practice is highlighted. Furthermore, the overall design of the indoor and outdoor environment and the selection of toys and play materials are described and related to the idea of the educational importance of providing a space for sense impressions that stimulate children's imagination and growth. Every day domestic chores as well as craft and artistic activities as a way of creating aesthetic experiences are discussed. Finally, some critical reflections upon the limitations and pitfalls of the Waldorf tradition are brought up.

Keywords Waldorf • Preschool • Early childhood education • Rudolf Steiner • Anthroposophy • Play • Child development

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72.1 What Is Waldorf Education?

This chapter presents the early childhood education in Waldorf kindergartens, also referred to as Steiner kindergartens. It gives an overview of the basic ideas for the kindergarten and its view of the human being, in particular the child up to the age of six. It also discusses the role and tasks of the educators and the teachers and gives some insights into the practices of the Waldorf kindergartens of today.

The saying that one should 'receive the children in reverence, educate them in love and let them go forth in freedom' is attributed to Rudolf Steiner, the founder of Waldorf education, though there seems to be no known citation. In any case it is an accurate description of the aims of Waldorf education, because the prevailing and dominating attitude towards the child is that it is a being that is not, cannot, and should not be fully known and dominated by the educator. Instead, it is emphasized that the educator with respect should welcome each child, and educate him or her in love, and thus prepare him or her to move forward in life in freedom.

The Waldorf education movement has a history that is only around 100 years old, but the amount of schools and kindergartens seem to be growing steadily all over the world. At present there are approximately 1025 Waldorf schools and 2000 Waldorf kindergartens or preschools in 60 different countries, although most of them are located in Central Europe (list of Waldorf schools and Rudolf Steiner schools, www.waldorfanswers.com/WaldorfLinks.html; see also Parker-Rees 2011).

72.2 Research Literature in the Field of Waldorf Education

Despite their popularity there is not much research conducted in or on the Waldorf schools or kindergartens, and publications that particularly address issues concerning early childhood education are scarce. In a comparative analysis of the content of articles published in the research journal Early Childhood Journal during a period of 10 years, between 1995 and 2005, Waldorf education had the least number of publications among six approaches, including Reggio Emilia, Montessori and Head Start (Walsh and Petty 2007). The relatively small amount of research in the area of Waldorf pedagogy can be explained in many ways. It is however good to recognize that there is a rich body of literature about Waldorf education and anthroposophy that gives guidelines for the actions and deliberations of the teachers in the Waldorf schools. This body of literature varies in quality. Many of the books and articles about kindergartens and younger children are documentations of practices and good advice from 'best practice'.

Instructions and directions for Waldorf teachers are to be found in the notes taken by participants at the lectures given by Rudolf Steiner around the time of the starting of the first Waldorf school, not kindergarten, though. Needless to say, there are many different interpretations of the meaning of these lectures. This article, however, tries to give a consensus view, an educational overview of the kindergarten, without delving into its background and anthroposophy.

In order to give a fair picture of the pedagogy and practice of the Waldorf kindergarten of today, the presentation of the basic ideas is accompanied by examples that illustrate what this might mean in practice. The main source of information is the documented practice of Waldorf kindergartens, which includes studies conducted in Europe (e.g. Astley and Jackson 2000; Frödén 2012; Kraftl 2006; Lim 2004; Masters 2000; Parker-Rees 2011), the USA (Uhrmacher 1993) and New Zealand (Bone 2007). When writing about the conceptual base of Waldorf education, the main works on Waldorf education will be mentioned, as will references to modern literature on the issue.

72.3 A Universal Educational Idea

Anyone who visits several Waldorf schools and kindergartens will be struck by the similarity between them, despite their different settings (e.g. Astley and Jackson 2000). The basic ideas for Waldorf education are in a sense universal. One can recognize the colours, the materials, the wooden toys and the setting of the kindergarten as a milieu for imagination and play. However, there is no detailed curriculum and no regulation that demands this similarity; it is rather a question of tradition and strong loyalty to the initial ideas of the Waldorf schools. Not only do the materials stick out as being typically Waldorf but also the structure and rituals of the education follow certain regular patterns, such as the rhythm of the day and the seasons. The Waldorf pedagogy has originated from Germany, but the more it finds its place in different parts of the world, and adjusts to the local rhythms and traditions, the more diverse one can expect it to become (Ashley 2009).

72.4 History and Conceptual Background

72.4.1 The Waldorf-Astoria School

The first Waldorf School was founded in 1919 in Stuttgart by Dr. Rudolf Steiner (1861–1925) on request of the owner of the Waldorf-Astoria cigarette factory, Erik Molt, who wanted a school for the children of his workers. This was the first comprehensive school in Germany. Steiner himself stressed the importance of founding a non-confessional and politically independent school. The Waldorf schools and kindergartens have ever since been addressing all children, regardless of religion, class or gender (Ashley 2009). The educator Elisabeth von Grunelius established the first Waldorf kindergarten in Germany in 1926, the year after Steiner died (Nutbrown et al. 2008). Her contribution to early childhood education, and later that of her colleague Klara Hatterman, remains relatively unknown outside the Waldorf context although she, in close collaboration with Steiner, formed guidelines for kindergarten practice according to the development of young children. Later, in 1950,

when she had already moved to the USA and started a kindergarten there, von Grunelius published a book on this topic (von Grunelius 1955/1974).

72.4.2 The Anthroposophist Roots of Waldorf Education

The educational setting in Waldorf kindergartens has developed and changed since the beginning of the twentieth century. It is, however, difficult to understand the teachers' work and professional attitude without looking back at the conceptual roots of Waldorf pedagogy into anthroposophy. Here anthroposophy does not play the role of a fixed content but gives a way of problematizing, and a way of responding to the anticipated needs of the children, according to its view of the human being.

Steiner had rather distinct ideas about education. He saw education as a practice tightly bound to the view of the human being (see, e.g. Steiner 1919). He was inspired by theosophy and phenomenology and wrote his doctoral thesis in philosophy, albeit with strong religious influences. Steiner developed what he called 'a way of knowledge' with inspirations from Christian mysticism. This has led to debate and criticism of his thinking, partly because of a conflict between the mystic's search for a divine truth on one hand and the scientist's search for deepened knowledge of the world on the other (van Mansvelt 2002).

However, looking for solutions to existential and moral questions need not be in opposition to the search for clarity and reflection that marks the scientific tradition. Steiner tried hard to bridge this gap, and one can find many metaphors and other literary innovations in his language. Steiner (1976) has commented on his own way of working, saying that he wanted to rewrite the world, not define it.[1]

Steiner considered the founding of the first Waldorf school to be a milestone in the development of society; a particular educational impulse that took its form in Waldorf education as a practice. He further stressed the importance of the inner activities and earnestness of each individual teacher who was engaged in the educational practice. Since the beginning, therefore, the Waldorf education relies a great deal on the individual teacher and his or her personal qualities and capabilities. In order to enliven and strengthen the practical pedagogical work, 'inner work' of meditation and a 'meditative path of knowledge' have developed concomitantly with the schools and the curriculum (Steiner 1991).

Today schools and kindergartens vary in how much they expect involvement in the anthroposophist movement from their teachers (Ogeltree 1998). Predominantly, however, the teachers see this as part of their personal lives and aspirations, and in the schools there is no mentioning of the spiritual basis of Waldorf education; here it is mere practice.

[1] 'Wenn man so etwas ausdrücken will, so wird man versuchen müssen, es irgendwie zu umschreiben, denn man wird natürlich mit abstrakten Definitionen auszerordentlich wenig erreichen können' (Steiner 1976, p. 25).

72.5 Other Influences on the Waldorf Movement

Although Rudolf Steiner has been and still is the predominant figure, other people have influenced Waldorf school practice over the years. Each nation tends to have its own leading figure; Bernhard Lievehood in the Netherlands, Frans Carlgren in Sweden, Reijo Wilenius in Finland – just to mention some. Among thinkers living at the same time as Steiner, similar holistic and humanist ideas can be found in the writings of the American philosopher John Dewey (1859–1952) and the Swedish educationist Ellen Key (1849–1926), who also emphasized the importance of the child (Lejon 1997).

Jan-Erik Mansikka (2007) points out that anthroposophy is a theoretical system which in itself tends to contain what it needs in order to develop and illuminate itself. A consequence of this is that Waldorf pedagogy lives a rather closed life, more or less untouched by other educational discourses. The tight relation between the view of the human subject on the one hand and the curriculum and the work of the teacher on the other makes it hard to separate the different roles and features of education: One cannot speak about the work of the teacher without mentioning the view of the human being at large, and one cannot speak about the content of teaching without referring to history. During the last decades, a more postmodern view on education has opened up opportunities for new discussions within the Waldorf education movement. New perspectives and a wider global engagement may change and broaden the scope of Waldorf education (see, e.g. von Wright 2014; Ashley (2009) for a discussion on this theme).

Since the Waldorf education curriculum in general is structured in accordance with its view of human growth, it does not always follow the same divisions as the state schools. Therefore the meaning of expressions such as kindergarten is a bit difficult to pin down. In this article kindergarten signifies the years before the 12-year school in which a child commonly begins at the age of 6–7.

72.6 The View of the Human Being and the Curriculum

In Waldorf education the view of the human being is central. It is, in a sense, the core around which all other questions evolve. The view of the human being is mirrored in the teaching methods and the attitudes of the teacher towards the school and the world, but it is not explicitly expressed in the curriculum or teaching practices in schools (Mansikka 2007). The young child is not yet part of the school with its focus on teaching and learning, but kindergarten is a preparation for it, and the child should be encountered holistically; 'Not from ear to ear but from soul to soul should the child learn to understand' (Steiner 1919).

A basic feature of the view of the human being in Waldorf education is that the human has many facets and aspects and can only be understood in relation to other

humans and to the world. The human being is a social being, yet every child is a unique human self. The uniqueness of a person comes to presence in relation to other humans when speaking and acting together. The organization of the educational setting should therefore be arranged in a way that enables growth of all aspects of the human, in each phase of her development. In kindergarten this means that the focus should be on what is important for the first 7 years.

72.7 The World Is Good, the World Is Beautiful and the World Is True

Waldorf education relies on a division of the development of the human individual into phases of 7 years. The first three phases of life – the ages of 0–6, 7–13, and 14–21 – are, in Waldorf education, said to correspond to three qualitatively different relations between the growing person (the child) and the world:

The first 7 years, the early childhood years, are described as the time when the relation between the child and the world ought to be one of moral sincerity, trust and goodness; hence, that the idea that 'the world is good' marks this phase. In the second phase, the first 7 years in school, the relation between the child and the world is one of artistry and beauty; hence, it is now said that 'the world is beautiful'. The third phase, the time of adolescence, is one where the relation between the young person and the world is about truth; hence, it is said that the idea that 'the world is true' should mark this period. That means that the truthfulness of the teacher and the adult world is of utmost importance for a sound development (Mansikka 2007; see also Ashley 2009).

Inasmuch as these phases or periods describe developments of the young and their relation to the world, they describe the expectations put on the educators. The division into periods of 7 years ought to be understood as guiding rather than exact descriptions. The division is in no way unique to Waldorf education, and it can be found in many educational and developmental theories (as, e.g. in Jean Piaget's epistemological ontology; for further discussion, see Ashley 2009; Kraftl 2006; Mansikka 2007).

72.8 The Curriculum

The kindergarten curriculum only points out the major aims of education. The kindergarten is to be arranged as a place where the child can play freely, and it is expected to shape experiences that in themselves are developing and fostering the child. Movement, imagination and play – these are the cornerstones of the kindergarten activity that supports the development of the child. The kindergarten gives opportunities for aesthetic experiences through sense impressions, play and rhythms.

It is crucial for the teacher to help the child to feel comfortable and welcome in the world. The children model their behaviour on that of the teacher, because to

them the teacher signals what the world is like and shows them through his or her way of being that they can trust the world and that 'the world is good'.

The kindergarten prepares for the world, for school and further life. The setting helps to socialize children into the community, e.g. when exercising social skills in line with the rhythm of everyday life. Good and social habits are slowly encouraged, for instance, during meals when the children learn to wait for each other, thank each other, and share the meal together. In the early years of education, during the child's first 7 years, there is considered to be no need for teaching in a formal sense. The role of the kindergarten is not to deliver knowledge but to offer a specific qualitative climate and situation where the child can play and flourish. The aim is therefore not to reach specific and preset skills but to offer a climate where every child can grow in accordance with and in line with its personal life plan.

Waldorf kindergartens are organized according to a principle of harmonious rhythm, which consists of continuously repeated daily routines, weekly activities and celebrations and festivals during the whole year. Things carry on in a predictable, regular manner that supports the creation of a secure and intelligible environment. It is seen as beneficial for young children to experience the relevance of the world before they separate themselves from it and begin to analyse it in a detached way. 'Premature awakening' is seen as a risk rather than a goal.

72.9 The Role of the Teacher

In the Waldorf educational setting, the role of the educator is like the role of an enlightened and stable grown up; a person who directs the common attention towards the world and takes full responsibility for the situation. The teacher and the children have different roles, and the relationship is considered asymmetric; for instance, the teacher seldom gets involved directly in the children's play, if not invited by the children to play with them. Already during the starting of the first Waldorf school, it was emphasized that all teachers need to educate themselves and stay spiritually fit. It was also stated that the attitude of a teacher should be to support and encourage the experiences of the children without theorizing about them (Parker-Rees 2011).

72.10 The Child Studies

In order to know and understand the children, the teachers do specific child studies in which they observe and note changes and developments, however, without measuring or judging children against any formal representations. The point of reference is their common knowledge of the development of the human being, with particular focus on the first 7 years. Attention is on one particular child at a time, but the aim is to adjust the actions of the teachers themselves and to develop their own sensitivity (Ashley 2009; Parker-Rees and Rees 2011).

This may result in changed interactions with the child, or it may result in considering certain changes of the environment or the programme. The child itself is seldom understood as being in need of adjustment or correction (Ashley 2009; Dahlin 2007).

The teachers' task is to see that the child is guided and supported; if there are severe problems, school doctors and curative educationists are consulted for deliberations and support.

The teacher draws the inevitable boundaries and arranges situations in accordance with the idea of a basic frame, consisting of temperature, texture, materiality, nutrition, imagination and basic social rules such as waiting and thanking.

72.11 Speaking to the Whole Human Being

As has been mentioned before, the educator should talk to and address the human being as a whole, and doing this art is crucial. Through art humans encounter each other as live and whole beings. However, art and artistic practices demand that teachers turn their attention towards a strengthening of the artistic aspect in the other (Nobel 1991; Oberski and McNally 2007; Uhrmacher 2004).

The task in the kindergarten is to allow the children to engage with the physical and social environment in an imaginative way. The following example from a study of Waldorf kindergartens in the UK (Drummond 2011b) illustrates how the children are indirectly taught to engage in and trust their sense experiences and not necessarily to theorize about them. The teacher and the children are making juice by using an old-fashioned mechanical apple press; although the children share the same experience, the explanations vary according to the children's age:

The children then had a discussion about how the press actually works. In answer to their questions, the teacher said, once again: 'Mmm… I wonder how it works'. After a moment of silence, the 3- and 4-year-old children suggested that it was 'probably the fairies and the gnomes' that were responsible, while the older children knelt down to inspect the working parts of the press and reasoned how the process might take place by one part affecting another. (Drummond 2011b, p. 14).

As Mary Jane Drummond later comments, the 'differences in the thinking of the younger and older children are accepted, not suppressed by the teacher – a powerful lesson for children learning together' (2011b, p. 23). By respecting the younger children's explanation, the teacher shows that respecting each other's different views is important. The teacher also listens and waits for the children to tell or ask, rather than questioning them, which is an approach emphasized in Waldorf early education. In other words, the young children are not encouraged by the teachers to seek scientific explanations or to focus on abstract ideas but to see the world as an enchanted and marvellous place that can be explored in their free play – a way which is believed to mirror their natural way of being. Accordingly, the teachers find it to be of the utmost importance that the children get rich opportunities for extensive periods of unstructured play and sense experiences. Rod Parker-Rees has observed in a study of several Waldorf kindergartens that 'teachers' concern to protect a

'dreamy' space may also be understood in terms of allowing children to wallow in their play, slowly absorbing the rich and complex information about social relationships, roles and feelings which will give colour and vitality to their understanding of their sociocultural world' (Parker-Rees 2011, p. 9).

72.12 The Teacher's Inner Work

There are several daily and weekly activities in which the teacher is engaged during the time at the kindergarten. They vary from household chores to artistic activities and storytelling. In addition to this, there are many further expectations of the teacher: being non-judgemental, non-evaluating and non-questioning and being responsive, consistent and acting according to the overall general structure yet being flexible and handling unpredicted situations. In order to handle these expectations, the teachers work with themselves, for instance, painting, practising eurhythmy or meditating.

When teachers practise their regular 'inner work' of bringing each child to mind, often in the evenings, just before they go to sleep, they are able to place each child in an imagined future by asking themselves questions such as 'what does this child need from me?' (Parker-Rees 2011, p. 11).

Another aim is to be a role model worthy of imitation (Drummond 2011a; Parker-Rees 2011). As a Waldorf kindergarten teacher in a Swedish study (Frödén 2012) explains it; one cannot expect the children to be calm, respectful and keep a low voice at the table at mealtime if the teacher is running around yelling at them to be quiet and sit down.

The expectations on the teachers can be summarized as follows:

Support the children in their imaginative play and sense experiences.
Inspire by doing (it, e.g. baking) and living (it).
Listen and sincerely say yes to the initiatives and thoughts of each child – this demands that the teacher refrains from comparisons, judgments and corrections.
Be a model worthy of imitation – this requires inner work and self-reflection and a sound relation to the world of which one is a representative.

72.13 The Kindergarten Practice

Kindergartens, like schools, are organized in flat non-hierarchal structures where the teachers have the overall educational responsibility and usually also have great influence on the management and organization of the kindergarten (Dahlin 2007; see also Ashley 2009). The collegium, consisting of all kindergarten staff, meets weekly for discussions and planning. They moreover engage in continuous further studying and training.

72.14 Forming a Community

In the Waldorf kindergartens, the children normally belong to a mixed-age group (3–6 years olds) and tend to stay with the same teachers for several years creating an almost family-like constellation and homely atmosphere as they share several everyday life activities together. The teachers and the children therefore get to know each other well, which means that the teachers are able to follow each child's individual development and progress over the years and get a deeper understanding of his or her unique personality. This relationship comes to an end when the 6-year-old child is ready to leave the kindergarten and go to school. There is a tradition of celebrating this passage from the first 7 year period to the next one. Some kindergartens arrange specific educational activities designed for the 6-year-old children to prepare them for school, and others have special festivities (Jenkinson 2011).

The structure or rhythm of the educational practice follows a steady pattern, and the children and the teacher do the same activities at the same time during the day. Since the older children are already familiar with the routines and activities, they can act as role models for the younger, with themselves modelling the behaviour of the teachers. Different obligations, rights and responsibilities of both the children and the teachers are woven into the rhythm, rather than being enforced through rules. This way the children soon learn what is expected of them and also what to expect from the teachers and the educational practice itself (Frödén 2012; Jenkinson 2011).

One might say that they 'learn before being taught' – a recurrent idea in Waldorf kindergartens: The teacher 'corrects' a child who has been mistaken, by showing how to do things right, in a concrete tangible way rather than by telling the child how to act or behave (Drummond 2011a; Parker-Rees and Rees 2011). The youngest can thereby find their way into the different activities and tasks at their own pace and contribute to the practice according to their own abilities and wishes. The older children are also thought to benefit from the mixed age community because they will have the opportunity to grow from the responsibility and enjoyment of sharing their knowledge with the youngest. In other words, this setting is arranged in order to reinforce solidarity, empathy and collaboration between older and younger children in a natural way and to support the continuity of the settled rhythm (Jenkinson 2011).

72.15 Breathing In and Out

The daily rhythm consists of various periods of contraction and expansion in order to provide a balance between movement and rest and in order to create different moods during the day's activities. There is a deliberate alternation between child-initiated and teacher-initiated activities, with an emphasis on the former, as well as spending time indoors and outdoors (Frödén 2012). This means that the circle time

occurs between periods of free play indoors and outdoors, not because it might be convenient for the teachers but as a way of following a principle of breathing in and breathing out (Bone 2007, p. 167). Children and teachers move rhythmically and consistently in and out in daily routines and activities in a calm, continuous pace. The children will, so it is argued, experience and become aware of how certain moods are to be connected and associated with specific activities. For example, the teacher strives to create a celebratory, yet meditative and ceremonial, mood at a yearly festival like the Lantern Festival in October. The aim is to bring about inner stillness and a sense of awe and wonder (breathing in). However, the outdoor activities are to be characterized as joyful, exciting and full of bodily movements (breathing out).

Breathing in and out is considered to have beneficial effects on the children. Ideally, they not only become aware of 'how things are done here', but they also integrate the rhythms into their bodies as habits: Surely they feel hungry around meal time, but they also 'get the feeling' that it is time to end the outdoor play and get inside for circle time since this is done at the same time every day. If the children become totally absorbed in their play, or in other ways forget time and place, the teacher should remind them about the next activity in a gentle way, almost like awaking them from dreaming (Waite and Rees 2011). That can be done by softly tinkling a small bell when it is time for cleaning, or collecting the children by dancing together in a line from one room to another, while singing a song about a caterpillar (Frödén 2012; Nicol 2011).

In other words, transitions from one activity to another are done with thought and care; the teachers use them as ways of building bridges between different practices, while at the same time clarifying when a task starts and ends. For instance, when the teacher lights a candle she or he marks that the mealtime has started, and when a child finally blows out the candle at the end of the mealtime they all know it is time to get ready for resting time (Bone 2007). The teacher can thereby minimize the amount of verbal reprimands and reminders of proper behaviour and manners because the child knows what is expected from him or her and what to expect from the situation ahead. In this way the rhythm is not stopped abruptly but continues to flow throughout the day (Frödén 2012).

72.16 Providing a Space for Specific Sense Impressions

When creating a Waldorf kindergarten environment one cannot think of buildings as merely empty surfaces to be filled with any functional material suitable for kindergarten children. Much emphasis is placed on the key idea that everything that surrounds young children will eventually have an impact on them or, in other words, that form stimulates thoughts and emotions (Uhrmacher 2004; see also Kraftl 2006.)

Since the young child is believed to experience the world through his or her senses, it is important to provide a space for certain selected sense impressions. The teacher's role is to pay attention to all senses whether it is a matter of sight (of the

warm pink or orange colours of the walls and rounded corners of the window), touch (of the soft texture of silk and the smoothness of the clay), sound (like tones from a lyre and children's laughter), smell (of beeswax and newly baked bread), taste (of home-made pie and apple juice) or movement (like climbing up a tree and dancing in a ring). In addition to the well-known five senses, other equally important sense experiences can be added, like that of warmth (from the heat of the fireplace), balance (when playing on a wooden see saw), social interaction (with peers and teachers) and a general sense of well-being (Masters 2000). Although it's a carefully arranged environment, it's designed to be 'transformed' by the children during their play and different activities; 'The children arrive each morning into an open space, where they may use the screens, the blocks, the tables, the length of cloth, to create their own environments' (Drummond 1999, p. 52).

As mentioned before, regardless of where in the world the Waldorf kindergarten is located one can easily recognize it by its specific, external features, colours and style and even architecture. Peter Kraftl describes the building of the Waldorf kindergarten in his study:

> The building has wavy, orange-pink walls, made from local stone with natural plaster and conical grass roofs. The interior is designed to be warm, enclosing and 'womb-like', as well as homely (…) The two classrooms are entered from a labyrinthine corridor, are circular in shape, with no straight lines, painted in a deep pink, with cubby holes and bulbous hide-aways, a little kitchen, and cupboards behind solid doors of local hardwood. (Kraftl 2006, p. 494)

Decorating the rooms with lights, flowers or self-made artefacts as well as neatly mending broken toys and tools is believed to be a way of showing respect and care, not only for the environment but for other human beings and ourselves; 'At the end of the day, each doll is wrapped in a blanket and put to bed, and the children also learn to treat other materials with respect; pieces of cloth are folded, ropes are coiled and everything has its place' (Parker-Rees and Rees 2011, p. 42).

72.17 Transforming the Place and Challenging the Boundaries

The outdoor environment in the Waldorf kindergarten looks typically more like a natural garden than a public playground; grass, fruit trees and bushes, small huts, home-made wooden swings and natural sandpits are preferred in place of asphalt, standardized plastic slides and climbing frames. Aside from free play, the children are therefore provided with opportunities to help in the garden, perhaps picking organically grown vegetables and herbs, chopping wood, digging or taking care of the compost. If there is no garden adjacent to the building then the outdoor activities can be conducted in a nearby forest or other nature area.

The environment of the Waldorf kindergarten is sometimes described and interpreted as an enclosed and shielded place, although rather as 'a mantle or protective cloak' than a bubble (Parker-Rees and Rees 2011, p. 44). At the same time, the

teacher is not ‘overprotective’ when it comes to activities like carving wood with sharp knives or playing near fireplaces. Unlike indoors, the children are encouraged to play in physically challenging and demanding ways that need space. While climbing trees, jumping and balancing on rocks, the children not only develop their physical coordination and gross motor skills, but the general aim is to let them find and challenge their own physical boundaries in self-motivated movements without the interference of adults (Parker-Rees and Rees 2011).

72.18 Toys and Play Material

The toys in the Waldorf kindergarten tend to differ from those found in other preschools in that all toys are made of natural materials, and they are often handmade, often by the teacher, children or parents, and therefore unique. For instance, dolls, hobbyhorses, fancy dresses and vehicles and animals in different sizes and simple shapes all made of wood and textiles can be found in the kindergarten. Unlike the range of toys found in other early childhood settings, there are no plastic or ready-made toys related to children’s popular culture or pre-structured play environments nor computers, TV or other electronic equipment for playing games or watching movies.

The selection of toys mostly consists of play materials drawn from natural sources, objects that the children or teachers have collected themselves like different-shaped stones, shells, sticks, seeds and pine cones and plain cloth of wool, cotton and silk and pieces of skin, fur and wool in different colours and sizes, simple construction toys like wooden building blocks or logs of varying shapes and sizes.

The point is to enable the children to transform all these ‘open-ended’ and changeable toys imaginatively, so that they fill different purposes in the various forms of play (for instance, building huts or imaginary landscapes and worlds) (Waite and Rees 2011; Masters 2000). Even the specific hand-sewn dolls, sometimes referred to as Waldorf dolls, are intentionally ‘unfinished’ with no distinct facial features – three dots to mark the eyes and mouth – and hair of yarn or wool. The body has a straight and simple form without details like fingers and toes and bears no sex characteristics. The dolls can therefore act many different roles in the play. The toys mirror a key idea of the educational practice, to strengthen the children’s imagination and creativity in general (Drummond 1999; Frödén 2012).

72.19 Learning from ‘Real Life’ Experiences and Seeing Domestic Chores as Honorary Tasks

One might say that the Waldorf kindergarten is a community of doers, where the children and teacher work together and experience the practicalities of ‘real life’. When the teachers are fully immersed and purposeful in the necessary household

chores or different crafts, they strive to mediate a love of work. The general approach towards work can be described as based on engagement, joy and industriousness, where work includes artistic activities, household tasks, handiwork and play; all equally valued and embraced in a sense of 'whatever is worth doing, is worth doing well'. Burnett notes that "in such a setting, the teacher sings during cleaning up. This is a prompt for the children to join in and do the same" (2011, p. 84).

The teacher's role is to support by showing and then to have patience and trust the children's ability to manage different tasks themselves (or together with a peer) and eventually finished what they started even though it takes time. Thus, all everyday actions, like climbing up on a rock and finding a way down, putting on shoes and mittens or sewing a doll, can be seen as an opportunity for the children to increase their self-reliance and sense of independence.

Some domestic chores like helping out in the kitchen with the washing up, serving or setting the table tend to be the oldest children's responsibility. These are ideally presented by the teachers as important and honorary tasks rather than obligations, and during mealtime the children helping out might even be given honorary titles such as 'The master of table setting'. In general, since both boys and girls not only are encouraged to attend but also expected to want to perform household chores, these do not appear as 'boring' 'women's work' but a crucial part of the everyday rhythm of the kindergarten (Frödén 2012).

72.20 The Circle Time: A Gathering for Storytelling in Various Forms

The circle time in the Waldorf kindergarten can be described as a teacher-initiated gathering that occurs regularly in the daily rhythm and contains different songs, poetry or rhymes, drama, dances and other kind of movements, usually based on a certain theme or a story (Nicol 2011). The themes, for example, the celebration of birthdays or a preparation for yearly festivals, and stories are often repeated many times during a week or more. There is an oral tradition in the Waldorf kindergarten where stories are told, not read, by the teacher. The stories include a variety of fairy tales, nature stories and folktales from different countries, viewing the world as good, or stories made up by the teacher to address a certain child or a problematic situation that has arisen in the group (Drummond 2011a; Nicol 2011). When a story is told several times, it allows 'the children to listen their way into it, anticipating particularly powerful moments and responding to subtle variations between separate tellings' (Parker-Rees 2011, p. 6). In addition to getting a deeper understanding and relationship to the story, the purpose is to develop a good memory, extend their vocabulary, enrich the child's imagination and develop knowledge of narrative

structure[2]. Later the teacher might also support a previously told story by performing a puppet play (Nicol 2011).

According to the principle of breathing in and out, the circle time is not only about sitting quietly and listening but involves lots of bodily activities. Sometimes the children participate in different plays or join in the teacher's storytelling by following her movements (Frödén 2012). Similar to eurhythmy[3], which is commonly practised in Waldorf kindergartens, the movements of the teacher might not be left to chance, instead she/he strives to rehearse them well to make them clear and precise. Janni Nicol considers this an art in itself; 'the teacher practices and enters into the movement which she has observed or studied beforehand, whether these are the archetypical movements of cutting wood, scything hay or jumping like a rabbit, she completes each gesture with precision and care, reflecting the rhyme, song or poem. […] The quality of the gestures performed by the adult is therefore of prime importance and developing them properly is an art' (Nicol 2011, p. 79).

The ring time is also a way of creating a sense of community, by making the children aware of each other's presence, for example, through singing a song where the children's names are mentioned to acknowledge who is there and who is missing from the group. Music is an essential ingredient of the educational practice, during ring time when the children and teachers sing, dance and play simple musical instrument like the pentatonic flutes, wooden xylophones, drums and kinder lyres (small harps) in everyday activities. As an integrated part of the daily rhythm, music can be used as a tool for keeping the children occupied when waiting at the dinner table or while wandering together to a nearby forest or meadow for daily outdoor activities (Frödén 2012).

72.21 Artistic Activities to Provide Possibilities for Developing the Senses

During their time at the Waldorf kindergarten, the children are given the possibility to engage in many different crafts. The place is usually filled with lots of materials and tools to provide opportunities for carding, spinning and felting wool, weaving, embroidering, sewing, wood carving and drawing – crafts that can be performed any day according to the children's wishes (Nicol 2011; see also Frödén 2012).

It is also common that some of the weekly teacher-initiated activities consist of aesthetic experiences and crafts like painting with water colour, modelling with beeswax or clay and baking bread. An activity like baking bread recurs regularly: the teacher brings out the small hand-operated mill to make flour from wheat grain

[2] Although storytelling, instead of reading books, is preferred and there is no formal education of reading and writing, research studies show that Waldorf children is not disadvantaged when later attending school (Ashley 2009; Suggate et al. 2011. For further discussions see Burnett 2007).

[3] Eurhythmy, a movement of art, is a school subject that is unique for the Waldorf school and is taught by specifically educated eurhythmy teachers.

and the children may participate, or they may refrain from participating, knowing they will get a new opportunity to bake next week. The central idea is to let the children follow the whole process, from grinding their own flour to eating the newly baked bread, or as illustrated by John Burnett:

> Each week they see the yeast bubbling on the cooker and get used to the feeling of sticky dough on their hands and the miracle of their moulded creations rising and coming out of the oven, crusty and hot. They don't learn about bread making, they make bread for people to eat, and do this slowly, dreamily and repeatedly, as part of a yearly rhythm. (Burnett 2011, p. 84)

Even if the product, the bread, can be seen as a reward for the heavy work of the grinding, an equally important part is the process of baking itself. In a similar way, the central focus of the watercolour painting is not to teach a certain painting technique (wet-on-wet), even though, by participating, the children learn how to use big brushes, running paint onto the wet surface of the paper to create beautiful pictures. Instead, the main aim is to provide a peaceful and meditative moment for the children and, by introducing a few colours at a time, to let the children get acquainted with each one and experience the 'feeling' of different colours (Lim 2004; Nobel 1991). The colour comes 'alive' when flowing on the wet sheet of paper, and as Lim observed, the teacher might therefore refer to the colours as different persons by saying that, for example, 'Blue wants to play with yellow' instead of 'Let's mix colours' (Uhrmacher 2004, p. 117). While focusing on the experience itself, the teacher avoids evaluating, comparing and analysing the way the children paint or their pictures. The repeating structure of rhythm is supposed to enable the children to gain an enhanced and deepened knowledge of these various artistic activities because they are practised so often (Frödén 2012; Nicol 2011).

72.22 Yearly Seasonal Celebrations

The rhythms of daily and weekly routines, activities and tasks are unified in the yearly rhythm where the different seasons are highlighted in various ways (Kraftl 2006). Depending on the location of the Waldorf kindergarten, several festivals related to different religions or local traditions are celebrated (Bone 2007; Nicol 2011). Other celebrations that are common in Waldorf kindergartens irrespective of the kindergarten's location are the Lantern festival (Martinmas), the Waldorf Advent Spiral, Michaelmas and different harvest celebrations. These festivals have the character of rites and some of them are well prepared through stories, songs, puppetry and making of artefacts and paintings connected to the celebrations. For instance, when the children and teachers prepare for the Lantern festival several weeks in advance, they make yellow, orange and red lanterns (which includes painting, cutting, folding and sewing papers), practising songs with lyrics like 'Here I walk with my lantern, my lantern walks with me. A star is shining up there; it shines on you

and me. […] Light my way, my little lantern lighten it up'. These songs are then repeated over and over again while wandering in the dark forest at dusk together, with the lighted lanterns in their hands, during the festival (Bone 2007; Frödén 2012).

As in the case of other traditions, the spiritual aspects of the festivals are not expressed explicitly, as Bone writes: 'in the Steiner kindergarten the deeper meanings were not spelt out but activities were repeated and children were simply exposed to certain ways of doing things' (2007, p. 153).

72.23 The Passage from Kindergarten to School

The Waldorf kindergarten practice is ultimately a question of preparing the young children for the next phase in life, in this case entering the school. The tradition of performing a certain ceremony, not unlike a rite of passage, for the 6-year-old children at the end of term assembly may serve as an illustration for the purpose of the whole kindergarten period:

> During the last day, the teacher tells a story about two children who enter into the world after gaining certain knowledge and experiences. Then the six-year old children receive gifts that will serve as memories of the kindergarten: cushions of wool that they have felted themselves, and a self-bound book with their own paintings and rhymes and songs that the children have heard and sung many times during their years in kindergarten. Finally, the teacher calls them one by one, takes their hand and says a few words to them before they pass through an arch decorated with leaves and flowers. Having done this, they have symbolically left the kindergarten for good, moving on to school. (Frödén 2012).

Later the same year, when the children begin first grade in the Waldorf school, they are likely to face a similar welcome ceremony since Waldorf teachers often begin each day by shaking hands and greeting the pupils by their names (Ashley 2009; Uhrmacher 1993).

The basic rhythms of the kindergarten continue in school, yet they change successively along with the same basic idea of human growth. Some of the themes, stories and activities introduced in kindergarten will recur, deepen and develop further in the first years of school. Learning to read and write may serve as an example of this, because in early literacy, the idea of working from the whole to the parts remains, and pictures precede letters. The teacher combines storytelling with recitation, drawing (the picture of a swan turns out to be the letter S) and eurhythmy (the sound of the letter is illustrated in specific bodily movements) (Burnett 2007).

Kindergarten is part of a cycle of lifelong learning. It is shaped around the idea that young children should experience the world as good. In the next 7 years in school, the world should be experienced as beautiful, along with the same motto for the teachers to 'receive the children in reverence, educate them in love, and let them go forth in freedom'.

72.24 Critical Reflections

Waldorf education has spread around the world, and today thousands of children attend the kindergartens and schools. Along with its growing popularity, the Waldorf education movement has been critiqued for being isolated and engaging in cultural reproduction of anthroposophists. In a Swedish study, Dahlin (2007) found that a majority of the Waldorf students attended higher education after graduating from upper secondary school and that only 1–2% of them joined anthroposophist professional training courses. There are reasons to believe that the degree of inclusiveness differs depending on the arrangements of the teacher education: In countries where teacher education is part of the higher education system with research and input from other streams of thought, the question of isolation is not as accurate as in cases where teaching qualifications and skills are limited to internal institutions without research.

The educational method that attracts many parents to Waldorf schools is also criticized for risking being alien to scientific thinking. This phenomenological attitude combines the development of certain skills with the experiences of the children in order to serve the overall aim to make knowledge a live and active element of the human individual (Mansikka 2007). On the other hand, Leijon (1997, p. 185) has pointed out that the critique against Waldorf schools has centred more on their potential threat against the public, or parallel school system, than on their educational content. The discussion about whether Waldorf education is a form of therapeutic pedagogy or a democratic pedagogy seems to stay an internal debate. Nevertheless, a central aim of the Waldorf pedagogy is to educate children to become ‘free-thinking’ individuals. It is, of course, difficult to prove that this is achieved (Ashley 2009; Ogeltree 1998). Yet results from two fairly recent Nordic studies (Dahlin 2007; Solhaug 2007) show that pupils in Waldorf schools involve in social issues at an early age and participate more often in non-parliamentary political activities than their peers from the municipal schools.

References

Ashley, M. (2009). Education for freedom. The goal of Steiner/Waldorf schools. In P. A. Woods & G. J. Woods (Eds.), *Alternative education for the 21st century: Philosophies, approaches, visions* (pp. 209–225). New York: Palgrave Macmillan.

Astley, K., & Jackson, P. (2000). Doubts on spirituality. Interpreting Waldorf ritual. *International Journal of Children’s Spirituality, 5*(2), 221–227.

Bone, J. (2007). *Everyday spirituality. Supporting the spiritual experience of young children in three early childhood educational settings*. Palmerston North: Massey University.

Burnett, J. (2007). A pleasurable path to literacy? Can Steiner contribute to the literacy debate? *Journal of Early Childhood Literacy, 7*(3), 321–331.

Burnett, J. (2011). Carolyn’s voice. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 81–93). New York: Routledge.

Dahlin, B. (2007). *The Waldorf school – Cultivating humanity? A report from an evaluation of Waldorf schools in Sweden.* Karlstad University studies 2007:29, Karlstad.

Drummond, M. J. (1999). Another way of seeing. Perceptions of play in a Steiner kindergarten. In L. Abbott & H. Moylett (Eds.), *Early education transformed* (pp. 48–60). London: Routledge Falmer.

Drummond, M. J. (2011a). Looking inside the kindergarten. The apple press. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 13–25). New York: Routledge.

Drummond, M. J. (2011b). The work of the teacher. Key themes and absences. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 94–102). New York: Routledge.

Frödén, S. (2012). *I föränderliga och slutna rosa rum. En etnografisk studie av kön, ålder och andlighet i en svensk waldorfförskola*. (Doctoral dissertation). Örebro Studies in Education 35, Örebro University, Örebro.

Jenkinson, S. (2011). Mixed age structure, the family model and the developing child. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 26–40). New York: Routledge.

Kraftl, P. (2006). Building an idea: The material construction of an ideal childhood. *Transactions of the Institute of British Geographers , 31*(4), 488–504.New Series

Lejon, H. (1997). *Historien om den antroposofiska humanismen.* (Doctoral dissertation) Acta Universitatis Stockholmiensis; Stockholm Studies in the History of Ideas 3. Stockholm: Almqvist & Wiksell International.

Lim, B. Y. (2004). The magic of the brush and the power of color. Integrating theory into practice of painting in early childhood settings. *Early Childhood Education Journal, 32*(2), 113–119.

Mansikka, J-E. (2007). *Om naturens förvandlingar. Vetenskap, kunskap och frihet i Rudolf Steiners tidiga tänkande. Idéhistoriska perspektiv på Waldorfpedagogiken.* (Doctoral dissertation). Pedagogiska institutionen. Forskningsrapport 211, Helsinki University, Helsinki.

Masters, B. (2000). City of Toy Falls to Plastic Horse – At what level can the Steiner approach to education contribute to the current debate on the early years? *Early Child Development and Care, 161*(1), 1–13.

Nicole, J. (2011). Doing is learning. The domestic arts and artistic activities. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 68–80). New York: Routledge.

Nobel, A. (1991). *Education through art. The Steiner school approach*. Edinburgh: Floris Books.

Nutbrown, C., Clough, P., & Selbie, P. (2008). *Early childhood education. History, philosophy and experience*. Los Angeles: Sage.

Oberski, I., & McNally, J. (2007). Holism in teacher development A Goethean perspective. *Teaching and Teacher Education, 23*, 935–943.

Ogeltree, E. J. (1998). *International survey of the status of Waldorf school*. Illinois: University of Illinois.

Parker-Rees, R. (2011). Introduction. Ways of knowing children. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 1–12). New York: Routledge.

Parker-Rees, R., & Rees, S. (2011). How the Steiner kindergarten environment helps adults and children to get to know each other. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 41–53). New York: Routledge.

Solhaug, T. (2007). Steinerskoler i et demokratisk perspektiv. En sammenlikning med offentlige skoler i Norge. *Nordisk Pedagogik, 27*(2), 150–171.

Steiner, R. (1919). *The Art of Educating: A methodological-didactical course, August 21–September 5, 1919*. Dornach: First Lecture.

Steiner, R. (1976). *Das Wesen der Farben. Vortrag 6 mai 1921. Bibliografphie-Nr. 291* (pp. 23–38). Dornach: Rudolf Steiner-Nachlasszverwaldung.

Steiner, R. (1991). *Towards a Deepening of Waldorf Education. Excerpts from the work of Rudolf Steiner. Essays and Documents* (2nd ed.). Dornach: Pedagogical Section of the School of Spiritual Science.

Suggate, S. P., Schaughency, E. A., & Reese, E. (2011). The contribution of age and reading instruction to oral narrative and pre-reading skills. *First Language, 31*(4), 379–403.

Uhrmacher, B. (1993). Making contact. An exploration of focused attention between teacher and students. *Curriculum Inquiry, 23*(4), 433–444.

Uhrmacher, B. (2004). An environment for developing souls. The ideas of Rudolf Steiner. In D. M. Callejo Pérez, S. M. Fain, & J. J. Slater (Eds.), *Pedagogy of place. Seeing space as cultural education* (pp. 97–120). New York: Peter Lang.

van Mansvelt, E. (2002). Hur kan vi uppnå kunskap om den värld i vilken vi lever? *Människobilder 4*, 55–61, Stockholm.

von Grunelius, E. (1955/1974). *Educating the young child*. London: New Knowledge Books.

von Wright, M. (2014). On the possibility of novelty: Subjectivity and intersubjectivity in teaching. *RoSE – Research on Steiner Education, 5*(Special Issue), 29–36.

Waite, S., & Rees, S. (2011). Imagination in Steiner kindergartens. Practices and potential purpose. In R. Parker-Rees (Ed.), *Meeting the child in Steiner Kindergartens. An exploration of beliefs, values and practices* (pp. 53–67). New York: Routledge.

Walsh, B. A., & Petty, K. (2007). Frequency of six early childhood education approaches. A 10-year content analysis of Early Childhood Education Journal. *Early Childhood Education Journal, 34*(5), 301–305.

Woods, P., Ashley, M. & Woods, G. (2005). *Steiner schools in England.* Department for Education and Skills. Ref No: RR645, University of the West of England, Bristol.

Chapter 73
Developing the Ability of Children to Use and Construct Visual Models

Nikolay Veraksa and Aleksander Veraksa

Abstract Since the 1960s, development of the ability for visual modeling was investigated by Research Institute of Preschool Education, Academy of Pedagogical Sciences of the USSR. These studies were based both on the cultural-historical theory of Lev Vygotsky and the theory of activity developed by Alexey Leontiev. According to Vygotsky, development of higher mental functions takes place due to the development of symbolic means that the child acquires under the supervision of an adult. Vygotsky's follower—Alexander Zaporozhets—showed that not only words are the cultural means but also visual image plays the role of sensory standard by which the child analyzes the world of human culture.

The follower of Zaporozhets, Leonid Venger, analyzed children's spontaneous drawings and came to the conclusion that drawings are not so much works of art as models of various objects. This allowed Venger to formulate the hypothesis that in the preschool age, children develop the ability to visual modeling. It is the ability to build and use a visual model in order to solve different cognitive tasks: orient in the space, create constructions, etc. Olga Diachenko showed that the successful development of verbal imagination can become a result of visual modeling practice.

Under the supervision of Venger, methods aimed at measuring a level of development of visual modeling ability for children were elaborated.

Keywords Visual model • Plan • Spatial relations • Cognitive tools

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This chapter is devoted to the development of the ability of visual modeling of children. Visual modeling ability is understood in the frame of cultural-historical approach shaped by the works of Vygotsky (1982), Leontiev (1960), Zaporozhets (1972), and Venger (1969). Special attention is given to works of Venger in which it was shown that the formation of the visual modeling ability is possible in preschool age through mastering mental actions related to the use of such models. Development of visual modeling is analyzed in the sphere of spatial relations, construction, and connected speech development. Examples of visual modeling implementation in these three facets of child development in preschool are presented.

Besides ways of the development of the ability to construct and use visual models, its diagnostic method is introduced. Also, experience of visual modeling usage in broad education practice is introduced.

A visual model is a schematic depiction of an object, a process, or the relations between objects that reflects the concrete characteristics of those objects or processes. Analysis of visual models helps in understanding the properties of the modeled situation. The ability to operate with visual models is considered a characteristic ability for children of preschool age.

Our understanding of visual modeling as a special ability of the preschool child was arrived in the context of Lev Vygotsky's cultural-historical approach to child development. The ability to construct and use visual models and the practical applications of this ability were recognized by the Research Institute of Preschool Education of the USSR Academy of Pedagogical Sciences in accordance with the general direction of Soviet psychology and pedagogy in the 1960s. In the works of Vygotsky (1982), Leontiev (1960), Rubinshteyn (1960), Zaporozhets (1972), Elkonin (1960), and others, abilities were considered to be generic human properties. According to this approach, any person, regardless of individual characteristics, has general human abilities, including the ability to construct and use visual models.

The researchers had a special task to reveal the psychological nature and substance of abilities and to reveal the main role of adult influence in the development of abilities in children.

According to the views that predominated in activity theory (Leontiev 1960), the main psychological characteristic of abilities is success in mastering different activities. In other words, abilities (including the ability to construct and use visual models) were considered properties of the human mind, which, first, are of a cultural, historically conditioned nature (i.e., are formed during a lifetime) and, second, are associated with the components of most activities.

If abilities facilitate the formation of activity, we must assume that abilities exist as fragments of the human mind even before a person begins to master a specific activity. The idea that abilities precede mastery is plausible only if there are tasks that are common to different types of activity. Thus, on the one hand, abilities are opposed to activities as a condition ensuring the success of their mastery, and, on the other, abilities are incorporated into an activity as a component. It should be emphasized that this approach requires consideration of abilities not as differences in a

person's success in solving specific tasks but as certain psychological properties acquired by the person through either natural or targeted education.

In keeping with the tradition prevailing in cultural-historical psychology, the ability to construct and use visual models is associated with mastering and using certain psychological means. The discussion that took place in the USSR in the 1960s concerning psychology (i.e., understanding the nature of human mental activity) led to the conclusion that, by their nature, general abilities are a kind of orientation to human activity in different situations. The researchers of the ability to construct and use visual models as a characteristic ability had a number of specific objectives: (a) to demonstrate preschool children's natural use of the ability to construct and use visual models, (b) to describe the means that provide for the development of these abilities, and (c) to describe the actions that characterize the successful application of such means.

A. V. Zaporozhets, a student of Vygotsky, was the first to speak about the existence of special imaginative means (sensory standards) that ensure the development of specifically human properties of perception in preschool children (Zaporozhets et al. 1967). Zaporozhets followed the line of cultural-historical psychology initiated by Vygotsky and contrasted culturally based, mediated mental development with naturalistic views of the child's nature. He emphasized that preschool children's development should be based not on acceleration but on amplification, that is, maximum saturation of the activities specific to preschool children. This point of view led Zaporozhets to look for manifestations of abilities in different types of children's activities (namely, playing, drawing, and constructing). He drew attention to the fact that these activities were of a modeling character. Thus, during a role play, children model social interactions among adults. During drawing activity, children's pictures represent not copies of objects but, in fact, their patterns, which have a variety of spatial properties. During construction activity, preschoolers reproduce complex relationships using three-dimensional structures that also, in fact, resemble the patterns of real objects. The modeling nature of these activities allowed Zaporozhets to argue that processes of visual modeling are included in the typical forms of activities of preschool children; in other words, they are not accidental, and they require special analysis of their role in child development.

L. A. Venger, a student of Zaporozhets, developed the ideas of his teacher and suggested that these phenomena characterize the process of forming a special general ability that is typical of preschool children, the ability to construct and use visual models (Venger 1980). According to Venger, this ability not only ensures the successful mastering of different activities but also is fundamental for the overall mental development of a child. The organization of research on this ability and its subsequent targeted development became an important focus of Venger's psychology laboratory.

Venger (1969) was the first to study the means that belong to visual modeling as a special ability. Following Zaporozhets, he proposed considering visual models to be such a means. Visual models as the means of mental activity had been considered in papers by Galperin (1965, 1969) and Davydov (1972) in relation to school education. Therefore, the assignment of the construction and use of visual models to

children of preschool age deepened the already existing view of visual modeling and thus allows us to see a continuous line in the development of the ability through kindergarten to school while preserving our understanding of it as a generic human property.

Venger put forward a hypothesis for the formation of the ability to construct visual models through mastering mental actions related to the use of such models. These mental actions were the use of substitutes for an object or process or relationship, the construction of a visual model (modeling the relations between real objects on the relations between elements of the model), and the use of a model to solve problems (analyzing the model in order to solve a real problem).

To test this hypothesis, it was necessary to select the educational content that would be the basis for building the entire system of visual modeling. In the search for this content, various types of adult activities associated with modeling were analyzed, and a list of the whole range of activities related to the use of drawings, plans, and diagrams was established.

73.1 The Development of Spatial Relations

One of the key areas of the experimental work of Venger and his colleagues was the study of the use of visual models when mastering spatial relations. A strong tradition of familiarizing children with spatial relations was already established in preschool education.

According to Venger (1982), children learn spatial relations between objects through operations with models that represent these relations in the form of a diagram or a plan (Diachenko 1973). In the experimental methodology, the ability to construct visual models was formed through having children master the ability to build graphic plans and to orient themselves in the real world on the basis of these plans. The very ability to construct and use visual models was considered as an orientation activity based on the use of a special tool (a graphic plan) and relevant actions (building a graphic model, orienting oneself on the basis of that model) (Fig. 73.1).

For the purpose of forming the ability to construct and use visual models, a special program was designed for children from 3 to 7 years; the program lasted for 4 years. It included three directions for the development of educational content. First, the program was based on a gradual increase in the complexity of the tasks—in particular, the size of the modeled space and the scale of the plan. Thus, the space of a doll's room gradually evolved into the space of a real room, then into the space of a kindergarten building, then into the adjacent area, and, in the end, into the space of a city.

The second direction was an increase in the complexity of the structure of the space displayed in the plan, from a minimum number of items in the beginning to a large number of items that filled the space in the end. The researchers emphasized

Fig. 73.1 Ivanna (4;11) making a visual model of a doll's playground

that if at the early stages items were different in shape and size, then in the future, items of the same shape and size were to be used.

The third direction was an increase of task complexity through the use of new actions. After plan construction and orientation in space using an individually constructed plan, such actions as the construction of a spatial plan from recall and the inclusion in the plan of a system of spatial relations based on Cartesian coordinates were introduced.

In the process of teaching the children, mastered mental activities were being interiorized: if at the first stage a child mastered substitution (creating a plan in external form) and orientation on its basis (understanding the correlation between the graphic plan and real space), then at the second stage, the child shifted to the mental construction of a graphic model and to orientation on its basis.

In practice, teaching the use of plans began by familiarizing children with a model of a doll's room with a small number of pieces of furniture having different shapes and sizes. The basic pieces of furniture for the room were a round table, a rectangular sofa, and a square chair. Each child was given a piece of paper matching the shape of a room and a set of plain cardboard figures corresponding to the shapes of the main pieces of furniture (circle, rectangle, square). Each child was asked to decide which figure looked more like a table, which one looked like a sofa, and which one looked like a chair. Then the child was asked to arrange the figures according to the arrangement of furniture in the doll's room. Also, a game situation

was created: it was proposed that another doll would like to arrange her furniture in the same way, and it was necessary to help her make a plan.

By the end of the first year of study, most children were able to make a plan for a doll's room, observing spatial relations between pieces of toy furniture.

During the next stage of learning, during their fifth year, children were taught to orient using a plan. They solved problems in several practical situations: these tasks were related (1) to the transformation of a model on the basis of a plan and (2) to orientation in the actual space of real life on the basis of a plan.

Tasks of the first type were as follows. Teachers used the model room plan and a set of furniture arranged in any order. The children were told that a doll wanted to rearrange the room, and a room plan was drawn especially for her. The task was to help the doll arrange everything according to the plan.

Tasks of the second type involved orientation in a model on the basis of a plan. Thus, the arrangement of furniture strictly resembled that in the model. A small object was hidden in the model, and its location was marked on the plan with an icon. Children had to guess where the hidden object was. Another variation of the same task was the placing of an item in accordance with the instructions on the plan. For example, the plan indicated the place where a doll was to sit, and each child had to find that place in the room and put the doll there.

Tasks of both types were gradually transferred to the real space of a classroom. At the same time, the number of items on the plan was increased, as well as the number of objects of the same type (e.g., the tables at which the children sat). Transformation of the classroom by rearrangement of pieces of furniture (tables, etc.) allowed for creation of diverse, nonstandard plans for the same room. Children could actively participate in the creation of these plans. For example, during a session, a teacher went out for a walk with children and observed the yard of the kindergarten. Before the task ("to draw a plan of the yard"), the children came up to the window to have a look at it (Fig. 73.2).

By the end of their fifth year, most children could successfully cope with such problems (children could make detailed plans of different spaces and use them to find objects).

73.2 The Development of the Ability to Construct Visual Models

Another direction for development of the ability to construct and use visual models was construction teaching. Venger believed that because construction represented a modeling of real objects, it could serve as the specific content for building models of the second level, that is, it could serve as a model of a model. In this case, a graphic model or a drawing of a structure not only repeats the content of a model of the first level but enhances it and thereby forces a child to more deeply analyze the structure itself and thus the modeled object.

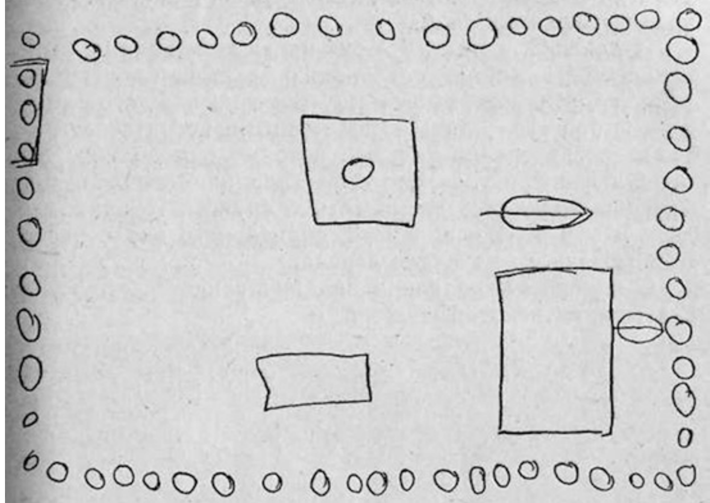

Fig. 73.2 A plan of the kindergarten's yard made by Peter (6; 5)

In this regard, Venger believed that the task of a teacher is to reveal to a child the modeling nature of the construction. In other words, the teacher should explain to the children that structures match specific objects in real life and that the relations among structural elements represent the relations among elements of real objects. The same was then applied to drawings because the relations among elements in a drawing are transmitted both by the relations among elements in a structure and the relations among elements in reality.

The researchers suggested that understanding modeling in this way would help teach children both how to use premade graphic models and how to create graphic models and use them to implement their own plans. In this case, the ability to construct and use visual models was understood to be related to the construction of models that, in their properties, matched visual graphic models.

Because the children's construction activity was developed in detail in Soviet pedagogy, the authors had only to choose standard types of structures, to arrange them by gradually increasing the details and complexity of spatial relations, and to create graphic models for them. The novelty of the approach lay in the fact that, in addition to the graphic model, a drawing of the object in three rectangular projections (front, side, and top) was offered.

The ability to construct models was developed in four stages. The first stage was designed for 4-year-old children. The main objective of this stage was for the children to learn to analyze simple graphic models and to use them to build simple objects. To begin, the children were presented with a graphic image of an object (e.g., a walkway); the image strictly matched elements of the construction blocks in size and shape. Children established the correspondence between the image (the scheme of the walkway) and its structure by putting corresponding construction details directly onto the image. Later, children were offered a new task: to build a

walkway without putting construction details on a graphic model (scheme). It was assumed that the children would turn to substitution and would use a model as a basis for the creation of the structure.

According to the researchers, in the classes, children acquired a new attitude toward construction as a process of modeling objects as they began to reveal semantic relations among object elements.

The second stage was designed for 5-year-old children. It was aimed at mastering an object pictured in three rectangular projections: top, side, and front.

To begin, the children learned to picture a structure in the front projection (as seen from a position in front of the object); this task turned out to be very difficult for them. They faced two difficulties: they could not accurately picture the shape and size of an object in the graphic model, and they could not retain an image of the object. Their difficulty in retaining an image was associated with the fact that, when picturing an object, a child is forced to use not a visual but a representational image of the object. Thus, during the first classes, the method of putting the construction details directly on paper was used: children outlined all the details with a pencil or a marker. The children created graphic images not of complex structures but of separate parts, such as a cube, a prism, and a bar. They mastered the front view and then the top view of the same detail.

In this stage, children learned how to correlate elements of a model with elements of a real structure; for example, they determined the position of a roof, of passages, and so forth. Then the children were offered an undivided graphic model (a model in which only the outer boundaries of the complex shape were outlined) and were asked to find among several structures one that matched the model.

A separate set of tasks was offered for the creation of construction on the basis of a graphic model: the children analyzed elements that characterized joints of parts. As a result, they mastered the ability to determine, on the basis of a graphic model, the most important functional parts and to reproduce them in their construction.

One of the tasks was construction on the basis of the children's own schemes. To do this, children first pictured a structure as a schematic drawing. However, it turned out that without special training children could not build a graphic model of the future structure. Therefore, children performed only part of the task: they completed a graphic model drawn by an adult by adding one or two elements to the picture.

Another task in this stage was the modeling of activity. Children were offered a simple visual model consisting of two colored icons and an arrow. Through this model, the children tried to understand the stages of their work. The first icon designated an object to be pictured in the structure. A child wondered what it was, how the object was used, and what parts would be used in the structure. The second icon designated the material selected to build the object. A child figured out which parts to use for building the structure and the sequence of construction. The arrow indicated the sequence of actions: the first step and the second step. Such a scheme was always used when discussing the children's ideas.

As a result of activities in the second stage, preschool children learned how to picture only undivided (generalized) schemes of objects. When creating graphic models, children forgot about the purpose of the scheme and included elements that

were not anticipated as elements of the model (e.g., a chimney and smoke coming from the chimney, window curtains). Thus, at this stage, children did not yet create a graphic model of the structure in the full sense of the word but pictured the general view of the structure.

The third stage was designed for 6-year-old children. It was aimed at the development of active modeling—that is, the transition from a simple graphic replacement to a graphic model that transmitted the basic spatial relations among the structural elements. Children were taught to build graphic models of various degrees of generality—that is, divided schemes showing separate structural elements and generalized schemes showing only general characteristics of objects. Moreover, children learned how to modify a finished scheme by making alterations and additions, how to create schemes of different projections of an object, as well as how to use in the construction of already-made graphic models of an object built on the basis of rectangular projections.

As in the previous stage, the children more easily pictured a generalized model of a structure than a detailed, divided model. They forgot separate structural elements and inaccurately correlated the size of parts with the image on the scheme. As a result, structures built on the basis of such models and schemes did not fit the scheme. Using several rectangular projections also caused significant difficulties; only 7-year-old children managed to fully solve this problem.

The main result of work at this stage was better reproduction of the structures in the schemes and of the essential elements of the structure—that is, the graphic models became more accurate.

At the fourth stage, children continued to build graphic models. The focus was on the internalization of a structural model and the transition to a more accurate depiction of the object in a graphic model taking into account the three rectangular projections of the structure (side, top, and front) and the scale.

Building the exact drawing scheme required the introduction of a measurement. One of the elements was used for this purpose (e.g., a block). The children were taught to measure key parts of a construction using the selected measurement and to vocalize the result ("a doorway having the width of two blocks," "a window having the width of one block"). Using a measurement allowed for transmission of the spatial relations of a structure consisting of five or six elements adjacent to each other. If the structure was too big, children had difficulty in transmitting relative size (Fig. 73.3).

In addition, the children learned to determine one projection (side view) using another projection (top view). Thus, they transposed one projection into another. But the success of such transfers was dependent on how much the children were familiar with the used structure.

The conducted training showed that the mind's ability to build visual graphic models is developed in the process of transforming modeling actions and their external means to forms; the children carried out this transformation in their minds by relying on spatial images of objects. In other words, the researchers considered as a model the spatial image of an object (Fig. 73.4).

Fig. 73.3 Ivan (6;2) making a graphic model of a construction

Fig. 73.4 Misha (5;7) and Luda (5;9) making a construction on the basis of the graphic model that pictures the construction in three dimensions

73.3 The Development of Connected Speech

One of the objectives pursued in Venger's laboratory was to explore the possible use of visual modeling in the development of children's connected speech. This task involved, on the one hand, the ability to produce a connected retelling of a heard text and, on the other hand, the ability to create new texts. A connected retelling of a heard text requires the ability to use the retelling scheme or plan that reflects the semantic parts of the text, with their subsequent extending and serial connection. The ability to create new texts requires the reverse: a child has to create a scheme and then expand it into a full text or story. The work was carried out using fairy tales.

The researchers assumed that the compression and expansion of a text could be implemented through the use of visual models. A visual model was transformed into a plan that depicted the sequence of events and their content. The program lasted 4 years and was designed for children from 3 to 7 years.

The first classes were conducted with 4-year-old children. To begin, the children had to learn how to use the principle of substitution—that is, they had to learn how to use substitutes to indicate characters of fairy tales. For example, substitutes could be paper strips of various sizes, each of which denoted a relevant character: father bear, mother bear, and son bear in the Goldilocks fairy tale, for example. Work with substitutes was restricted to motor modeling: children moved substitutes following the major events of fairy tales read by a teacher. Thus, a teacher reading about the arrival of the family of bears first told about the arrival of the father bear, and a child had to show a large strip; then, the mother bear came, and the child had to show a middle-size strip; when the son bear arrived, the child had to pick up a small strip.

Typically, the children quickly mastered motor modeling, and the teacher moved on to substantive visual modeling. The teacher, just as before, read a fairy tale out loud, and children demonstrated the spatial position of each character with the help of a substitute. In addition, a subject model contained a schematic image of the basic attributes of a scene: the house was represented by a cardboard house, the woods by a drawn tree, and the lawn by a green cardboard oval.

It was assumed that the children would gradually switch to using static visual models. Static models do not involve the movement of substitutes. Each episode was placed in a separate frame containing the main attribute, which characterized the scene of the action, and substitutes for the episode's characters. Arrows were located between frames to indicate the direction of a story.

Forming the ability to make up stories was based on an idea developed by Diachenko (1973) for the development of imagination. It was shown that preschool children could expand a schematic image into a detailed one and include it in a variety of imaginative stories. The ability to make up texts was developed using the same logic: the children recorded their own ideas in the form of a visual scheme and then unfolded it in a detailed story. This study was based on the work of Propp (1969), who analyzed the structure of fairy tales; he showed that a fairy tale contained stable functional relations among characters and that the number of these

Fig. 73.5–73.6 First children learned how substitutes could introduce the characters and objects from the story

Fig. 73.7 Gradually children come to retelling of the story by means of the model

functions was rather limited. This analysis made it possible to build small models that convey meaningful sequences of the interactions of fairy tale characters.

To begin, the children had to learn how to pick various real-world objects and characters for a substitute proposed by an adult. For example, a yellow circle could be the sun, a chicken, and a flower. Then, the adult introduced several substitutes, and each child had to expand a simple plot using the substitutes. At the same time, motor modeling was applied: substitutes were connected to each other or separated from each other, and each child related what was going on with the characters by following a motor model guided by an adult. Finally, the preschoolers proceeded to independently moving the substitutes and making up their own stories (Figs. 73.5–73.6, 73.7, and 73.8).

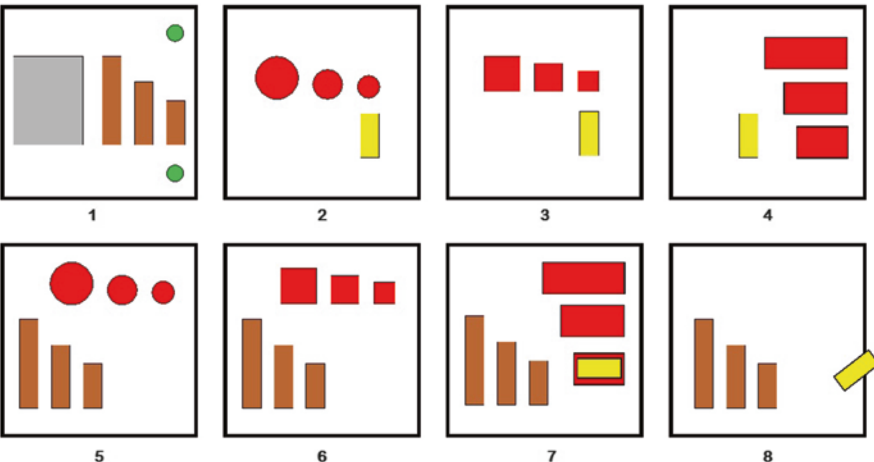

Fig. 73.8 Goldilocks and the three bears tale visual model

When the children had learned to confidently use motor models and to make up short stories, they moved to using static models. But, in this case, the children themselves made up the static model and then used it as the basis for expanding their own plots.

The work with 4- and 5-year-old children followed this sequence:

Forming the ability to replace fairy tale characters and individual objects
Mastering motor modeling and presenting major episodes of a fairy tale with the help of such models
Mastering objective visual modeling—that is, moving substitutes and key attributes of a scene
Selecting suitable objects and characters for a substitute proposed by an adult

One of the main difficulties was the fact that, by easily accepting the idea of substitution, children became addicted to the manipulation of substitutes and did not follow the development of a plot read by an adult. Therefore, special attention was paid to ensuring that all children moved substitutes in strict compliance with the scene. The adult stopped and did not read the next scene of a fairy tale until all the children placed their substitutes properly. As a result, children began to position substitutes reasonably, depending on the scene.

The work with 6- and 7-year-old children involved the transition from motor and subject modeling to static modeling. Children continued to master the retelling of texts by building static models. At the same time, they were offered a creative task, to make up their own texts. And if at first children had to expand schemes of a single episode into a detailed text, over time they moved on to the use of already-made models to create their own texts with a complex plot (Fig. 73.9).

The use of premade models caused difficulties; as in the process both of retelling and of making up their own stories, the children stopped to focus on the model. As

Fig. 73.9 Kira (6;5) telling the three pigs tale with the help of the visual model

a result, they either misrepresented the meaning of episodes or did not reproduce the sequence of events reflected in a model. Thus, the preservation of a focus on the model was a key task of the adult during the entire experiment.

It was observed that children began to change the nature of substitution. Whereas previously a substitute was chosen solely on an external basis (e.g., father bear was represented by the largest strip, and a chicken was represented by a yellow circle), at the latter stages of work, the substitute expressed hidden semantic characteristics of an object or a character. Thus, a wicked witch was portrayed as a black circle "because she is evil."

During the work, three levels of performance of the proposed tasks were identified. The low level was characterized by the children experiencing significant difficulties when proceeding to a new stage of work; they needed extra help, tips from a teacher. Their own stories were restricted to a single episode. The average level was characterized by the children's easily building models but having difficulty in reproducing the sequence of episodes. This difficulty was expressed in their omission of some episodes or rearranging them. Children who demonstrated a high level of operating visual patterns freely proceeded to each new stage and fully used the opportunities to use visual patterns when retelling a text and building their own stories.

The results of the 4-year work confirmed the basic hypothesis of the researchers: visual simulation is a tool for mastering coherent retelling and allows preschoolers to make up original, creative texts with a lot of details and rich storylines (Diachenko 1996).

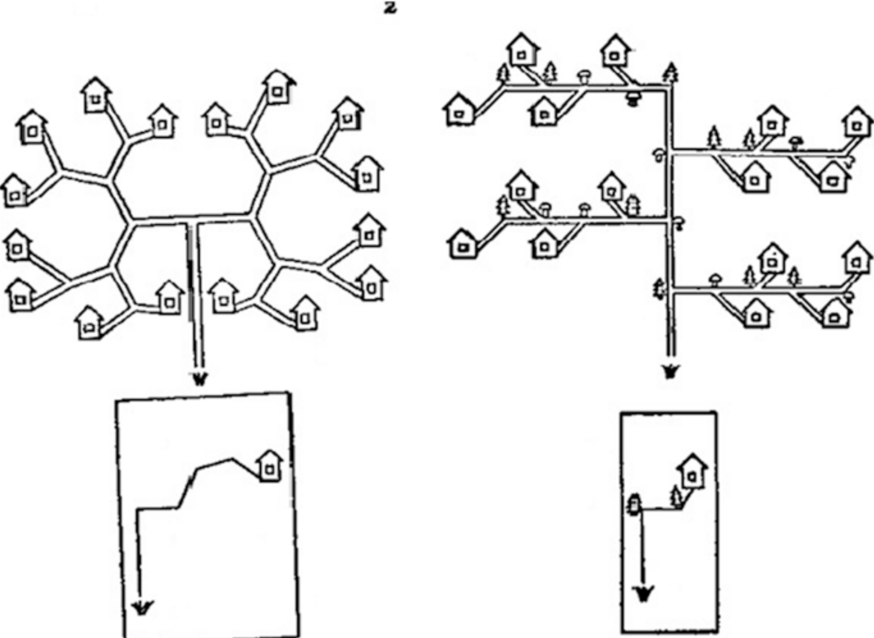

Fig. 73.10 Examples of "schematization" method tasks (Source: Venger and Diachenko 1996, reprinted with permission)

73.4 Testing the Ability to Construct and Use Visual Models

Because the development of the ability to construct and use visual models proved to be an important component of a child's mental development in the preschool years, there was a need to develop an appropriate diagnostic method.

Venger and his colleagues developed a battery for diagnosing mental abilities; in the battery, a special method of "schematization" was aimed at diagnosing visual modeling. The material of the test is a textbook consisting of 12 pages, which show lawns with multiple paths and houses at the ends (Fig. 73.1). At the bottom of each page, there is a map showing the path to one of the houses. The child's task is to properly mark the house to which the map leads. This method became well known not only in Russia but also abroad, and it is part of the set of diagnostic methods known as A Developmental Neuropsychological Assessment (NEPSY-II) (Korkman et al. 2007) (Fig. 73.10).

Studies of this method for forming the ability to construct and use visual models confirmed the effectiveness of the cultural-historical approach in understanding child development. This approach links the formation of higher mental functions with mastering certain forms of mediation.

Complex mass psychological studies of children conducted in the 1980s and 1990s in Russia showed that almost all preschool children in one way or another cope with the diagnostic tasks aimed at developing the ability to construct and use visual models. These results suggest that this ability is not artificial but is a characteristic of preschool-age children. Its controlled formation has a positive effect on the overall mental development of preschool children and their readiness for school.

In the recent study of Nisskaya (2012), the development of children enrolled in the program "Razvitie" (Venger and Diachenko 1996) was compared with the control group of children. The sample of 92 preschoolers from the two kindergartens was the subject of the research. Children from the "Razvitie" educational environment were significantly more successful ($p \geq 0{,}05$) in making contact with the teacher, assisting peers, negotiating ideas, and understanding emotions. They possessed higher level of self-representation and had a higher level of arbitrariness and the ability to restrain aggressive manifestations. During their first year at school, 331 child was the subject of the research. It was found that adaptation was more comfortable for children from "Razvitie" educational environment than for children from other kindergartens ($p \geq 0{,}05$). For pupils from "Razvitie" educational environment, higher level of educational motivation, peer acceptance, and self-control, as well as moderate anxiety in the interaction with the teacher, were the characteristics to be found.

73.5 Pedagogical Practice

The most successful Russian preschool education program, Razvitie ("development") (Venger and Diachenko 1996), which is based on the idea of visual modeling, has won governmental prizes. Among international programs, we should mention the Key to Learning program (Esteban et al. 2011; Kozulin 2009), which incorporates the development of visual modeling.

As a result of studies devoted to visual modeling, the main practical recommendations for pedagogues were formulated. It became clear that pedagogues should understand the preschool age as a period that is sensitive to the acquisition and use of visual modeling. Children's development will not be improved if they do not master the use of visual modeling and the construction of their own visual models. The use of visual models develops not only children's thinking but also their communication and self-regulation. Children who successfully develop the ability to construct and use visual models are successful in the traditional activities of childhood: playing, constructing, and drawing, and they show a high level of speech development and imagination. Their understanding of the surrounding world becomes integrative and reflexive.

References

Davydov, V. V. (1972). *Vidy obobscheniya v obuchenii* [Types of generalization in education]. Moscow: Pedagogika.

Diachenko, O. M. (1973). K voprosu ob ispol'zovanii skhematizirovannogo obraza kak sredstva resheniya prostranstvennykh zadach v doshkol'nom vozraste [The question of the use of a schematic image as a means for preschoolers to solve spatial problems]. *Voprosy Psikhologii* [Issues of Psychology], *2*, 89–98.

Diachenko, O. M. (1996). *Razvitie voobrazheniya doshkolnika* [The development of the preschooler's imagination]. Moscow: Psychological Institute of the Russian Academy of Education.

Elkonin, D. B. (1960). *Detskaya psikhologiya* [Child psychology]. Moscow: Trivola.

Esteban, M., Sidera, F., Dolya, F., & Veraksa, N. (2011). Key to learning. A neo-Vygotskian program for children aged 3 to 7. *Revista de Psicología y Educación, 6*, 69–78.

Galperin, P. Y. (1965). *Osnovnyye rezul'taty issledovaniy po probleme "Formirovaniya umstvennykh deystviy i ponyatiy"* [The main results of research on the problem "formation of intellectual actions and concepts"]. Moscow: Pedagogika.

Galperin, P. Y. (1969). K issledovaniyu intellektual'nogo razvitiya rebenka [About research on the child's intellectual development]. *Voprosy Psikhologii* [Issues of psychology], *1*, 15–26.

Korkman, M., Kirk, V., & Kemp, S. (2007). *NEPSY II*. San Antonio: Psychological Corporation.

Kozulin, A. (2009). Review of the book key to learning: The technology of child development—Vygotskian approach to early education, by G. Dolya. *Journal of Cognitive Education and Psychology, 8*(2), 216–221.

Leontiev, A. N. (1960). O formirovanii sposobnostey [About the formation of abilities]. *Voprosy Psikhologii* [Issues of psychology], *1*, 7–17.

Nisskaya A. K. (2012) Social situation of development in a preschool educational institution as a factor of school adaptation in first-graders. *Psikhologicheskie Issledovaniya*, 5(23)

Propp, V. Y. (1969). *Morfologiya skazki* [Morphology of a fairy tale]. Moscow: Pedagogika.

Rubinshteyn, S. L. (1960). Problemy sposobnostey i voprosy psikhologicheskoy teorii [Problems regarding abilities and questions about psychological theory]. *Voprosy Psikhologii* [Issues of Psychology], *3*, 3–15.

Venger, L. A. (1969). *Vospriyatiye i obucheniye* [Perception and education: Preschool age]. Moscow: Prosveshenie.

Venger, L. A. (Ed.). (1980). *Problemy formirovaniya poznavatel'nykh sposobnostey v doshkol'nom vozraste* [Problems in the formation of cognitive abilities in preschool-age children]. Moscow: Pedagogika.

Venger, L. A. (1982). Razvitiye sposobnosti k naglyadnomu prostranstvennomu modelirovaniyu [The development of ability in spatial modeling]. *Doshkol'noye vospitaniye* [Preschool Education], *3*, 46–56.

Venger, L. A., Diachenko, O. M. (Eds.). (1996) *Obsheobrazovatelnaya programma "Razvitie"* [Educational program "Razvitie"]. Moscow: Gnom i D.

Vygotsky, L. S. (1982). *Sobraniye sochineniy* [The collected works] (Vol. 2). Moscow: Pedagogika.

Zaporozhets, A. V. (1972). Pedagogicheskiye i psykhologicheskiye problemy vsestoronnego razvitiya i podgotovki k shkole starshikh doshkol'nikov [Pedagogical and psychological problems of all-round development and preparations for school in preschoolers]. *Doshkol'noye vospitaniye* [Preschool Education], *4*, 37–42.

Zaporozhets, A. V., Venger, L. A., Zinchenko, V. P., & Ruzskaya, A. G. (1967). *Vospriyatiye i deystviye* [Perception and action]. Moscow: Prosveshenie.

Chapter 74
Montessori Education

Christina Gustafsson

Abstract This chapter is a compressed presentation of Maria Montessori's life, about her pedagogy and its theoretical basis, and how the Montessori Method developed and gained geographic spread over more than 100 years. One aim has been to put in Montessori and her activities in a context in order to understand how her thinking evolved. Another aim has been to lay a theoretical perspective on the issues primarily associated with the Montessori Method – the prepared environment and the didactic material. These two key aspects are related to the role of the Montessori teacher and Montessori's idea of the conditions for children's learning and development. A third aim has been to discuss, with a critical but respectful approach, what parts of the Montessori Method has survived and what ought to survive in the twenty-first century in a society where we talk about gender/equality, multiculturalism and sustainable development. In short, it was an intention to raise the question how it is possible, in the light of the history to utilize basic ideas in the spirit of Montessori's pedagogy and at the same time develop teaching and learning to suit the child and society a number of decades to come.

Keywords Didactic material • Maria Montessori • Montessori criticism • Montessori education • Montessori teacher • Prepared environment • Principle of freedom • Sensory education

Many have been fascinated by Maria Montessori, both as a person and as a teacher. There are several reasons for this. She appeared in contexts that were mainly reserved for men. She quickly established herself in Europe and the USA as an educator who achieved good results with children who for medical or social reasons were considered to have little future. Even in old age, she travelled across the world to spread her educational message at a pace and with the intensity that even today can be marvelled at. Understanding Montessori education also means knowing something about the person behind the pedagogy. Of necessity, this part is limited to a few specific points. For more detailed presentations, see Rita Kramer's

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biography of Maria Montessori, written in 1976, and E. Mortimer Standing's book about Maria Montessori's life and work, published in 1957.

74.1 Maria Montessori (1870–1952)

Maria Montessori was born in Italy in 1870. As a young woman, Montessori made controversial personal choices in connection with her own education. At the age of 13, she began to study at a technical school. After 3 years there, she continued her studies at a technical institute for a further 4 years, with the ambition of becoming an engineer. However, during these years, she became more interested in biology and, after some resistance, was eventually allowed to study medicine. In 1896, she became one of Italy's first woman doctors of medicine. In her final years of medical school, she studied paediatrics at a children's hospital and gained experience by working at a psychiatric clinic. During her medical studies, she also began to teach education. Parallel to her continued clinical work as an assistant at the university hospital, she ran a private practice with colleagues. During this time, she came into contact with children who had intellectual disabilities. In Montessori's opinion, the main problem for these children was that they suffered from a lack of experience. She had studied anthropology, and her priority now was to learn about children with intellectual disabilities and study the history of education and teaching methods. These studies helped Montessori to find solutions for children that would totally change the direction of her thinking.

Around the turn of the century, Montessori began to work more as a teacher. She taught hygiene and anthropology at a teacher training college and soon became the director of a medical-pedagogical institute that trained teachers to care for and teach children with intellectual disabilities. Montessori remained in post for a few years and regarded this as her real degree in pedagogy. In this arid environment, she realized how some children could be trained to perform at levels comparable to those of ordinary children. By systematically working from morning to night, she gave the children the opportunity to show that they could make progress. Now she was not only a doctor but also an educator, and in 1901 Montessori left both the institute and the school and expressed the desire to work with normally developed children and to continue her own education.

In her continued studies, Montessori came into contact with and was inspired by other people's work (see below). She translated and wrote articles about improved health care, taught student teachers at the University of Rome and took part in conferences to share her experiences. Now the overriding question was how to educate children of normal intelligence in order to create a better society. She also temporarily returned to hospital work and received various academic recognitions, including becoming Professor of Anthropology in 1904. The biggest turning point came when she, after several years of planning, opened the first Children's House in 1907. Here Montessori tested theoretical ideas and her own experiences of working with children who had intellectual disabilities. Aided by her teachers, she

also conducted her own educational development work/research. Here Montessori could systematically observe individual children and note how they reacted to their environment. She gradually furnished the environment according to the identified needs of the children. It soon became apparent that the children were interested in the didactic material that Montessori developed. The children became more sociable and began to communicate. She worked for 2 years in the Children's Houses with children aged 3–6 years.

Over the coming years, Montessori developed her method for older children. Within a relatively short period of time, her work became known worldwide. Her methods proved to be a great success in the USA, not least due to her many field trips, her lectures and the fact that many of her texts were translated into many languages. Supporters of Montessori education were keen to meet her, and she was also involved in various Montessori societies. For the remaining three decades of her life, her main occupations were writing, lecturing at conferences and running courses in various locations in Europe and other parts of the world, although not in the USA, to which she never returned after the First World War. Montessori died in 1952 in the Netherlands, which became her permanent home in Europe for the last 15 years of her life.

In the following, the main features of Maria Montessori's education for younger children are presented. The presentation largely follows the guidelines as they were described by Montessori herself, because the basic characteristics of the Montessori pedagogy have changed very little over the last hundred years. This is followed by a discussion about Montessori's sources of inspiration and theoretical base. The chapter concludes with a brief overview of the spread of Montessori education, the criticisms levelled at it and what it looks like now, a hundred years after its establishment.

74.2 Description of the Montessori Pedagogy

Maria Montessori (1912/1964) begins one of her first books in the following way:

> It is not my intention to present a treatise on Scientific Pedagogy. The modest design of these incomplete notes is to give the results of an experiment that apparently opens the way for putting into practice those new principles of science which in these last years are tending to revolutionise the work of education. (p. 1)

The pedagogy that Montessori developed and during her lifetime spread throughout the world is based on a holistic approach. An expression of Montessori's holistic approach is that even in her most concrete texts she highlights global issues that she believed were relevant to the educational field, such as humanity at large, civilization and peace issues. Montessori education covers all areas of human activity that are meaningful to the child, where the pedagogical whole is constituted by the central components of the child, the teacher and the environment, which Standing (1957) illustrated as a triangle. However, a triangle on its own does not do justice to

the core ideas of Montessori pedagogy. To Montessori, the child, the teacher and the environment constituted an organic whole, where a changed approach to some or part of the components determined whether or not the Montessori pedagogy was genuine. In addition to Montessori's own earlier works, it is not easy to find good illustrations of how the holistic approach that she represented can be expressed. A contribution in this regard is a Swedish thesis, in which the wholeness, with an emphasis on children's existential conditions, is successfully illustrated from a phenomenological perspective (Tebano Ahlquist 2012).

Even though the focus of Montessori education is the child and the child's development, she wanted teachers to realize the value of using science in their teaching. However, according to Montessori, in order for a teacher to work scientifically, a change of environment was required that allowed children and young people to experiment with different ways of working. Montessori herself formulated some fundamental principles for achieving good results in child development. An overall aim was to make children independent. The basic components of this were *organization of the work*, which is environment – including the teacher as an actor – and teaching aids in the form of *didactic material*. Montessori's thesis was that order in the external environment also meant an internal order: "... the importance of my method does not lie in the organization itself, but *in the effects which it produces on the child*" (Montessori 1914/1965, p. 182; emphasis in original). *The principle of freedom* was the most important part of the work, freedom that allowed the individual to develop. According to Montessori (1912/1964), freedom was a prerequisite for a new pedagogy and a scientific way of working: "Let us leave the life *free* to develop within the limits of the good, and let us observe this inner life developing. This is the whole of our mission" (Montessori 1914/1965, p. 134; emphasis in original).

The environment and freedom, both of which would offer children resources for their existence, required changes in traditional teacher and student roles. The environment, the material and freedom in turn facilitated the child's *self-activity*, which according to Montessori was a source of satisfaction and an *individualized learning* – but not necessarily individual learning. Children's activities were based on their own interests, the time that was available to them and their own level of development. For Montessori, it was about a child learning what it needed to learn and determining its own criteria for success: "Help me to do it myself". The importance of adapting to the individual was something that Montessori had learned in her work with different kinds of children. Respect for the child permeated Montessori's education. The way the work was organized also meant that individual differences did not need to be highlighted when the environment provided tools for intellectual and personal development at different levels. It was on the basis of these premises that she produced didactic material with great variation.

74.2.1 The Prepared Environment and the Didactic Material

The prepared environment and *the didactic material* are key phrases in Montessori pedagogy. This was the case 100 years ago and is still the case today. For Montessori, school was the prepared environment, where from an early age the child could develop freely and without being interrupted by an adult. In her Handbook, Montessori (1914/1965) provides detailed instructions as to how the environment should be constructed. Although Montessori thought that the environments should vary, the ideal was a house with a garden in which the children could follow the development of nature, familiarize themselves with animals and plants and also grow things themselves. Montessori's ambition was to create a home for the education of all with everything that was needed, just like in a family. It would be a home that, in addition to the pedagogical ambitions, would provide a basis for the social structure. Children's Houses would also constitute a healthy environment, with opportunities to practise physical and moral development. Everything was planned to suit children between the ages of 3 and 6 years. The equipment was thus designed for children rather than adults, and so that the children could easily move the furniture around. The tables had to be different sizes and shapes. The shelves had to be low, so that everything that the children needed could hang on hooks and be easily accessible. Each child was also expected to have its own box for storing things in. The walls were to be adorned with pictures of different kinds. It was envisaged that the children would work on mats on the floor with the tools that would facilitate learning. There would also be opportunities to make music and play games. Singing was regarded as a good way of learning to pronounce words.

In the Children's Houses, small children learned routines and approaches that were related to daily life, such as how to behave, wait their turn, how to eat healthily and, according to their ability, clean. Rather than dollhouses and similar toys, Montessori wanted children to experience that which was real. In addition to providing appropriate environments, according to Montessori's requirements, those who sent their children to the Children's Houses had to follow strict rules (Montessori 1912/1964). For instance, the children had to be equipped in a certain way – clean in body and clothing and provided with a suitable apron – when they came to school. Continuous and frequent contact between parents and the school was regarded as self-evident, which at that time was quite revolutionary.

Dr. Montessori's own Handbook (1914/1965) was first published in 1914, with the aim of serving as a practical guide for work with young children. The book highlights the material and the techniques that were used in the Children's Houses. Montessori divided her methodology into *motor education*, *sensory education* and *language*. Montessori's own pre-produced didactic material was an important part of the environment and was specially designed to help the children's motor, sensory and intellectual development. Sensory education was fundamental for the younger children and, according to Montessori, an important preparation for other types of learning. Motor education could partly be addressed by means of a consciously created environment, while the senses and language were developed with the aid of the didactic material.

Montessori designed didactic material for the senses which she classified into 11 groups. The most famous material is also the one that the children began with, which consisted of different kinds of wooden cylinders, cubes that could be used to build the "Pink Tower", blocks that were used to construct "the Brown Stair" (also called the Broad Stair) and different sized rods according to a certain system (the Long Stair). With the younger children, Montessori also used large geometric shapes of different kinds, fabrics, wooden trays of different weights and cards with geometric shapes made out of paper (Montessori 1912/1964, 1914/1965).

Montessori regarded motor teaching as complex, because by nature children are not very coordinated in their movements. For example, she stressed that children could not sit still and that this should be seen as an aspect of development that adults could take advantage of and correct. As a counterbalance to activity and movement, she introduced "lesson of silence", which trained the children to sit absolutely still and to be silent. The idea was to create a temporary pause and allow the children to listen to other sounds, such as the ticking of the clock. The exercise ended with each child's name being whispered in turn, as a signal that the child could begin to move again. These exercises were intended to influence children's behaviour and produce a calmer atmosphere.

Motor training also included rhythmic movements and gymnastic exercises. For example, in order to practise balance, a line was drawn on the floor on which the children had to walk and work out where to put their feet. The exercise could be set to music, so that it also became an exercise in rhythm. For fine motor exercises for the hands, frames were provided that allowed the children to practise tying and untying their shoelaces and buttoning and unbuttoning buttons, so that they would quickly learn how to dress and undress themselves.

It is impossible to describe all the Montessori material here. Instead, a few examples will have to suffice to illustrate the basic principles. Even today, a common type of didactic material found in the Montessori environments is trays and frames containing a variety of geometrical wooden shapes. These were – and still are – of general interest to the younger children, especially when they can be set in motion. Only one set of each material was provided in the environment. For children aged between 2.5 and 3 years, wooden cylinders are provided that can be placed in holes on trays. The cylinders can vary in terms of height, diameter and the order in which they can be placed in the holes. The cylinder exercises began by the cylinders being removed from the holes, mixed up and then being put back in the right place. For the child, experiments or tests are always successful, because the material is self-correcting; it is only possible to place the cylinders in the holes that match the diameter. When the children get it wrong, they begin again and repeat the exercise until they get it right. In her work, Montessori had observed that this kind of endurance in young children was important for their development. For her it was important that the child should learn to do things for itself, with the aid of the material, rather than the teacher pointing out what had gone wrong.

Montessori prescribed a certain order for different geometrical exercises depending on the assessed level of difficulty. The exercises were easier to begin with – a few shapes that were clearly geometrically different – and then progressed to the use

of shapes that were slightly different in form (the Geometric Cabinet). In these exercises, the child trained both the eye and their motor skills. The material provided opportunities to compare and to observe differences and similarities. The point was also that the child should feel the shapes with his or her fingers. For Montessori, it was important that the child learned how to do an exercise; learning something about the object was not the primary motive. These kinds of exercises were designed so that children could identify different dimensions and how to arrange the material according to given principles. These exercises eventually led to the shapes being given their proper names. Montessori (1914/1965) wrote in her Handbook that she had intended to limit the terms to square, rectangle and circle, but the children wanted to know the names of all the shapes that were represented in the Montessori material.

Exercises using different fabrics to train tactile perception were also constructed by Montessori as well as exercises with fabrics that trained the eye to recognize and identify colours were created, for example, by combining pairs of the same colour. The severity of the exercises could be varied, by using bright colours or different shades of the same colour. These exercises were designed to help children memorize and recognize the various colours.

The sensory material was designed in a way that children would learn how to think in terms of quantity, such as longer and shorter, darker and brighter. This material was therefore also a preparation for learning arithmetic. The various parts of the material were generally related to each other, such as a series of numbers from 1 to 10 or another type of numbering scheme. This kind of material helped the children to learn addition and subtraction up to and including the number 10. When the children had learned numbers, they were then ready to work with material in a more abstract way.

Language training was a very important part of the Montessori pedagogy. Concepts like large and small could be developed in connection with the sensory material exercises. Montessori had three steps – *naming* (this is thick), *recognizing* (give me the thick one) and *pronunciation of the word* (what is this?) – which she said that teachers should use when working with the didactic material. The children learned to classify on the basis of different aspects. The exercises were about paying attention, observing, comparing and classifying. These exercises were also designed to stimulate the children to observe their environment and discover that it was interesting to explore. In this way, the children practised vocabulary that was not linked to any special object and learned to discriminate in a new way.

As the didactic material has always been a crucial part of the Montessori environment, it is also that which catches the eye and attracts the most attention, often because it represents the content. It is therefore worth emphasizing that Montessori's ambition was *that the material would facilitate the learning of the principles that were illustrated by the subject matter*. In this respect, the Montessori material that is used with very young children is very sophisticated and allows for variation. The intention was to arrange a graded variation of material, so that depending on his or her interests, the child could progress from a lower level of complexity to a higher one. Primarily, for the youngest children, this involved variations in shape, size and

colour. The material that was intended for the youngest children also prepared them for learning to write, read and count, which Montessori, unlike many of her contemporaries, believed should be practised before the age of 6. After sensory and motor training based on the didactic material, the children often became proficient in writing, reading and arithmetic within the space of 2 or 3 years.

According to Montessori, the sensory material also developed the children's writing and counting skills, which is their capacity to relate to quantity, identity, difference and ranking. Learning to write primarily involved using the hand and the finger to trace around geometric shapes and then follow the shape of alphabetic characters made out of sandpaper and pasted onto paper cards (the Sandpaper Letters). In addition, Montessori made use of exercises in which the children had to fill in the shapes with different coloured pens. The children soon learned to follow the contours of the different sized shapes and colour them in. The number of such exercises was unlimited. The exercises also paved the way for more advanced writing practices, away from larger and more flowing movements, which eventually led to exercises that were more comparable to writing with a pen. When the child touched the letter, the teacher pronounced the sound. In this way, the child's movement over the letter also became a preparation for reading. Later, the children used the movable letters (the Moveable Alphabet) to make words and sentences. Learning to count was done in much the same way, with sandpaper numbers pasted onto cards. The children practised setting out as many objects as there were numbers. By using such methods, writing, reading and counting developed spontaneously as a logical consequence of the systematic preparations.

74.2.2 The Role of the Teacher in Montessori Education

> 'Wait while observing.' That is the motto for the educator. (Montessori 1914/1965, p. 132)

Montessori education presupposed a completely new way of teaching. Montessori wanted children to benefit from science in their learning. The teacher therefore had to start by understanding how a child discovered its internal aptitudes. According to Montessori, what the teacher needed from science was more spirit than mechanical ability. It is still very common for Montessori teachers to say that the most important part of their teaching role is their approach. Montessori's view was that this spirit would allow the teacher to broaden his or her perception of learning and that with the aid of different environments and teaching materials, they would see new and greater possibilities in their work with the children.

Although Montessori education can mainly be characterized as very child-centred, it can only be child-centred if the teacher follows the guidelines that Montessori laid down. Respect for the child and the child's individuality has always been central, with the teacher as an authority, although not in the sense of being the one who knows best. The environment and the nature of the didactic material make great demands on organizational skills, combined with a sufficient distance to give

the child freedom to develop. Montessori's view was that the teacher should develop through the child. For this, the teacher has to become a good observer. However, if the teacher is to be open to new challenges and abandon the traditional teaching role, being a good observer is not enough. The environment has to be prepared in a way that makes the observations meaningful. The most important component here is to allow the child to express her- or himself in a natural way. The role of the adult is therefore to eliminate disorder and assist the learning process that is latent in the learner's, which is the child's, mind. In addition to being an observer, the teacher is also expected to be a facilitator.

Learning to observe has always been an important part of Montessori teacher training. Montessori believed that if you could not observe, you could not be a teacher. The teacher should also be able to notice changes in children's behaviour. In order to take advantage of science and rational teaching aids and facilitate the child's work and adaptation, the teacher also has to take the children's spiritual growth into consideration. On the one hand, motor skills (balance, learning to walk and coordinating movements) have to be learned. On the other hand, the sensory skills (visual perception, perceiving tactile differences, distinguishing sounds) have to be in place so that the children can make use of the environment. If a child has both the freedom and opportunity to gain experience by discovering their environment and continuously comparing and evaluating it, then he or she will develop intellectually and personally. At the same time, the child learns the language. Discoveries like these became obvious to Montessori after working with children who had intellectual disabilities.

Even though the younger children in the Montessori environments were expected to cope with the choice of activities and the didactic material, the Montessori teacher played, and still plays, an important role when introducing an exercise and presenting new didactic material. The teacher should explicitly, or rather overexplicitly, sometimes for an individual child and sometimes for a group of children, demonstrate how the exercises are to be carried out. This might involve demonstrating all the steps in the use of a button frame, so that the child can practise buttoning and unbuttoning to later dressing and undressing him- or herself. Even with regard to everyday tasks, such as washing and sitting at the dinner table, Montessori thought that it was important for the teacher to demonstrate all the relevant steps.

Montessori was very particular about teachers not disturbing children's work or activities. Her guidance to teachers was that if a child was to remain enthusiastic, he or she must be allowed to play and experience without hindrance. Each child was expected to observe, understand, remember, make judgements and learn the new language by means of work, exercises and tried and tested experience. The teacher could help if that was what the child wanted. Assistance might consist of the teacher guiding the child's hand around an object, as an indirect preparation for drawing and writing. However, the basic principle was that the teacher never got in the way of the child and his or her experience, even if the teacher saw a mistake. Instead the presentation was repeated the next day as a model for the child. The teacher should always be as discreet as possible, show respect and patience and certainly not condemn but still have control over the situation.

74.2.3 Conceptualization of the Child and of Learning/Development

Montessori presented a picture of children's development in 3- to 6-year intervals from 0 to 18 years of age. She called the first 6-year period – three plus 3 years – *the absorbent mind*, and regarded the period as a complete life in itself. Skills were created during the child's first 3 years and were developed in the 3 years that followed. According to Montessori, the first 3 years of the 6-year period were characterized by the child unconsciously collecting impressions from the environment and by the formation of the intellect. She meant that the unconscious period gradually led to the child becoming conscious. The child was able to discover, for example, that the hands could be used as a tool. The child now showed its volition and that it could think and remember. In other words, the body and the hands become the instruments of the brain. Against this background, Montessori believed that a natural step was for the young child to learn to write, read and count. While Montessori did not think that the transition between the unconscious and the conscious period could be directly affected, she did regard the adult as being able to offer good prerequisites for the child's development, which is to create the prepared environment.

Some of the Montessori pedagogy also consists of short transition periods, or what she referred to as "the law of sensitive periods". Montessori came to this realization by observing that children were particularly sensitive to a certain type of development. She referred to this as one's internal power directing interest towards certain parts of the environment. Sensitivity for one aspect of the environment then subsided and was replaced by another kind of sensibility. Good conditions for development in one period could therefore be ineffective or unfavourable in another period. Spontaneous interest in learning something special could later disappear. Montessori talked about sensitive periods for language, order, refining the senses and learning good behaviour. The practical implications of sensitive periods were that the environment and freedom made it possible to meet the children at their own level. Montessori observed that even at the age of 2, children were interested in regularity and routine and were able to, for example, detect discrepancies in their environment. In her view, the sensitive period refined development if the disorder was removed. The child could also return to any material that had already been worked with and, in a second period, deepen his or her knowledge. For example, sensitivity to language started long before the child could talk, which was why Montessori wanted to see a second sensitive period for language, when the children themselves wanted to construct relationships between words. Montessori also saw sensitive periods in the higher age groups.

Just as the teacher in the Montessori environment acquired a new role, it can be said that the children acquired a different role and that this became very apparent when Montessori established her pedagogy for the youngest children in the Children's Houses. Montessori thought that children became inhibited in both body and soul in traditional child and school environments. Her opinion was that they were disciplined for immobility and silence. In one of her earlier books, she almost

makes fun of (Montessori 1912/1964) the development of the desk. Montessori thought that the desk, as a scientific example of a material measure for coping with a dilapidated school, was a solution that meant that the social environment disappeared and the child found itself in an unnatural situation; the "perfect" desk hampered children's movements and also separated them from each other. The best way of changing this was to change the children's way of working, so that they did not need to sit for hours in such a strange position. She thus broke with tradition and emphasized that the child did not only need intellectual freedom but also physical freedom.

Observation was thus a fundamental part of a teacher's work. Montessori also linked observation to the child and maintained that the child should also learn to observe, for example, in the sensory exercises. The observations would lead to comparisons, which in turn would lead to discussions and decisions. Observation in relation to the didactic material as preparation for dealing with abstract problems is worthy of note. In the garden, the children were encouraged to observe and watch the plants grow and change. Montessori believed that children developed their intellectual ability by paying attention to what was happening around them.

Through her own observations, Montessori found that even young children could concentrate and that they seemed to find repetition satisfying. Small children also demonstrated their desire to imitate, try to remember and cope with difficulties. These observations led to a respect for the child. In fact, her pedagogy as a whole is based on faith and trust in the child. But in order to develop in an optimal way, the child had to develop the discipline that was associated with freedom. According to Montessori, all human progress was based on an inner strength. Real punishment was when the environment was not aware of the child's inner strength, and it was here that she felt that her pedagogy could help.

74.3 The Theoretical Base of Montessori Education

A few years after Montessori's death, Standing (1957), who had worked with Montessori for her last 30 years of her life, wrote that only a third of her research results had been presented in writing. On the other hand, she had spread her message orally, and a number of unpublished lectures that Montessori had given in 1915 in California were published in 1997 (Buck Meyer 1997). Prior to this, a smaller number of lectures had been published for the first time in English in 1989 (The Child, Society and the World, from a German edition published in 1979). Montessori prioritized the practical part of her work when she had an opportunity to lecture and write. She was not very concerned about framing her pedagogy theoretically, despite claiming that "My method is scientific, both in its substance and in its aim" (Montessori 1914/1965, p. 36). Over the years, it has mainly been others who have credited the theory to Montessori, and the conclusions have varied depending on the author. Standing (1957) writes as following:

> Her method in fact seemed to have sprung forth from her brain, fully formed and complete, as Minerva is said to have issued forth fully armed from the head of Zeus. What made it still more astonishing was the fact that Montessori herself was a member of the medical profession and not a trained teacher at all in the usual sense. (p. 58)

The views that Standing expresses are probably largely due to the fact that the roots from which Montessori education stems go far back in time. Even though Montessori was criticized for being unscientific, she used the expressions “scientific pedagogy”, “pedagogical anthropology” and “experimental psychology” when describing her work. The sources of inspiration that many, including Montessori herself, refer to are people who were active during the 1700s and 1800s. From her studies, she made use of things that she thought enhanced her own work. In some places in the world, the emerging industrialization fostered ideas about educating outside the home, which probably also influenced Montessori. Other sources of inspiration with regard to the idea of education for all children included Jean Jacques Rousseau (1712–1778), Johann H. Pestalozzi (1746–1827) and Friedrich Fröbel (1783–1852). Jacob Rodriguez Pereira (1715–1780), a contemporary and friend of Rousseau, was another source of inspiration in this respect.

Montessori felt a certain affinity with Pereira’s work, because he had also studied medicine and dedicated his life to education for the deaf and dumb. But it was to Rousseau that Montessori (1912/1964) referred to when she compared her own concept of freedom with that of Rousseau, which she claimed was based on impractical principles and vague hopes. Montessori thought that the child’s management of the environment was a human need and was the key to individual development and the advancement of civilization. She wanted the school to meet the children’s real needs, and in this she had the support of Rousseau. He also gave her the idea that development of the senses was the most important basis for abstract learning and that artificial barriers should be eliminated; the child should come in contact with reality and be free to learn from his or her own experience.

Pestalozzi, who lived more than a century before Montessori, was also inspired by Rousseau. He is often named as one of Montessori’s inspirers in that he worked with children who were culturally deprived and claimed that the poor and orphans could improve their situation through education. He also wanted to create a freer school, and one of his main principles was that the senses should be trained, because he maintained that all thinking began with the observation of concrete objects. Montessori developed the principles from simple to complex, from concrete to abstract, for example, in arithmetic and language, and was able to refine the tools for such learning processes.

Fröbel, who died before Montessori was born, was also influenced by Pestalozzi and, according to Kramer (1976), can be seen as a bridge between Pestalozzi and Montessori. Fröbel wanted to create a school for very young children and only saw the possibility of self-realization through self-activity, when adults did not interfere with the child’s spontaneous activity and provided guidance rather than coercion – an idea that corresponded with Montessori education.

When Montessori concretized her own thoughts, she combined elements from Fröbel with both science and clinical practice – medical theory and practice, educa-

tion of children who were deaf or had intellectual disabilities and techniques from anthropology. The anthropology that Montessori had studied was rooted in a new view of the human being as a biological organism and a suitable object for scientific study, where classifications could make use of the development of quantitative techniques to measure, for example, the anatomy. The measurement of human physical qualities made an observer like Montessori begin to systematically observe her surroundings. This encouraged practices that had already begun during her medical studies, such as the clinical practices of observing, comparing and noting, and she used this knowledge to study children's behaviour. Hunt (1964) found that Montessori had a solid psychological base for the use of her didactic material. Montessori's thinking did not align with the tradition that social and political scientists would discover the causes of and cures for antisocial behaviour. She argued that development became possible when people started to observe the individual, rather than theorize about the individual. Her knowledge of anthropology also made her realize that it was in the school as an environment that a person could be changed. It can be said that the inspiration to put this into practice partly came from Pestalozzi and Fröbel.

It would seem that a combination of different sources of inspiration contributed to the Montessori education that was established a hundred years ago and that continues to exist today. However, two doctors, Jean Marc Gaspard Itard (1775–1838) and his disciple Edouard Séguin (1812–1880), appear to be the most important. Séguin had also worked as a teacher. In connection with her early work with children who were intellectually disadvantaged, Montessori consciously searched for literature in order to learn how she could influence children's development. She then discovered Itard's and Seguin's written work. Itard had worked with deaf and dumb children with the aim of stimulating their minds and senses. He had developed his own tools for doing this by experimenting with an individual child. The aim of the exercises was to sort and match simple objects according to size, shape and colour. More advanced exercises were conducted with the aid of cardboard letters. One result of this was that the children could eventually express some of their wishes by combining the letters. Itard focused on activating the senses and called the method "medical education". He handed this work over to Séguin, who had actually discovered the idea of sensory training in Pereira's work. Séguin's interest was predominantly in children with intellectual disabilities, and he tried to apply ideal methods of regular education to special cases, that is, for the intellectually disabled. His teaching aimed at emphasizing the potential skills of the individual. One can see many parallels between Séguin's and Montessori's work. Séguin divided the education of the child into sequential stages, from physical movements to intellectual exercises. He developed a series of graded motor exercises and created sensory material, which in some cases formed the basis of the material that is associated with Montessori. The children also formed letters, since he believed that writing preceded reading. He successfully tested his work in a school for children with intellectual disabilities and was acclaimed throughout the world by psychiatrists. In 1866, his book about this work was published in the USA.

Itard's and Seguin's way of describing their work changed Montessori's thinking to the extent that she changed the course of her work and tried to make a synthesis of theirs. For Montessori, Seguin's work became convincing on terms of the intellectual disabilities being seen as an educational problem rather than a medical one. Through both Séguin's and her own work, she saw that children could be helped to develop harmoniously through the use of special teaching methods. They should not be in hospital but should be trained in school. One can definitely say that Séguin was the most important source of inspiration and created a platform that Montessori both managed and developed.

Even though these innovators provide a theoretical basis in terms of philosophy and pedagogy/psychology, Montessori's pedagogy is largely influenced by medical and anthropological knowledge. The division into stages and sensitive periods has clear biological grounds. When she talks about writing, she refers to the nervous system and to medical knowledge. She also designed an instrument of measurement with which the children could measure themselves and referred to anthropology and psychology as the basis for that scientific method. From her use of language – she talks, for example, a lot about experiments – one can also determine that it was the natural sciences that formed the basis of her pedagogical practices, even if they also included elements of psychology and educational philosophy.

It is not unusual either for Montessori's view of a child's staged development to be associated with the thoughts of Jean Piaget (1896–1980). Given that there was a certain age difference between Montessori and Piaget, it is reasonable that Montessori's ideas influenced Piaget, in much the same way as she influenced other people in Europe involved with educational child psychology, without this being especially obvious (cf. Kramer 1976). In the mid-1930s, Piaget took part in a Montessori Congress in Rome, and after that became the leader of a Montessori Society in Switzerland. In his youth Piaget had observed the learning of very young children. He was a biologist and used Montessori's work, especially the sensitive periods, to develop a schedule for children's mental development. But Piaget was a theorist and the creator of a theory of cognitive development that ran alongside Montessori's pedagogy. Montessori was the practitioner who was most interested in the structure of teaching, while Piaget made significant contributions to developmental psychology.

Montessori also met John Dewey (1859–1952), and especially in connection with discussions about democratic education, the two are associated with each other (Thayer-Bacon 1996). However, due to the fact that Montessori fell out of favour in the USA (see below), there is no evidence to suggest that these two educators had a common cause.

Vygotsky (1962) (1896–1934), who was about 25 years younger than Montessori, referred to her and to the sensitive periods, because in his studies he had found other sensitive periods. He claimed that Montessori's biological anchoring did not explain everything, and instead argued for his own way of interpreting complex processes in terms of a sociocultural perspective. He nevertheless believed that Montessori's data was important, because her examples showed that educational interventions could trigger processes that he had not previously considered the child to be ready for.

A modern educational approach like Reggio Emilia has also been compared with Montessori pedagogy. There are certainly many similarities between the pedagogical approaches, great confidence in the child's capacity, clear teacher responsibility (documentation, observation, respectively), great importance to the environments and emphasis on teacher-child continuity, but also differences; the Montessori pedagogy is often assessed more formal depending on the view of the child's development in stages, the didactic material and its use and absence of a clear socially progressive vision (Edwards 2003).

74.4 Montessori Education in Time and Space

Approximately 100 years have passed since Montessori education was established and became known in different places throughout the world. Over these hundred years, the number of Montessori environments has increased and can now be found in over a hundred countries. Montessori teacher training courses are also held in various parts of the world. There are a number of national and international Montessori societies, too. Considerable research on Montessori education has also been conducted, primarily in the USA and Europe but also in other parts of the world (see, e.g. Cossentio 2009; Dodd-Nufrio 2011; Lillard 2012, 2013; O'Donnell 2013; Wonwoo et al. 2013 and the journals/newsletters M.E.R. and MoRE). However, a positive development of the Montessori pedagogy has neither been obvious nor linear.

Interest in Montessori was expressed in the early 1900s' second decade in the USA, and her pedagogy quickly became a social movement. Experienced writers and other interested individuals saw the results from the Children's Houses as a quick way of making changes. Montessori's supporters in the USA mainly consisted of elite politicians and educators, although criticism was soon voiced in the fields of psychology and educational philosophy. It was regarded as old fashioned that children aged 3 or 4 should be trained for something that had significance for later development. Following the introduction of intelligence tests, many had believed in an individual's fixed intelligence and predetermined development. Educational solutions for children with intellectual disabilities were therefore regarded as meaningless. Sending very young children to school would also increase government spending and was moreover regarded as an encroachment on family responsibilities. In actual fact, the idea of the importance of previous experience did not contradict contemporary psychology and psychology research, although the formal nature of Montessori's work did not win any support at all.

Criticism in the USA gained a significant boost from Kilpatrick (1914), one of Dewey's disciples. He was one of those who argued that there was no point in teaching children to write, read and count before the age of 8. But the main criticism was that Montessori education was based on *individual work*, rather than *work in groups* and also that Montessori talked about children's work instead of play, which meant

that there was no room for creativity and imagination. Kilpatrick admitted that Montessori had a lot in common with Dewey but was considered to have a much narrower concept of pedagogy. Montessori was also criticized for not being scientific enough. Within the space of a few years, interest in the USA decreased rapidly, largely due to Kilpatrick's criticism. Also in Europe, interest in Montessori education rose and fell during the period from 1920 to about 1945. Since World War II, interest has steadily increased, although this increase has not been as dramatic as that during the first two decades of the twentieth century.

In the 1960s, the standardization of the material was also criticized (Hunt 1964). Hunt made use of the critique that the development of social relations and the arts was in danger of being sidelined. It can be noted that over the years such criticism has remained more or less the same. The most common criticism of Montessori's activities is directed towards the individual work, with few opportunities for play, and a pedagogy that prevents the development of children's creativity and imagination.

Kramer's (1976) biography of Montessori is very positive and almost devotional. However, she is critical of Montessori's inability to develop her education and her tendency to defend herself and stick to her original procedures. Although Montessori education included both working in groups and play, Montessori was unable to convey this message. She was also criticized for her later publications, because they did not contain anything new. During the latter years of her life, Montessori was not an innovator, but rather gave the impression of being conservative in her approach. She also seemed to have difficulties to respond to this criticism in a credible way.

When we talk about preschool goals and content in the Nordic countries today, and also in many other parts of the world, some keywords recur – sustainable development, multiculturalism and gender/equality – expressions that we do not find in Montessori's own texts. Notwithstanding, an important feature of Montessori's didactic material is that it is gender neutral and that her educational principles transcend cultural factors. But perhaps the most important of all is Montessori's passion for sustainable development. Her work was characterized by the ambition that both teachers and children should have knowledge about and be able to take care of the environment, regardless of whether this was the physical, social, contemporary or future environment.

Much of what Montessori advocated is now standard in environments in which young children spend a lot of time. However, the standardized Montessori material is still unique and has characteristics that in modern research have been highlighted as important in learning processes (Marton and Signert 2005). The ideas and considerations, especially those relating to the progression of learning that characterizes certain aspects of the didactic material encountered in the Montessori environments, are unique. Montessori's pedagogy was the result of a combination of science knowledge and tried and tested experience. It has been an ambition of this chapter to highlight these characteristics rather than describing all didactic Montessori material. It could be that as time went by, Montessori herself lost track

of why she designed her practice as she did. She was unable to deal with the criticism that was metered out. Also, it was not her scientific approach to education that she was most famous for. She was, and unfortunately often still is, most admired for the more superficial characteristics of the Montessori Method, which appeals to the eye – the colourful Montessori environment, children who can move freely and the didactic material. Few people think about the more subtle – long-term, systematic research and development behind each geometric figure, why the children move and choose a certain activity and the pedagogical considerations underlying the environment. Therefore, we had, and still have, a criticism that almost always just touches the real core of what we call Montessori Education.

References

Buckenmeyer, R. (1997). *The California lectures of Maria Montessori, 1915. Collected speeches and writings*. Oxford: Clio Press.

Cossentino, J. (2009). Culture, craft, & coherence: The unexpected vitality of Montessori teacher training. *Journal of Teacher Education, 60*(5), 520–527. doi:10.1177/0022487109344593.

Dodd-Nufrio, A. T. (2011). Reggio Emilia, Maria Montessori, and John Dewey: Dispelling teachers' misconceptions and understanding theoretical foundations. *Early Childhood Education Journal, 39*, 235–237. doi:10.1007/s10643-011-0451-3.

Edwards, C. P. (2003). "Fine Designs" from Italy: Montessori education and the Reggio Emilia approach. *Montessori LIFE , 2003*, 34–39.Winter

Hunt, J. M. V. (1964). Introduction. Revisiting Montessori. In M. Montessori (Ed.), (1912/1964) *The Montessori method* (pp. XI–XXXV). New York: Schocken Books.

Kilpatrick, W. H. (1914). *The Montessori system examined*. http://www.hathitrust.org/access_use#pd. Accessed 1 Mar 2013.

Kramer, R. (1976). *Maria Montessori. A biography*. New York: Capricorn Books.

Lillard, A. (2012). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology, 50*(3), 379–401. doi:10.1016/j.jsp.2012.01.001.

Lillard, A. (2013). Playful learning and Montessori education. *American Journal of Play., 5*(2), 157–186.

Marton, F., & Signert, K. (2005). *Affordances for learning. Studying teaching in terms of the learning that the inherent pattern of variation and invariance makes possible: Maria Montessori's pedagogy as an example*. Paper presented at the 11th biennial conference of the European Association for Research on Learning and Instruction. Nicosia, Cyprus, August 23–27.

M.E.R. om Montessori. (2008). *7 professorer om montessoripedagogik* [Montessori Education and Research. 7 professors about Montessori education]. Tidskrift för utbildning och forskning inom montessoripedagogik.

Montessori, M. (1912/1964). *The Montessori method*. New York: Schocken Books.

Montessori, M. (1914/1965). *Dr. Montessori's own handbook*. New York: Schocken Books.

MoRE – Montessori Research Europe. Newsletter published from 2008. www.montessori.uniroma3.it

O'Donnell, M. (2013). *Maria Montessori: A critical introduction to key themes and debates*. London: Bloomsbury.

Standing, E. (1957). *Maria Montessori – Her life and work*. New York: New American Library.

Tebano Ahlquist, E.-M. (2012). *Skolans levda rum och lärandets villkor. Meningsskapande i montessoriskolans fysiska miljö. [The lived room and conditions for learning. Creating meaning in the Montessori school's physical environment]*. Stockholm: Institutionen för pedagogik och didaktik.

Thayer-Bacon, B. (1996). Democratic classroom communities. *Studies in Philosophy and Education, 15*, 333–351.

The Child, Society and the World. (1989). *Unpublished speeches and writings*. Oxford: Clio Press.

Vygotsky, L. S. (1962). *Thought and language*. Massachusetts: The MIT Press.

Wonwoo, B., Steven, B., & Pate, R. (2013). Objectively measured sedentary behavior in preschool children: Comparison between Montessori and traditional preschools. *International Journal of Behavioral Nutrition and Physical Activity, 10*, 2. doi:10.1186/1479-5868-10-2.

Chapter 75
Pedagogy Has Children's Voice: The Educational Experience of the Reggio Emilia Municipal Infant-Toddler Centres and Preschools

Claudia Giudici and Paola Cagliari

Abstract Over the years, the pedagogy elaborated and practised in the infant-toddler centres and preschools of the Municipality of Reggio Emilia – thanks to the research, the pedagogical documentation, the realisation of publications and exhibits – brought to the construction of a different language, of an unusual language for pedagogy, where images and words are powerfully interwoven: these images, in particular the photographic "mini-stories", which are broadly used as a communication mode in the Reggio Emilia Approach, support and give visibility to the pedagogical thinking, which is expressed through a peculiar language, made of contaminations and drawn from different disciplines.

Keywords Reggio Emilia approach • Loris Malaguzzi • Documentation • Atelier • Participation • Hundred languages

The written texts coming from Reggio Emilia are shaped by and at the same time shape a pedagogy that doesn't separate theory from practice, culture from technique and thinking from acting, but, thanks to the communicative and expressive choices, they intend to point to the richness of an educational experience, of an open, ever-changing research of meaning where children, teachers and parents are the vital protagonists.

The following written contribution aims at introducing the values and the principles of the pedagogy of Reggio Emilia by filtering and interpreting them through

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the image of "competent child" that steers and gives meaning to our daily work in the infant-toddler centres and preschools of the Municipality of Reggio Emilia.

> (…) Seeing an army tank, six horses, and three trucks generating a school for young children is extraordinary. The fact that the school still exists and continues to function well is the minimum that one could expect from such beginnings.
>
> Furthermore, its valuable history confirms that a new educational experience can emerge from the least expected circumstances (…) (see footnotes 9 and 11).

75.1 Background

The municipal infant-toddler centres and preschools of Reggio Emilia find their origin in this act of participation, solidarity and co-responsibility of its citizens: immediately after the Liberation from Nazi-fascism (25 April 1945), men and women decide to start the reconstruction of their village, Villa Cella (near Reggio Emilia), starting from a school for young children (Fig. 75.1).

Women played a very important role in this choice that nowadays can be interpreted as a powerful metaphor: "A reconstruction starting from children".

Fig. 75.1 Building the Asilo del Popolo [Asilo of the People] of Villa Cella, Reggio Emilia, 1946 (© Preschools and Infant-Toddler Centres – Istituzione of the Municipality of Reggio Emilia from the catalogue of the exhibition "One city, many children. Reggio Emilia, a history of the present", © Preschools and Infant-toddler Centres – Istituzione of the Municipality of Reggio Emilia and Reggio Children; Reggio Emilia, Reggio Children, 2012 - www.reggiochildren.it)

The Reggio pedagogista Loris Malaguzzi[1] stated that "We can change history by making it ours and we do it starting from children",[2] from the subjects who have the embedded potential of a future that can be conceived and planned different and better: already in Villa Cella, the foundations were laid to foster and recognise children's rights along with parents' (above all mothers') rights. When those citizens built the school, they wrote on the façade: "We built the walls of this school together, men and women, because we wanted it to be new and different for our children".

This is the orienting principle that always guided the educational policies of the city of Reggio Emilia – a new and different school – that developed over the years an identity of the infant-toddler centres and preschools which are not simply places of care but also places where children build up together their own culture entitled to be recognised as such by adults.

Starting from these premises, our city always tried and tries to make a sustainable and quality educational system addressed to 0–6-year-old children able to respond to the right to education of all children – meant as a primary and inalienable right of the children all over the world.

"Not just any infant-toddler centre, not just any preschool" was the slogan used by parents and the staff working in the municipal infant-toddler centres and preschools to ask the municipality, in May 2011, for a formal engagement to continue to invest in quality educational centres, exactly as those men and women after the Second World War in Villa Cella.

This slogan suggests:

> A quality which lies in the idea of human being, of "child" as holder of the right to freedom, to relation, to happiness, to learning; of the right of being considered as a unit of body and mind, as a researcher and producer of knowledge and meanings.
>
> A quality which lies in the idea of learning as a process of the subject in relation with the others, as a subjective act of research, curiosity, creativity that rarely follows predicted and predictable paths.
>
> These ideas are tied then to organisational, environmental, time and people choices that are sympathetic with children's learning processes.
>
> The quality of an infant-toddler centre and of a preschool is not an aesthetics for its own sake or a flaunted wealth of resources but it is the solidarity with children's and adults' processes of knowledge construction.

This pedagogical approach requires spaces, where children can act, choose, meet, be on their own, lovable, welcoming, including spaces that can reassure and, at the same time, challenge intelligence and curiosity; it requires people keen on sharing researches, discoveries, questions who can continue to venture the acquired

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[1] Loris Malaguzzi (1920–1994): Graduated in pedagogy and psychology, in 1963 began collaborative work with the local administration to open the first municipally run preschools. In 1971, infant-toddler centres were added to this network of educational services that Malaguzzi – working closely with colleagues – ran for many years. He was an untiring promoter of innovative pedagogy capable of giving value to that legacy of potentials he loved to call "the hundred languages of children". For further information: Cavallini, I., Baldini, R. and Vecchi, V. (eds.) (2012) *One City, Many Children. Reggio Emilia, a History of the Present*. Reggio Emilia: Reggio Children.

[2] From the documentary film directed by Michele Fasano (2002) *Not Just Anyplace*. Reggio Emilia: Reggio Children.

Fig. 75.2 A 3-year-old's classroom, Diana Municipal Preschool, Reggio Emilia (© Preschools and Infant-Toddler Centres – Istituzione of the Municipality of Reggio Emilia from the DVD "Everyday Utopias", © Preschools and Infant-toddler Centres – Istituzione of the Municipality of Reggio Emilia and Reggio Children; Reggio Emilia, Reggio Children, 2011 - www.reggiochildren.it)

knowledge, their own and children's one; it requires times that allow every child to encounter the situations with his or her own peculiarities by devising their own desires and interests but also by keeping the distance and by making choices. It requires materials that support thinking, shaping the ideas because the mind works with the hands, with the eyes and with the body, and it cannot only work on abstract ideas and theoretical visions (Fig. 75.2).

A quality which lies also in the capacity of adults to make children visible, to grant them the right to express, to be listened to, to legitimate their culture through a concrete visibility and readability that can be shared with others, i.e. through the documentation.[3]

A quality which is also made by the participation of the parents involved in the above mentioned processes, who are holders of visions about childhood's culture

[3] The pedagogical documentation includes the written notes and images through which teachers make visible children's learning processes while they are taking place. Knowing the strategies implemented by children allows teachers to elaborate the following steps of the educational paths by taking into consideration the hints shared by children, thus leaving them a strong role of protagonists. The documentation is also important so as to discuss with colleagues and parents about the idea of a 'child' teachers refer to and to share reflections about children's knowledge processes. Furthermore, the documentation strategy expresses the ethical and political meaning of education and the identity of the public school which, as such, should be transparent and valuable by everyone.

and have important competences so as to give more quality to spaces, environments, times and people.

As stated in the premise: the "hard core" of the quality lies in the idea of "human being" and of "child": consequently, it is important to bring into focus and express the forms we, as adults, apply to learn and interpret the different ways children encounter and explore the world of physical objects and of people through. These forms structure the way of being educators that is to say adults dealing with children's growth and learning.

Everyone of us is holder of his own image of "child". We are holders of implicit or explicit theories that guide our actions, choices, glances and interpretations.

The real child exists but coexists, sometimes hiding it, with the ideal child, i.e. the one in our minds who is the image we interpret the real children through.

The child is not only a biological entity, a "young man"; he is also, and above all, a cultural construct: every culture, society and historical age has produced its own cultural construct about childhood, a social image of a child influenced by the theories output of the scientific research, of the ideas spread among people, of the commonplaces, of the media messages and so on.

There are theories presenting a child described for what he doesn't have or he is not in comparison to the adult, so he is described by subtraction or for what he has but he doesn't expresses: in this sense, we can better understand the metaphors "tabula rasa", "vase to fill in" and "plant to straighten".

There are further theories proposing rhetorical images: childhood as the idyllic age, the age of innocence, angel child and so on – misleading images created by adults who are trying to retrieve, to compensate for and to protect their desires and needs.

Then, we have to tackle two more recent images:

The first, less evident (and more devious) image is the idea of accelerating the learning of skills that interpret the image of competent child shared by new research studies as an anticipation of teaching of abilities and formal skills like reading, writing and counting. This precociously leads the child, through teaching, towards an acquisition structure of already codified structures by ignoring his specific peculiarities and needs.

The second image is a commodification one: childhood intended above all as privileged target of industry and trade that appeal to a widespread sensitivity about childhood's needs creating new needs and offering child models which are strongly anticipating adolescent images.

Nowadays, we also have a further image of a "child" that implies many risks: the child considered as such an extraordinarily capable and astonishing being to leave adults unprepared in a condition of passive listening or in a state of mere approbation and exaltation.

This is a risk, which people, working in early childhood educational centres and thus contributing to the creation of childhood's images, should always bear in mind because otherwise they can run the risk of endorsing an absence of circular interaction between child's and adult's mind. This could affect negatively children and their growth potential.

As Jerome Bruner states,[4] the problem of theories about child doesn't lie in their epistemological correctness but in their implications on the level of educational practice.

All these theories imply very different beliefs, e.g. that the child has something to eradicate, replace or rebalance, and for this reason, a pedagogy is proposed that is oriented each time to repress, to modify or to fill the gaps or that the child can act on his own and only needs praising from adults or that he is out of step with the world and its contradictions and that this extraneousness and this distance should be preserved.

Thus, it is important to try to look at children with different eyes, with words and theories able to pick up the potential all children are holders of, with the peculiarities that everyone has in being a child, not any child but a subject with a character, a story, some physiological and mental features and also in connection with a context made of environments, materials, peers and adults in a reciprocal relation.

The psychological research studies of the twentieth century proposed a new idea of "subject", of "learning" and of "approach to knowledge" as for the new concept of subjectivity: a knowledge constructed by the subject through a continuous circularity connecting his own descriptions of the world and the world itself.

The acknowledgement and the recognition of the subject, a unique and not repeatable being, as a producer of knowledge and original points of view was a "Copernican Revolution" for human sciences.

75.2 The Competent Child

Anchoring the idea of difference to the subject, more than to the culture or to the ethnic group or to particular unusual physical or mental conditions, means recognising a subject's specific and peculiar identity that requires listening, welcoming, respect and possibility of expression. Choosing to look at the child as a competent subject is an important and founding choice even to get access to the construction of a context that welcomes all children.

75.3 How can we interpret the concept of "competent child"?

By "competent child" we mean a child who is endowed very early with exploration systems making him active, curious, attentive to the world; a child with a mind provided with endless learning possibilities, a plastic mind that changes and takes shape through learning.

[4] Bruner, J.S. (1996) *The Culture of Education*. Cambridge, MA: Harvard University Press.

By "competent child" we mean a child who, from shortly after birth, has available collection of data and information saved in his mind that dialogue with new data and information he constantly receives from the outside; a child who, since he is very young, has a capacity of connecting acts and explorations of different nature: visual, kinaesthetic and tactile ones.

By "competent child" we mean a child who, since he is very young, is interested in collecting information about the objects of the world and about space through learning acts and developing a "lexicon of acts" necessary to build up even more complex activities; a child oriented towards the others who has an evident capacity to explore human visages and voices from his very first weeks of life.

The mirror neurons[5] offered us a new interpretation key of the image of child that we already knew: the image of a child able since being a baby to feel empathy, to recognise the emotional state of the others, to anticipate and predict in a certain way the intention of the others and to construct complex communications and interactions – thanks to a plurality of languages and through the movement of the body, the gestures and the mimics.

By "competent child" we mean a child able to assign complex meanings and able to create his own images and mental representations, symbolic representations that are mental structures making possible processes like the creation of metaphors.

By "competent child" we mean a child able to dialogue with others in more and more sophisticated ways and to produce theories about the world shared and built together.

Being educators requires this knowledge of the child along with the awareness that only by listening to him we can elaborate the understanding and the interpretation, and we can play the role we deserve thanks to new proposals. With these new proposals, the adult educator is able to position himself in the proximal zone of child's action so as to foster his evolution towards more complex forms, to find the words to realise and express his images and representations by building new meanings.

How can we get to know the child, his ways to encounter and explore the world so as to get acquainted with it, to develop explanations about the phenomena modelling him and to be placed in it?

This idea of the "competent child" is a fundamental change of paradigm.

The adult has a valuing, sympathetic, empathic glance and is self-aware and aware of the choices made; he is able to include himself in the description he produces.

The recognition of this child and the value of differences fostered in the infant-toddler centres and preschools of Reggio Emilia are a series of high-value organisa-

[5] In the mid-1990s, scientists demonstrated the existence of "mirror neurons" also in the human brain that automatically activate both when we carry out an action and when we observe others carrying out a similar action. The author of this discovery, we can refer to so as to explain our capacity of relating to others, was the Research Group of the Department of Neurosciences of the University of Parma, guided by Professor Rizzolatti.

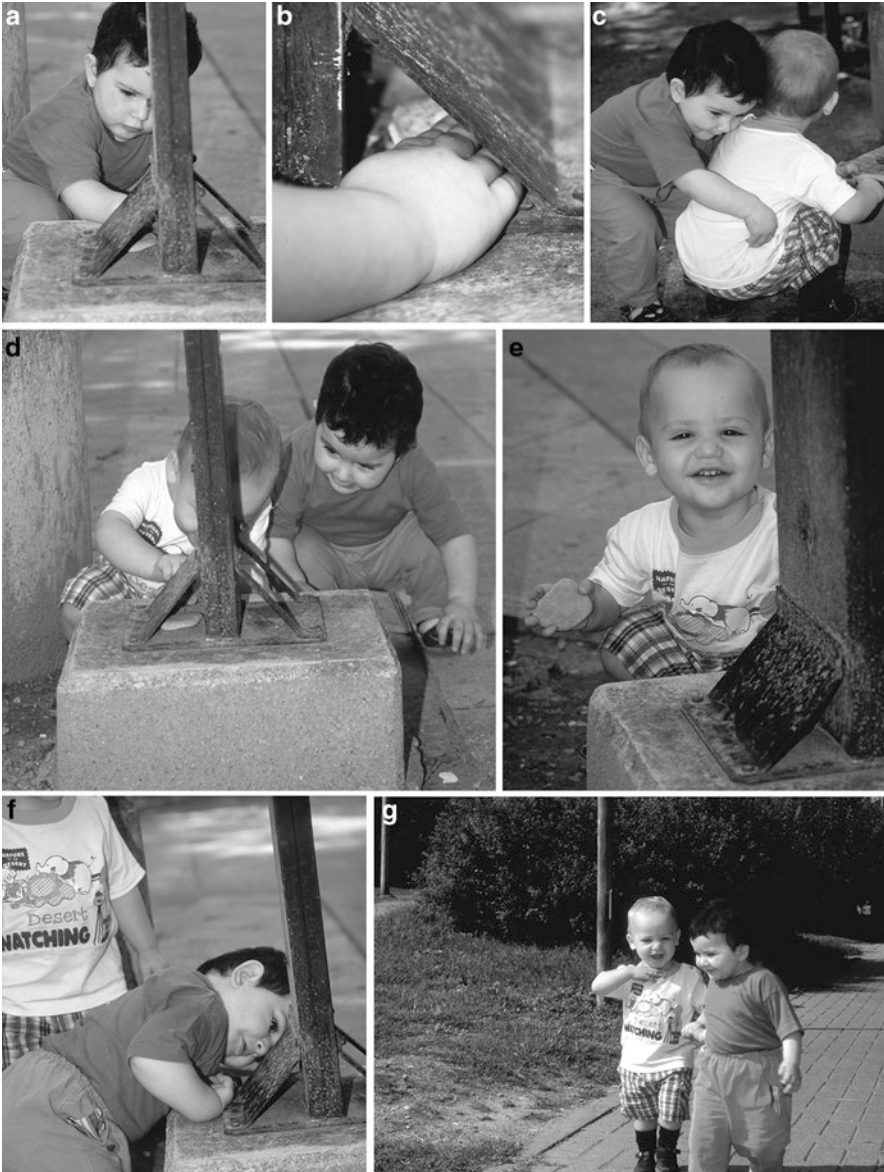

Fig. 75.3 (**a**) Matilde (20 months) and Lorenzo (19 months) are outside the school yard with other friends… A stone, a precious little stone, Matilde's accomplice in play and discovery, involuntarily ends up in a tight spot and it's impossible for her to get her hand in to recover it.
(b) Impossible, that is, for a chubby hand like Matilde's. She makes a quick evaluation and formulates a hypothesis.
(c) Another child, a smaller friend, could be of help. Lorenzo seems to be just the one. It shouldn't be difficult to persuade him. Is a hug sufficient?

tional and strategic choices of high-value concerning spaces, organisations of children and adults, project and educational modes, participation mode and so on.

The following sequence, from Luigi Bellelli Municipal Infant-Toddler Centre (Reggio Emilia), shows how young children are able to read and grasp the problems posed by the context, to make hypotheses and predictions and particularly to organise themselves when attempting to find consistent solutions.

The ability to make a pertinent decision on how to solve a problem, even a small one, and being able to do so with the complicity and joy of a friend, is a demonstration that suggests us that children at a very young age not only measure the relationships between things but already show a clear ability to construct meaningful relationships with their peers (Fig. 75.3).

What we have just experienced is for sure a nice story; but if we are able to come out from this very first sense of empathy, this story asks us above all to be more attentive, as adults, to the games that children daily carry out in front of our eyes and we often underestimate or trivialise.

Therefore, we are speaking about the child's right to find contexts that welcome, activate and give value to his potential. In this story, as in many others, we think there are all elements, principles and values characterising the infant-toddler centre and the preschool as contexts where children are active protagonists of their own growth.

These are documentations of a "normal" approach to reality by the children, if they are listened to by adults keen on listening to them carefully and respectfully and on observing them with empathy, curiosity and respect. Through the documentation, children's capacities are recognised, and their productions and their research paths made visible to other children and adults. This story shows an adult who built,

Fig 75.3 (continued) (**d**) Yes, it seems to be. Lorenzo, in fact, follows his friend, whom he has shared many games and adventures with, and together they re-evaluate the problem. Lorenzo could be the one to do it. We can try. Under Matilde's attentive and grateful gaze, Lorenzo slides his hand into the gap.
(**e**) Matilde's evaluation was correct: Lorenzo's hand is definitely smaller than hers. His hand is one that Matilde knows well, a friendly and familiar one. She has grasped the difference and knows who and when to ask for help to resolve the problem. He did it! Here's the stone. The satisfaction is great, and Lorenzo proudly shows to Matilde the retrieved stone, pleased that he has fulfilled her expectations. And Matilde,…
(**f**) …though counting on Lorenzo's ability, doesn't neglect a careful recheck, as if this further increases the value of the endeavour. Yes, that's really the right stone. But how did that happen? It's such a narrow space…
(**g**) The destiny of the treasure does not seem to be particularly important. Holding hands, Matilde and Lorenzo walk away towards new challenges that will reinforce their feelings of mutual esteem, collaboration and probable friendships (© Preschools and Infant-Toddler Centres – Istituzione of the Municipality of Reggio Emilia from the book "Making Learning Visible. Children as Individual and Group Learners", © Reggio Children, The President and Fellows of Harvard College, and the Municipality of Reggio Emilia; Reggio Emilia, Reggio Children, 2001 - www.reggiochildren.it)

through progettazione[6], curious and dialoguing contexts so as to activate and share children's researches.

Adults' project attitude needs the sympathy of children's attitude and requires a teacher who doesn't simply apply programmes others developed, but who acts/works as a researcher of children's knowledge along with them; an adult able to wonder and to be astonished with them; a teacher who doesn't offer himself as a model to follow but as a travel companion equipped with a compass to find his own bearing and to steer. A teacher who is a co-author of children's learning processes, who construct his knowledge while learning their learning processes through the exchange, the dialogue and the action reflected with the colleagues thanks to the documentation.

The experience of the municipal infant-toddler centres and preschools of Reggio Emilia demonstrates how children activate more languages to learn and encounter the world, according to Loris Malaguzzi's theory of the hundred languages.[7] Children and adults act together in seeking for a meaning, a construction of meanings that requires and proposes to everyone to learn by dialoguing through children's hundred languages.

With the term "languages" in the Reggio Emilia educational experience, we refer to the different ways the child (and the human being) has to represent, communicate and express his thoughts through the different media and symbolic systems[8]: the languages are then the multiple sources/geneses of knowledge. Loris Malaguzzi stated:

> (…) We maintain that all the languages of a child's life are born together with the child. They are interacting acts and have exploratory and perceptive equipment capable of organising information and sensations, and of seeking out exchange and reciprocity (…). The more languages we recognise children as having, the more we help them to act out and identify the methodological models required for dealing with events (...). Imagination and logics, like socialisation, feelings, creativity and aesthetics have a hundred roots and a hundred genesis (…).[9]

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[6] "Progettazione" derives from the Italian verb, *progettare*, meaning to design, plan, devise or project in a technical engineering sense. The use of the noun form *progettazione* by Reggio educators, however, has its own special meaning. It is used in opposition to *programmazione*, which implies predefined curricula, programmes, stages and so on. The concept of *progettazione* thus implies a more global and flexible approach in which initial hypotheses are made about classroom work (as well as about staff development and relationships with parents) but are subject to modifications and changes of direction as the actual work progresses.

[7] Malaguzzi, L. (1990) "History, Ideas and Basic Philosophy. An interview with Lella Gandini". In Edwards, C., Gandini, L. and Forman, G. (eds.) (1993) *The Hundred Languages of Children.* Norwood, NJ: Ablex.

[8] For further information: Conversation with Simona Bonilauri and Claudia Giudici. In Vecchi, V. (2010) *Art and Creativity in Reggio Emilia. Exploring the Role and Potential of Ateliers in Early Childhood Education.* London: Routledge.

[9] From the speech of Loris Malaguzzi during a professional development event for the staff working in the infant-toddler centres and preschools of the Municipality of Reggio Emilia; Reggio Emilia, October 1991.

This is an idea of knowledge that required consistent pedagogical, organisational, professional development choices like the one made by Loris Malaguzzi at the end of the 1960s: having the atelier and the atelierista[10] in the educational centres for early childhood. This was an intuition and a choice that contributed to the construction of an original educational philosophy where the aesthetic dimension and the research of beauty have been adopted as important dimensions in the life of our species and thus also in the school and in learning.

Learning is a subjective construction process that is strengthened by the group dimension where the cooperative exchanges of thoughts can enable progresses, new formulations, and new and deeper understanding – dimensions where also the play, the irony, the pleasure of making attempts, discovering and challenging the others and one's self are an integral part of the relational and learning dynamics.

Research is a keyword of children's being together, and it is a keyword also for the adult educator who can listen to and dialogue with their knowledge and their researches. Loris Malaguzzi stated:

> (…) As we have chosen to work with children we can say that they are the best evaluators and the most sensitive judges of the values and usefulness of creativity. This comes about because they have the privilege of not being excessively attached to their own ideas, which they construct and reinvent continuously. They are apt to explore, make discoveries, change their points of view, and fall in love with forms and meanings that transform themselves (...).[11]

Our responsibility as educators is to nourish that stubborn feeling of optimism.

[10] The *atelierista* is an educator with a background in arts who works in the atelier (the atelier space is present in every municipal infant-toddler centre and preschool in Reggio Emilia). The *atelierista* works with teachers in curriculum development and documentation and supports and develops the expressive languages of children and adults as part of the complex process of knowledge building.

[11] Malaguzzi, L. (1990) "History, Ideas and Basic Philosophy. An interview with Lella Gandini". In Edwards, C., Gandini, L. and Forman, G. (eds.) (1993) *The Hundred Languages of Children.* Norwood, NJ: Ablex.

Part VII
Child, Families and Communities

Charlotte Højholt

Chapter 76
Introducing Reflections

Charlotte Højholt

Abstract What brings together concepts such as child, families and communities? In this chapter some actual problems in the field related to this heading will be discussed. It has been problematized how children through abstract understandings have been isolated from the social world and its multiplicity of relations. Going up against abstract isolation of development as a solo project calls for conceptual possibilities for analysing developmental conditions and how persons in a concrete way make up conditions to each other. This involves new questions and matters including children's significance for each other, the shared care between different parties involved in the life course of children and children's everyday life across contexts. In these introducing reflections I will touch on how these interrelated significances point to conceptualizing the child as a participant in compound and historical social practice. In that way the composition of the three concepts in the heading of this part of the book may offer possibilities for exploring children's development as an aspect of their participation in everyday activities and situated interplay. The changing theoretical perspectives on 'child', 'families' and 'communities' will be discussed and in the end the following chapters are presented.

Keywords Child • Families • Communities • Theories of development • Critique • Participation • Social practice

What brings together concepts such as child, families and communities? Why are they included in a specific section of an International Handbook on Early Childhood Education? Due to the initial idea for this book (Fleer and van Oers, Chap. 1, this volume), it could be argued that this combination of concepts opens opportunities for bringing together material from researchers who are currently paving new directions and providing new insights into methodological problems and challenges for research as well as practice related to children's life and development.

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The authors in this section are all engaged in fundamentally rethinking early childhood education and thereby overcoming conceptual problems often criticized as decontextualizing and individualizing our approach to children. It has been problematized how children, their ways of living, learning and developing through abstract understandings have been isolated from the social world and its multiplicity of relations. On this background the authors of this section argue for a contextual point of departure aimed at understanding children in their lived environments and aimed at developing different methodological possibilities for this. Such problematics, challenges and rethinking form a background for the heading of the part.

In this introduction I will discuss some actual problems in the field related to this heading. Mainly I aim at presenting the following chapters, their main points and the conceptually as well as methodologically movements they contribute to. This also involves new questions and matters – in continuation of current discussions and changes in our understandings of children and their development, pertinent topics appear. These include children's significance for each other, the shared care between different parties involved in the life course of children and, furthermore, the changing understandings throw light on children's life across contexts. Involving these attentions is not just a question of adding supplements to our concepts – it gives new content to our concepts, and in this way, child, families and communities must be conceptualized in new ways and first and foremost in connection to each other.

In these introducing reflections, I will touch on how, from my point of view, these interrelated significances point to conceptualizing the child as a participant in compound and historical social practice. In that way the idea with the heading of the section is connected to the mentioned problem about decontextualizing and may offer possibilities for exploring children's development as an aspect of their participation in everyday activities and situated interplay. Going up against abstract isolation of development as a solo project calls for conceptual possibilities for analysing developmental conditions and how persons in a concrete way make up conditions to each other.

Particular the concept of communities – among and about children – challenges foundational understandings of children's development and points to significances of this attention to the concepts of 'child' and 'families'. This expands the amount of important participants in the process of child development – as, e.g. different family members, friends, peers and professionals working in the institutions responsible for children's learning and development. All these areas of focus lead to new perspectives on family life and parenting since parenting come to include among other things promoting friendships with peers and collaboration with teachers, pedagogues and other parents.

Hence, the focus on child, families and communities can be seen in the light of a changing child life in a changing world and in the light of new theoretical approaches to children, their everyday life and their way of living it and developing through life. The section discusses these themes and their inner coherence. It pursues the development of theoretical concepts and methodological ways of exploring children's lives in respect to the manifold variation between societies, cultures and in respect to specific children and their personal ways of dealing with their different social

conditions. The question of children's everyday life is in various ways taken up here to explore children's as well as adult's ways of dealing with different everyday lives.

The purpose is to gather different theoretical discussions, empirical insights and ways of using and elaborating fundamental concepts. The chapters illustrate a quite diverse development in the field: the critique of approaches to children leads to various theoretical contributions and the different conceptualizations of 'child', 'families' and 'community' illustrate productive tensions and discussions in the field.

In this introduction, first some of the key theoretical discussions will be presented related to new methodologies developed in relation to exploring children, their everyday life and their communities and families. Afterwards some changing perspectives on child, families and communities will be discussed. By that means some of the studies and insights that the reader will meet in this section will be introduced, and thereafter the chapters of the section one by one will be presented.

76.1 Some Key Theoretical Problems

Theoretical challenges in relation to conceptualizing child, communities and families offer many perspectives, and one may start from different angles. However, three related problematics appear of central importance to prioritize: (1) the critique of developmental concepts for being abstract and normative and categorizing children according to universal standards; (2) the continuous discussions about how to conceptualize the dynamic relationship between an active and developing subject and the social contexts of development, including social understandings, discourses and material conditions for development; and (3) the tendencies to move back and forth between essentialist and relational understandings of, e.g. 'child', 'developmental problems' and 'a community'.

A recent milestone to begin with could be Erica Burman's *Deconstructing Developmental Psychology* from 1994 (a revised third edition is published in 2017) This work illustrates how our widespread ways of thinking about development are constituted through the twentieth century, closely connected with social policy, family policy, educational policy and practical needs for social control and gender differentiations – as well as differentiations between groups of people and their way of living. In this light, the question then changes from what developmental psychology has 'discovered' to what has made its special issues, topics and answers relevant and in what manner the development of psychological research practice has had an impact on how we in practice relate to children and how developmental psychology has contributed to social and discursive movements.

Normativity is a classical and fundamental problem when it comes to discussions about children, early childhood education, families, upbringing and communities and especially connected to the concept of development. Can we conceptualize development without laying out what is 'the right way' of developing? And as a consequence of this differentiating between children and their ways of developing and categorizing their eventual dilemmas due to such a universal perspective 'from

above', from 'outside' and without connections to concrete developmental conditions?

We seem to displace the very attention to children's developmental conditions when we follow shifting abstract standards for children's needs and behaviour. Notions about children's development and about early childhood education have been used to distinguish between wrong and right, to pathologize those individuals and groups who do not meet the idealized models and especially to point out problematic ways of upbringing. In this way, such notions not only point to how children at different ages should be treated but also to how family should be lived, to how upbringing tasks should be organized and distributed and to how gender should be an organizing principle. Burman's point about 'mother-blaming' seems as relevant today as when she wrote it for the first time and can be seen illustrated in this section in an analysis of parenting in India. Doner's chapter is a striking analysis of the connections between global political changes and specific ideals for early childhood education, in professional institutions as well as in families – and especially in the relationship between these: 'Today, mothers are expected to be the main contact between the school and the home. If they don't come in daily they are quickly cast as problematic' (Doner, this section).

In spite of differences in contexts and approaches, this is a parallel to Højholt and Kousholt's analysis of how family background is pointed out in relation to school problems in Denmark and a parallel to Andenæs and Haavind's analysis of sharing early care in Norway. In her own, 'Towards a post-human developmental psychology of child, families and communities', Erica Burman takes us a step further in relation to critique and theory development, raising new critical perspectives that provoke re-evaluation of existing models and, beyond this, pose different research questions for early childhood education and development researchers.

Concerning the second selected discussion about how to conceptualize the dynamic relation between an active and developing subject and the social contexts of development, this issue often turns our attention to the everyday life of children and their caregivers. Our section is rich in examples of this, in empirical studies and in theoretical formulations. The challenge appears especially central to cultural historical and related approaches engaging in conceptual development concerning dialectics. Central authors within this development and represented in the section are Jonathan Tudge (e.g. 2008) and Mariane Hedegaard (e.g. 2012), turning methodology towards new ways of observing children's activities and experiences in their everyday lives (see also Tudge and Hogan 2005) and new ways of exploring children's everyday lives across contexts (see also Hedegaard and Fleer 2013).

In continuation of this, Hedegaard contributes to changes in our approach to the concept of family and the tendencies to move from conceptualizing family as a quite isolated entity to exploring family life in its connections to other developmental contexts as well as involving the child's own contribution to its developmental contexts. In this section, she elaborates this attention in an analysis of the cultural learning taking place, not just from parents to children but as bidirectional and with the child as an active creator of their shared social situations. Tudge uses the theoretical framework of cultural-ecological theory (2008) to examine Brazilian families, par-

ents' values and beliefs and the ways in which parent–child interactions take place. Furthermore Liberali and Shimoura expand the cultural historical traditions in this section, focusing on the joint creation of 'reading communities', where children learn and change themselves through taking part in transformative communities.

Concerning such dialectical formulations (as well as close observations of everyday interplay among small children and their parents), Hanne Haavind's study from 1987 has inspired researchers in Scandinavia and elsewhere through developmental concepts, focusing neither solely on the child nor on its surroundings but exactly on development in-between relationship. Her research proposes concepts for analysing how the mutuality between child and caregivers is changing in specific ways. It is, for instance, concepts dealing with an extended mutuality, involvement in new tasks and affairs, expanded responsibilities, new kinds of contributions and increasing motivation. Haavind also accentuates how development should not be seen as having one objective and one sequence but must be understood as 'exceeding processes'. It cannot be controlled or predicted, but we may point to possibilities for development (Haavind 1987, see also 2011).

In this section, Andenæs and Haavind follow up on the attention given to care for small children's everyday life, with a focus on sharing early care and 'chains of care'. In continuation of the discussion in this introduction, it is stressed how just 'setting the caregiver in plural' provokes key concepts related to development: generating 'conceptual and theoretical challenges to grasping the connection between care and development' (this section).

Returning to the problematic tendencies about moving back and forth between essentialist and relational understandings, Bronwyn Davies formulated a breakthrough in relation to exploring how children are positioned as (gendered) children in a historical and discursive social practice (since Bronwyn Davies was originally part of our work with this section, I involve her work in illustrating this point). She illustrated in her *Frogs and Snails and Feminist Tales* (1989) how children become persons through learning the discursive practices in which all people are positioned as either male or female. In her way of listening to the children and acknowledging their perspectives on gender, she not only introduced a new analytical practice related to poststructuralist theory but also illustrated new scientific practices involving children in the research (Davies 1993, 2014).

This presents conceptualizations of social dynamics between persons and represents an alternative to the short circuit about universal essence beyond historical and cultural interplay. Exactly this problem has been central in relation to historical endeavours to develop a scientific approach to exploring children, their learning and developmental processes and their specific positions in a changing world (a critique and discussion wich has a long tradition especially in the cultural historical approaches).

Looking at the other chapters, one can identify parallels, for instance, in a discussion of changing focus from differentiating between children and categorizing their difficulties in abstract ways (and seen from the adults' conflicting perspectives) and instead 'listen' to the dynamics in the interplay between children and between their adults (Højholt and Kousholt this section). Moreover, several chapters touch on the

way that not only the children develop through taking part in the ongoing changes of social communities but also the communities develop through different contributions to the common social practice. In this section it is especially contributing to discussions about 'community', and Liberali and Shimoura present a concrete analysis of a project in Brazil in which the researchers, in collaboration with students, teachers, parents, principals, caretakers and children, work with 'creatively enhancing community transformation' (Liberali and Shimoura this section).

76.2 Changing Perspectives on Child, Families and Communities

The theoretical problems and challenges touched upon above are connected, interact and criss-cross the different chapters in this section, where the researchers deal with them in different ways. Thus, we hope to illustrate differences as well as general questions emerging from our common matter. The concepts of 'child', 'families' and 'communities' vary in different conceptual frameworks and in different historical contexts. The concepts cannot be seen in isolation from one another and must be seen in the light of historical changes, global differences and conflicts and political discussions about the same.

In a very general sense, critical researchers and practitioners seem to pay attention to the 'child' in a way changing from a kind of an exceptional being on its way to becoming a real person due to developmental processes characterized by special logics and regularities – to different kinds of approaches to children as persons with agency and different perspectives on the daily life they share with each other and with their adults. For a long time, there has been fundamental critique of several developmental models referring to their abstract standardizations, their ways of detaching analyses from the children's life contexts and not including the subjectivity and social participation that mediate persons in development. This was mostly expressed as a critique of developmental studies and not followed by specific contextual empirical studies. Indeed, this section illustrates that a period of critique has been followed up by a multiplicity of empirical as well as theoretical studies. Still the field is quite empirical, but the new studies are building on the theoretical critique and developing new modes of conducting research, developing contextual understandings, connecting theoretical strands and going beyond different disciplines and methodologies. Also the empirical studies involve children as subjects in new ways, and they involve the many other subjects engaged in children's everyday life, learning and development. The focus on a child taking part in a common world opens up for involving societal analyses, structural and structuring dynamics as well as analyses of situated interplay between children.

Such changes should not be simplified but seen in their variations around the world and in connection with how the different concepts and understandings have significances for one another and for the practices we organize for children to live

and learn through (e.g. 'children's perspectives' are of particular concern in Scandinavian countries cf. Hedegaard et al. 2012). New conceptualizations about the 'child' point to new attentions, for instance, to children's possibilities for taking part in relevant communities of their lives, children's contributions to the relations they are part of and children's influence on their everyday life. Such conceptualizations raise political as well as pedagogical questions about unequal developmental conditions, how to explore the personal meanings of this and how to work explicitly with conditions for learning and developing as a person in a particular context. In addition these attentions entail new ways of understanding social problems, taking into account how categories from developmental psychology evolve in relation to and have consequences for specific possibilities for investigating and dealing with problems linked to early childhood education. For instance, we come to study situated meanings for children's participation in school instead of focusing isolated on their social background and a intergenerational transmission of problems (Højholt 2016).

Thus, instead of universal standardizations, psychological research should inspire caregivers to concrete kinds of exploration of situations in children's life and deliver concepts for being curious about children's perspectives on what is at stake in their everyday life. In relation to work for developmental conditions, the attention could be turned in direction of the importance of giving the children experiences of contributing to communities and being influential in relation to what matters to them.

Furthermore, the theoretical discussions of these concepts have consequences not just for the research questions we raise in our projects but certainly also for the way we explore the questions and the ways we involve children in the research. The chapters in the section present different ways of paying attention to children's everyday life, to social complexities and to the endeavours of focusing on 'connectedness' instead of separating and isolating different aspects of children's life and development in abstract ways. This points to including the other children, the involved adults and the structural arrangements of children's situations and it implies to analyse how actions are connected to conditions, meanings to the participants and how these may form reasons for actions.

Children's lives and conditions look very different in different parts of the world and so do their families. The concept of family seems almost as much of a key concept as the 'child' in discussions about early childhood education. Even though the very focus on family has been criticized, the use of the concept does not decrease. Nevertheless, conceptualizations and explorations of different ways of living family life and performing care for children seem quite revolutionized. As illustrated in the section, this implies the ways the family is investigated as a compound community, where different participants with different lives across other contexts and with different perspectives and contributions make up the conditions for each other.

Moreover, it concerns the way the family is explored in connection with other societal institutions and global structures, constituting conditions for being parents, exercising care and cooperating with other caregivers. Parental tasks are undergoing changes and are being under new kinds of pressure. Parental collaboration comes

into the focus as a central issue to investigate and to strength. Exactly the collaboration between the various caretakers seem to be troubled by conflicts (e.g. about when something is a problem, about what is the right way of being a parent or about whether to give priority to the work of supporting child communities) and by displacements of responsibility between the involved parties. A recognizable example could be the way problems in schools are often formulated as caused by problems in the families of the children.

Opening up for acknowledging the plurality of perspectives on children's lives, development and education paves the way for new ways of understanding the conflicts about the 'right' way of giving care and for exploring the different educational perspectives and practices around the world. Our way of thinking about what should be the best for children is at one and the same time connected to intimate and local cultures, to broader historical movements and to structural distributions of tasks, responsibilities, positions and power.

The concept of community has been criticized for overlooking such social differences, alluding to something harmonious, homogeneous and static, and in this way for being imbued with ideological components. In relation to this critique, a point of departure in 'community' may have excluding and preserving significations. Still, the concept is also part of theoretical movements aimed at analysing the ways persons constitute the conditions for each other, the ways persons are connected in structuring interplay and the ways participants are connected through their different relations to common matters. In other words: community becomes connected to emergence in ongoing encounters, and individual agency is to be found in the emergent and multiple encounters through which communities are established and maintained.

The concept seems to be used to prompt restrictions and adjustments as well as to attempts for analysing social interplay and opening up for democratic development in the educative practices for children. These contradictions call for theoretical investigations and discussions, and the section is a contribution to that. To me the concept of community goes up against individualism – especially the individualization of developmental problems as something a child 'has' or 'has not'. To understand developmental problems, we have to involve the communities of the social practices were children live and take part – and sometimes find themselves in problematic situations in relation to. In this way the concept might be central to the point that the behaviour of a child must be understood in the light of what the child is participating in – what is at stake here and what kind of situated conditions do the child find for taking part? This seems to be a quite obvious point which nevertheless is missing in many descriptions of children.

Thus, such perspectives on child, families and community and their conceptual refractions lead to a manifold area of research as presented in this section. They raise general questions such as: How do different parties in different contexts think about children's development? What do they do in relation to promoting children's development and well-being? How do they cooperate about their different contributions and what kind of conflicts do they encounter?

The contributions of the children are particularly accentuated: How do children act in their life? How do they act together with others creating conditions and influencing the social situation of their life? Moreover, how do they organize their activities, arrange relations and communities and challenge their caregivers?

76.3 The Composition of the Section

In this last section of the introduction main points, contexts and particular concerns from each of the chapters in the section will be presented – in the sequence they appear in the section. As mentioned the very combination of the terms child, families and communities at one and the same time challenges and illustrates current movements in our understandings and explorations of questions and problems associated with early child education. Setting developmental contexts and caregivers in plural and involving situated social dynamics as well as historical societal structures, discourses and constructions; encounters traditional theoretical concepts and the societal way of organizing early child education. Andenæs and Haavind formulate that the issues evoked by the sharing of care go to the core of the discussion of the interrelatedness of care and development.

With this point of reference, Andenæs and Haavind state that instead of drawing on prevailing psychological models and standards to assess the quality of arrangements of caring during early childhood, they will learn from how caregivers go about in their everyday practice. What characterizes the everyday life that parents of small children organize, and in what ways do practices of shared care unfold around their toddlers and involve them as social participants? How are relationships between parents and other care providers negotiated, and how is responsibility for the cyclical regulation shared? The chapter offers insights into three different selected cases: a family that moved from a country in the Middle East to Norway and started sending their young son to child care, a family with a girl suffering from asthma, and a same-gendered family (both females). The latter has been selected because same-gendered parents seem to share the care to a higher degree than other couples and can thereby elucidate what intensive parental sharing may look like.

Then we change continent, turning to how Tudge, Martins, Merçon-Vargas, Dellazzana-Zanon and Piccinini discuss child-rearing values and practices in Brazil. In their chapter, they illustrate how to use a theoretical framework that requires attention to four interrelated aspects: the cultural context, in particular, cultural values and practices; how those values and practices change over historical time; the influence of individual variability; and, most importantly, the typically occurring activities and interactions in which children engage with those who are trying to raise them. A dialectical point here is that the next generation never simply copies but appropriates what has been done or valued before. Cultural-ecological theory, therefore, requires that one attends to the impact of historical time on changes in values, beliefs and practices. In their chapter, the authors present work by Kağitçibaşi and Keller, focusing on child-rearing approaches linked with autonomy and related-

ness in the majority world and plenty of data collected in Brazil, discussing families and their child-rearing strategies in different parts of the country, including local and class variations in child-rearing.

In Mariane Hedegaard's 'Children's cultural learning in everyday family life exemplified at the dinner setting', we prolong this attention, zooming in on the social situations of a dinner table. This implicates approaching learning, not only as resulting in a person's acquisition of new competences but also of values leading to new motive-orientations and new positions in concrete activity settings. In this chapter, this is conceptualized as 'cultural learning', taking place in families through parents' and children's negotiation of demands in concrete activity settings and leading to new forms of social interaction between children and parents as well as to new initiatives and conflicts. Therefore, this learning process goes both from parent to children and from children to parents. These points are illustrated with examples from a project on children's everyday lives in the family in Denmark. The examples focus on Emil and Martin, two boys in two different families. Emil and Martin had just started in school, and this resulted in fundamental changes in their daily activities at home. The children's transitions to school are chosen to illustrate how this changes the demands a child experiences at home, thereby affecting the child's motive-orientation, and the demands a child puts on his home surroundings, thereby influencing his development.

Another example of how different learning practices influence one another is Doner's chapter about how the ongoing processes of globalization through new educational regimes affect parenting among the middle class in India. Henrike Doner argues that early childhood education becomes a prime site, where neoliberal values are reproduced and enacted in relation to new government agendas and economic conditions, in terms of competition and the imagery of global markets in education and employment and directed towards future upward mobility for the family. An emphasis on education and the institutions, ideologies and practices related to becoming an educated person are among the accepted markers of middle-class identities across the globe, and education does not just affect the child involved. It also shapes those around him or her and how they relate to the wider world. On the basis of two decades of extensive periods of long-term anthropological fieldwork in Calcutta/Kolkata, India, it is discussed how the production of global Indian citizens starts with preschool education, a novel and spreading practice that is changing the roles of the family members and especially the role of mothers.

In their 'The Learn through Playing Project: creatively enhancing community transformation', Liberali and Shimoura involve us in an extraordinary developmental project in a context where many Brazilian children, parents, teachers, principals and even teacher educators and researchers feel deprived of the possibility of creating conditions for a better future. With a point of departure in transformative thoughts from Freire, Vygotsky and Bakhtin, the authors take us into the dialogues and inner connections of collaboration, where individuals learn and change themselves through taking part in transformative communities. The project has focused on the development of reading as a general aim – elaborating the objective to promote reading communities through activities for sharing reading. In this way, the

project opens new possibilities of seeing reading not as an individual practice but as a way of transforming community realities. Performance, as a kind of support, enabled the kids to go beyond their familiar perceptions and possibilities and gave them a chance to see themselves as active agents in the construction of the reading community. Liberali and Shimoura are engaged with the actual dialogue and argumentation between interlocutors and illustrate how changes in collective meaning stem from the struggle established between different subjective experiences. In this sense, the general interest of the group is created through the debate generated by the conflict of ideas.

Conflicts and communities are also the subject of the next chapter, which focuses on children's development of agency across different and conflictual communities (families, schools, institutions for children's leisure time and special help arrangements in Denmark). Højholt and Kousholt illuminate how different adults are connected in a structural distribution of responsibility in relation to children and have different perspectives on the development of children. On this background, it is discussed how social conflicts around and between children may constitute problematic developmental conditions and form a basis for personal conflicts for the children – related to a plurality of engagements. This gives a certain view on how the social background of the children seems to have situated meanings in the interplay between their different life contexts. Through examples about the children's internal coordination, the authors want to illustrate how children develop possibilities for conducting their life, not just through adjusting to given conditions but also through arranging conditions together with others, contributing to social practice and taking part in negotiations about different matters in their life. A specific example about a boy's personal dilemmas illustrates how children's developmental processes cannot be understood in isolation from social conflicts about them. The aim, therefore, is to develop analytical concepts to be used for exploring children's ordinary life as a background for understanding specific difficulties.

To end where we started: in the deconstruction of developmental psychology, the theoretical critique as well as new ways of thinking theoretically, we now have the chance to gain an insight into new concepts in Erica Burman's 'Towards a posthuman developmental psychology of child, families and communities'. This chapter elaborates the rationale for post-human approaches to early childhood education and raises new research questions for development researchers. Taking in turn the key terms, 'child', 'families' and 'communities', the chapter indicates how frameworks associated with the post-human both critique the formulation of their relations and generate new conceptual and methodological agendas. This also raises questions about sciences and the application of science. Among other points, it turns the focus from generalization, standardization and universality to specificity, particularity and contingency and calls for engaged scholarship, where ethics (with formulations of Badiou) become more than 'pity for the victims' – rather it should become the enduring maxim. Beyond static rationalist models of reflexivity, the affective turn promises to support politically engaged and innovative research that attends to the apparently minor or insignificant, the fleeting and the non, or less rational, in research relations and accounting practices.

Going through these themes, points and questions, I hope to have aroused curiosity and desire for reading further, and I wish the readers pleasant and inspiring moments with this section.

References

Burman, E. (1994/2017) *Deconstructing developmental psychology*. London: Routledge. ISBN: 0–415–06438-4 (pbk) & 0–415006437-6 (hbk).

Davies, B. (1989). *Frogs and snails and feminist tales*. Sydney: Allen & Unwin.

Davies, B. (1993). *Shards of glass: Children reading and writing beyond gendered identities*. Cresskill: Hampton Press.

Davies, B. (2014). *Listening to children*. London/New York: Routledge, Taylors & Francis Group.

Haavind, H. (1987). *Liten og stor: Mødres omsorg og barns utviklingsmuligheter* [Small and big: Mother's care and children's developmental possibilities]. Oslo: Universitetsforlaget.

Haavind, H. (2011). Loving and caring for small children: Contested issues for everyday practices. *Nordic Psychology, 63*(2), s24–s48. doi:10.1027/1901-2276/a000031.

Hedegaard. (2012). Analyzing children's learning and development in everyday settings from a cultural-historical wholeness approach. *Mind, Culture, and Activity, 19*, 127–138.

Hedegaard, M., & Fleer, M. (2013). *Play, learning and children's development: Everyday life in families and transition to school*. Cambridge: Cambridge University Press.

Hedegaard, M., Aronsson, K., Højholt, C., & Ulvik, O. (2012). *Children, childhood and everyday life – children's perspective*. Charlotte: Information Age Publishing Inc.

Højholt, C. (2016). Children's conduct of life and social conflicts about children – situated inequality and political aspects of social practice. In E. Schraube & C. Højholt (Eds.), *Psychology and the conduct of everyday life*. London: Routledge.

Tudge, J. R. H. (2008). *The everyday lives of young children: Culture, class, and child rearing in diverse societies*. New York: Cambridge University Press.

Tudge, J., & Hogan, D. (2005). An ecological approach to observations of children's everyday lives. In S. Greene & D. Hogan (Eds.), *Researching children's experience* (pp. 102–121). Thousands Oaks: Sage Publications.

Chapter 77
Sharing Early Care: Learning from Practitioners

Agnes Andenæs and Hanne Haavind

Abstract *Shared care* and *chain of care* are core concepts for analysing empirical variation of care arrangements for small children, involving more than one caregiver. The Norwegian context exemplifies an increased tendency among mothers to share the care of their young child with a co-parent at home, and with professional care providers at day care centres. Instead of drawing on prevailing psychological models and standards to assess the quality of arrangements of care during early childhood, we have tried to learn from how caregivers go about in their practice. In this respect we count parents as well as care providers in childcare centres as practitioners. Based upon parents' detailed descriptions of their children's everyday life, the paper analyses how parents involve others in the chain of care that they organise. Three cases of sharing are presented and discussed: same-gendered parents who demonstrate intensive parental sharing, parents who share with professional caregivers at day care and parents of children with special needs who do the same. Setting up care arrangements with more than one continuously engaged participant appeared as a process of gradual adaptation, not a sudden abdication from parental responsibility. Thus, the child is neither constructed as a baton in a relay race, delivered from one caregiver to the next, nor as a task that is easily split into pieces, one for each caregiver. Different caregivers did not necessarily treat the child in exactly the same way, but they coordinated their efforts in order to contribute to the subjectification and development of this particular little person.

Keywords Chain of care • Caregivers • Parenthood • Routines of everyday life • Early development • Child care centre

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77.1 Introducing Shared Care

Theoretical models about early child development draw heavily on assumptions about attachment in the mother-child dyad, stressing the child's dependency on one particular person with the ability to read signs and satisfy needs (see, e.g. Bowlby 1988). Therefore, it should not come as a surprise that everyday practices of sharing care for a child will raise many concerns, particularly if beginning from an early age. It is as if the notion of more than one person in a baby's life could easily turn into 'too many': that the babies might encounter shifting caregivers who do not really care that much about them or that they will not be able to differentiate between persons and will fall short of the standards for being securely attached (Haavind 2011).

In the sociocultural context that we will present to the readers – the Scandinavian countries – there is a growing tendency for children to stay connected to more than one caregiver from an early age. Since both the male and female parents are entitled to take paid leave from work to care for their newborns, mothers and fathers may actually take turns in staying at home and care for their baby for some period during the first year (Ellingsæter 2009). When the babies become toddlers, their parents may take them to low-cost and high-quality childcare centres where professional caregivers will daily enter into the lives of the young children (Ellingsæter and Gulbrandsen 2007). Arrangements for the sharing of care in its many versions are changing the premises for creating the early years of childhood for particular children. This generates conceptual and theoretical challenges to grasping the connection between care and development (Andenæs 2005).

As might be expected, arrangement for sharing care could be interpreted both as being reassuring to small children and also as threatening to their well-being. We will bring the contested issues that the sharing of care evokes to the core of the discussion of the interrelatedness of care and development. Instead of drawing on prevailing psychological models and standards to assess the quality of arrangements of caring during early childhood, we have tried to learn from how caregivers go about in their practice. We will count parents as well as care providers in childcare centres as practitioners in this respect. Instead of drawing on one-parent care as the implicit norm for quality of care, we have learned from the ways caregivers in shared care arrangements actually adapted their practices to the experiences they gathered as they went along with the children and each other during their first years of life (Andenæs 2011). In doing so we will draw on a selection of studies from Norway, where the sharing of childcare between both parents and professional caregivers in childcare centres as well as between parents themselves is at stake.

77.2 Recent Trends in the Sharing of Care in Norway

Increased sharing emerges in many different ways. First, there is an increasing tendency towards more sharing of care *between mothers and fathers*. The continuously engaged father with a capacity for tender care is no longer perceived as violating standards of masculinity (Haavind 2006). This is not to say that all couples who live together will subscribe to a scheme of equal sharing of the caregiving chores, but the tendency towards sharing across gender will leave no one unaffected. Therefore, fathers will more often than not have to account for why they stay less involved than their female co-parents in early care. Box 77.1 gives an overview of the Norwegian scheme for parental leave benefit.

Box 77.1: Arrangements for Care During the Baby's First Year: Parental Leave Benefit

Coverage: Parental benefit is intended to ensure parents an income in connection with the birth of a child and during the first year of the child's life. For most people, the coverage from the state corresponds to the ordinary salary of the parent who is on leave. There is an upper limit for the level of compensation from the state for some people with high annual income. All employees in the public sector will be fully compensated.

Period: The total period for parental benefit in the case of a birth is 49 weeks if parents prefer to receive 100% coverage, or the period can be extended to 59 weeks if parents prefer 80% coverage.

Entitlement: Any parent claiming the right to parental leave benefits must have been in work or an activity deemed equivalent to work for 6 of the last 10 months prior to the start of the leave. More than 80% of the mothers and approximately 70% of the fathers have the right to parental leave benefit. Mothers who do not have the right to parental leave benefit are entitled to a lump-sum grant. This lump sum will for most mothers correspond to a salary of 1-2 months.

Shared period and maternal and paternal quota: The shared period is that part of the parental benefit that can be split between the parents as they wish. If the father is going to draw parental benefit for part or all of this period, the mother must be in paid work or an equivalent activity. The maternal quota is 10 weeks, and the first 6 weeks must be taken immediately following the birth, while the remaining 4 weeks can be taken at any time during the parental benefit period. The paternal quota is that part of the parental benefit period that is reserved for fathers. A father can assume care of a child for 10 weeks on a 'use it or lose it' principle.

Public policies support sharing between the two parents in the sense that when paid parental leave in 1993 was expanded up to almost a year, there was space opened up for designing a father's quota (Brandth and Kvande 2011). This quota for fathers is perceived by some as offering all three parties extended possibilities for realising new ideals of early parenting and by others as a state intervention into the private zone of family life in a way that reduces the parental couple's freedom of choice and ignores their own understanding of the specific needs of their baby (Ellingsæter 2012).

The new, engaged father figure does not just appear in circumstances in which mothers and fathers live together. In the wake of increasing numbers of mothers and fathers who have split up and live separately, there are increased efforts by both mothers and fathers to allow fathers more than mere visitation rights. A significant minority of ex-couples practise equal sharing between two separate homes ('joint physical custody'), and some of their children will from an early age be included in an arrangement that involves them moving back and forth on a regular basis every other week. Among the population at large, there is both strong support and prevailing scepticism about employing this as a cultural standard for best practices (Skjørten et al. 2007). What emerges as a contested issue is that for some, the shared care arrangement is considered to be proof of a willingness to protect and maintain a close relationship to both parents, while for others, it raises concerns that the child's need for day-to-day stability and continuity may be violated, especially if small children are involved.

Second, sharing *between parents and professional caregivers of children attending day care* has increased for children under the age of 3, and such arrangements now take place as a standard procedure, which marks a significant transition for the majority of small children in their second year of life. Quite recently, the long-term goal of offering high-quality and low-price day care to all children on the verging of entering into their second year of life was reached (Statistics Norway 2012). All types of parents take part, including parents with Norwegian and immigrant backgrounds and parents from different social classes (Sæther 2010). See Box 77.2 for a brief presentation of the Norwegian day care centres.

Box 77.2: Arrangements for Child Care in Day Care Centres During the Preschool Age

Provision: The state and the municipalities are entitled to offer affordable and high-quality day care for children aged 0–5 years (they attend school from the year they turn 6). Most municipalities are drawing on a combination of public day care centres and centres operated by private providers. In any case most of the expenses will be covered by the state, and the municipality must provide guidance and ensure that centres are operated in accordance with standards and rules for management.

(continued)

Staffing: Head teachers and pedagogical leaders must be trained preschool teachers (3 years university college education or equivalent education). There must be minimum one pedagogical leader per 7–9 children under the age of 3 and per 14–18 children over the age of 3. Additional childcare personnel without professional qualifications can be employed in order to reach the common standard (although not regulated by law) of one adult per three children under the age of 3 and one adult per six children in the age between 3 and 6.

Content: Childcare centres shall lay a sound foundation for the children's development, lifelong learning and active participation in a democratic society. According to the Nordic educare model, education and care should be entangled. Children and parents have a legal right to participation.

Payment: The parents' part of funding the total running costs varies between approximately 22% and 30%. At present there is a maximum fee of NOK 2730 (about €300) per month. The rest is paid by the state and the municipalities.

Take-up: At present 90% of all children 1–5 years, 97% 3–5 years and 80% 1–2 years. There has been a rapid growth in attendance for the children in the youngest age group.

At present, childcare is celebrated as being beneficial to all children from the age of 3. The idea is that it allows children to be with other children so that they can play and enjoy outdoor life year round, and it is appropriate preparation for schooling. When it comes to the youngest children beyond the age of 3, this remains a contested issue. On the one hand, public childcare is viewed as being a universal measure of the welfare of both children and parents. On the other hand, there is concern that children around the age of one tend to be sensitive to separation and also too young to really enjoy the company of other children their age (Ellingsæter 2006). There is also a questioning about the motives – especially of mothers – for sending small children to day care. Because the decision to either 'stay at home' or to leave the child in the care of professionals designates her as the accountable parent, some will launch the suspicion that the availability of low-cost childcare and her wish to pursue her work and receive a full salary may cause her to ignore the needs of her child.

Third, arrangements for sharing care are called for and introduced in order to improve the life conditions for *children with special needs*. The improved quality of life for the majority of children in Norway has also led to an increased sensitivity towards children who, for a variety of reasons, suffer from disabilities or chronic illnesses or who grow up in families where extraordinary stress or a shortage of resources may reduce the parents' capacity to provide viable standards of caring. In such cases, there is a growing tendency to consider professional caregivers as having a central role in supporting parents. Whether this pertains to parents with extraordinary responsibilities or parents with limited capacities, the childcare centre

is supposed to relieve the parents – usually the mother – of some of the extraordinary burden and thereby also strengthen her capacity to remain engaged. Here, the direction of public concern is turned around, and the claim may be that some children will need professional care in addition to parental care, because the care that is needed appears to be too burdensome or too complex to be solely the parents' responsibility. The underlying assumption is that no one can beat the parents in how they tend to their vulnerable child, but doing so is particularly demanding for them. Shared care is about to become the standard arrangement for small children with special needs that follow from disabilities or developmental delays. Further, because attending childcare is increasingly in accordance with what most small children actually do, the need to account for childcare as a compensatory arrangement has just vaporised. Instead, non-parental childcare is seen as an arrangement for the early social integration of all kinds of small kids (Ellingsæter 2014).

77.3 Following the Contested Issues Raised by Sharing

Shared care is increasing due to a set of different reasons and across different contexts, and we have pointed out how such arrangements may be highly valued as well as contested. What psychology offers in order to settle these issues is limited, in spite of, for instance, Bronfenbrenner's efforts to direct attention to investigations of relationships between settings, like the childcare centre and family home (Bronfenbrenner 1979). Following Singer (1993), shared care will at best be ignored in psychological theories of early development because the pedagogic concept of family upbringing is based on the assumption that the mother will stay at home and represent continuity within the family. Ahnert et al. (2000) have tried to find alternative expressions of the phenomena of sharing between parents and professionals, claiming that when a child attends out-of-home care, he or she is not cared for by non-maternal care providers *instead of* being cared for by a mother. What the child experiences should not be viewed as a replacement but rather as regular turn-taking routines in which the children carry experiences across various places and therefore are received and supported by care providers in those places. Attachment to just one person does not tell the entire story, and there is a need to conceptualise the entire 'care ecology' (Ahnert et al. 2000). Similar viewpoints are expressed by Højholt (2001) and Kousholt (2008) when they talk about parenting. According to these authors, there is a need to develop ways of talking about and investigating parenting as a set of practices that are not exclusively conducted in the family home. Tending to a child may be based on direct face-to-face contact with the actual child, but pretty soon it will include some kind of awareness directed at him or her as a continuous being, even when the child is somewhere else with someone else (Højholt 2001; Kousholt 2008). 'Chain of care' (Gullestad 1979; Andenæs 2011) is a conceptual contribution to this understanding. The concept opens up for the inclusion of care providers, seen as 'links', in the chain, while it is still the personal obligation of the parents to ensure that each link as well as the total chain is good enough for their child.

The premises for emerging as accountable caregivers – mothers, fathers and professionals alike – are under transformation. As researchers, we can take advantage of this situation, by turning to the ways in which actual practitioners proceed. Surpassing the normative stance is not an easy and straightforward task for the caregivers, and increased awareness and more reflection will be the result. How do they arrange their everyday lives together with their small children, and how do they involve and draw on others in the sharing of care? Our strategy for developing concepts and models that to a larger degree resonate with the sharing that is actually taking place is to explore the practices as well as reflections of the practitioners, of caregivers who actually do the sharing.

77.4 Studies of Care Through the Routines of Everyday Life

In order to investigate shared care, as it is carried out by care practitioners, we have turned to several studies that address how small children are taken care of and live their everyday lives in Norway today. The main study followed 58 families from when the children were about 6 months of age until close to their third birthdays. During the period of the study, close to all of the children were enrolled in a childcare centre, making it possible to investigate how childcare became an element of their everyday lives. In addition to the initial variation according to social class and ethnicity and urban/rural positioning, different strategic samples were added as we became aware of other constellations relevant to the three trends in the sharing of care just described.

Our general theoretical approach is inspired by authors combining cultural psychology and developmental psychology (e.g. Bruner 1990; Rogoff 2003; Valsiner 2006). According to these perspectives and the arguments presented thus far, the empirical data required to address our research questions are practices of daily life both as contextualised interaction and as they are experienced by the participants themselves. In order to obtain the broad spectrum of social events that take place during a day, interviews with the parents consisted of detailed reports of how the care for each child was organised in time and space. To capture the entire day for those children who had begun attending childcare, we even interviewed the children's preschool teachers to get their descriptions and reflections.

To ensure that we acquired the necessary standard information about current care arrangement and plans for the future, the interviews started with a series of questions about these issues. Still, the main element of the interview setting was the 'life mode interview' (Haavind 1987), in which the interviewees are encouraged to describe their day episode by episode with regard to the social interactions in which each caregiver and child participated. The interviewer organises the conversation around the preceding day in order to ensure a close association between the interviewee's detailed descriptions of episodes involving the child and their subsequent interpretations and reflections. 'Yesterday' is used as the point of departure, and the description of each episode is used as a basis for further inquiry with question to

capture routines as well as exceptions, and how the current practices have developed. As we verbally move through the day, the parents are repeatedly encouraged to provide accounts of their own practices, aims and efforts in their interactions with their child and of their interpretations of the aims and efforts of others. Instead of asking general questions about parental experiences, worries and expectations, each of the accounts is thus contextualised in relation to specific episodes, and each episode is accorded a distinct place in the day's stream of events.

When parents are invited to describe their experiences from living with their children, their emotional regulations and reflective stances and belief systems will also follow. The description of each episode could therefore be used for further inquiry into what each parent was up against and what he/she was trying to accomplish.

The interviews were recorded and then transcribed. Our overarching question in the analysis of the empirical material has been what characterises the everyday life that parents of small children organise and in what ways do practices of shared care unfold around their toddlers and involve them as social participants? More detailed questions include the following: In what ways do arrangements of shared care create both developmental challenges and support for children who encounter a set of caregivers across different times and places? What notions about their small child as dependent on involvement and support from caregivers do the parents draw on in concurrent episodes with their child? How are relationships between parents and other care providers negotiated, and how is responsibility for the cyclical regulation shared?

The presentation that follows is based mainly on three children and their care arrangements, representing the three main tendencies of increased sharing, in this sequence: (1) between parents and professional caregivers in 'ordinary' families, (2) between professional caregivers and parents in families with vulnerable children in need of increased care and (3) between mothers and fathers.

77.4.1 I: New Places and New People: The Sharing of Care Between Parents and Professional Caregivers

Adam was 14 months old when he was enrolled in a childcare centre, and his family is among the 58 families who have participated in the main study. His parents moved from a country in the Middle East to Norway a few years before Adam was born, and they have experienced what it is like being immigrants without the cultural knowledge that most ethnic Norwegians take for granted. It has been suggested that studies of immigrant families are generally well suited for advancing knowledge about how dynamic societal and cultural processes are intertwined with familial processes (Chuang and Gielden 2009) and thus useful for our purpose here, exploring sharing of care between parents and professional caregivers.

77.5 Based on Trust

The first task for parents is to decide the right time for enrollment and then to pre-check the quality of the potential care arrangement. Adam's parents were eager to find a place at a childcare centre for Adam when he gotten passed 9 months, but did not succeed until 5 months later. They were firm in their choice, that is, to send Adam to a childcare centre and not a private child minder, and were in this respect in line with the general trend in Norway, as a childcare centre is at the top of most parents' preference hierarchy regarding non-parental care (Ellingsæter and Gulbrandsen 2007). 'We would never dream of hanging up a piece of paper at the local store to search for a child minder and then just leave him with this stranger', they said, and thereby underlining that confidence is what counts. 'You can trust a day care centre in a totally different way than a private child minder'.

Both parents have high expectations of the day care centre. There he will get 'the language and all the rest', as the father says in the interview. And they look forward to him socialising with other children his age. This is actually what most parents in Norway seem to emphasise when they consider non-parental care. What counts is that one's child is taken care of by friendly people who possess knowledge about children and the opportunities given to enjoy social life with other children (Østrem et al. 2009).

77.6 Gradual Adaptation

The transition from staying home with one's parents the entire day to spending 6–9 h each day at a childcare centre with unfamiliar care providers is gradual. Most employees in Norway are entitled 2 to 3 days off when their child starts attending day care, and childcare centres expect parents to spend time in assisting their child in becoming familiar with the new place and settling down. Adam's childcare centre had a rather detailed adaptation programme with explicit rules for the introductory days. It started with a short visit on the first day, included a light meal, and one or both parents were expected to be there the entire time. Then the stay at the childcare centre was gradually prolonged, and the parents were asked to stay away for an increasingly longer period. See Box 77.3 for a presentation of an adaptation programme.

Box 77.3: An Example of an Adaptation Programme

Day 1 A short visit accompanied by the parents. A light meal.

Day 2 Parents are encouraged to leave and stay away for a short while (10–60 min).

Day 3 Similar to day 2, and include a short nap for the child. Parents should be present when the child wakes up.

Day 4 Similar to regular days, but much shorter.

Day 5 Similar to regular days, but shorter.

Adam's preschool teacher recalls Adam's start-up as quite unproblematic, though she adds that this should not be taken for granted. Quite often she has to convince parents who find it hard to follow the plan that this procedure is actually what makes for the smoothest start-up. Even Adam's mother initially found it hard to leave her child with other people. Yet she felt so welcome, and, in addition to Adam's easy adaptation process, this is what really mattered to her.

77.7 Direct and Indirect Monitoring and Support

Even after the introductory phase, it was continuous work for Adam's parents to ensure that their child is taken good care of at the childcare centre. Key elements in their *caring from a distance* was to keep themselves informed about his life when he is out of their sight and to do what they could to secure his well-being. They take active part in what goes on at the childcare centre, and according to the preschool teacher, his mother in particular is the kind of person who never rushes, but takes her time and reads all kinds of information. 'And they both ask a lot of questions', she adds. Another source of information about Adam's life when he is out of his parents' sight is a continuous interpretation of what has been referred to as *signs of care* (Thorne 2000). When the sandwiches that were packed for Adam in the morning have not been eaten or his diaper is very heavy at pick-up time, it is interpreted as a sign indicating that everything is not exactly as it ought to be. When such things occur, they present their concerns in the gentlest possible way, without accusing any particular person. What is also at stake is the maintenance of a relationship of cooperation, which is not driven by the customer-salesperson relationship as underlying logic. They want to appear as reasonable persons in the mind of the other caregiver, and there were no indications in the interview with the preschool teacher that they had not succeeded so far.

The close contact and effort to keep themselves informed about daily life at the childcare centre serves another purpose as well, namely, to assist Adam in making connections between the two settings, that is, the childcare centre itself and the family home, by talking about the centre at home and by facilitating the caretakers' conversations with Adam about home life during childcare hours. Actually, this kind of talk seems to be more frequent at Norwegian dinner tables than, for instance, in the USA (Aukrust 2002). Adam is even encouraged to be the one who transfers information and habits between home and childcare, like when his parents satisfy his expressed wishes for 'canned mackerel in tomato sauce'. This typical Norwegian sandwich spread is strange to Adam's parents, but nevertheless it has been included in their groceries at home. Through practices like these, they acknowledge the childcare centre as a place for respect and belonging and part of the life that family members share.

77.8 Installing the Child in the Mind of the Other - to a Certain Degree

A crucial way of performing care from a distance goes through the personnel at the day care centre. As Adam's verbal capacity is limited, his parents keep close contact with them. The parents try to inform them about Adam and the rest of his everyday life, thus increasing the caregivers' sensitivity towards him and making it easier for them to understand him. At the same time, the parents are well aware that Adam is not the only child at the childcare centre. Expectations must be realistic, and they do not want to be interpreted as being too demanding.

The efforts of Adam's parents underlines the notion that the task of taking care of the child cannot be conceptualised as being shared among *equal* partners, which could be a possible interpretation of the previously introduced term 'shared care' (Singer 1993). The parents regard it as their responsibility to see that he lives a good life and that he receives good care even when they are not together. They are receptive to feedback and ideas related to their child and appreciate suggestions pertaining to age-adjusted demands, as well as feedback about how Adam's language skills are developing. They do not interpret such feedback and suggestions as criticism but more as a way of supporting them in their task of taking care of Adam.

There are only a few things that they are not entirely happy about. They would have preferred some stricter rules, for instance, an absolute prohibition against eating sand. They have witnessed children eating sand outdoors, and it worries them that it has not been stopped more effectively. Yet they are not really worried or upset. To them, the childcare centre is a place for Adam to be one of the kids, and their relational expectations seem to pertain to establishing a relationship between their child and the caregiver, that is gradually transformed from positing the caregiver as a stranger to a friendly acquaintance. Adam is doing fine, and his parents do not expect these persons to have the same emotional relationship to Adam as they have themselves.

77.8.1 II: Support and Relief: Sharing of Care Between Professional Caregivers and Parents of Children with Special Needs

The next case of sharing is between professional caregivers at childcare centres and parents of children with special needs, and our strategic choice has been parents living with children suffering from asthma. Parents in this group are considered to be fully competent, but they need some relief from their care work, and childcare is meant to support and strengthen their parenting. Asthma is a disease that accentuates the *cyclical* and *individualised* character of care work. It has a fluctuating course and is worst during the night, which implies a chronic lack of sleep for the children as well as for the parents. What happens at one point of the day travels to

other parts of the day, and good sleeping routines are extremely important in order to keep the asthma symptoms in check. The individual mechanisms and appearance of asthma makes it crucial to know how the disease affects the particular child and calls for continuous observation and follow-up.

The sample of the asthma study (Reve 2008), which is a substudy of the main project, consists of six families with a child between 11 months and 3 years with a diagnosis of moderate to serious asthma. All of the children attended day care, except the youngest one who had not started yet, but her parents had childcare experience from an older child who also suffered from asthma. According to the parents, the medical specialists had encouraged them to use childcare and from an early age. The medical doctors know very well that being parents of children with asthma is hard work, 24 h a day, and they need support and relief. Therefore, they recommend childcare, in spite of possible risks from the physical environment and infectious diseases. The parents in all the six families had experienced how difficult it was to engage participants in their network to mind the child. Relatives and friends hesitated to offer their assistance because they were afraid of possible asthma attacks while they were in charge. With this as the background, day care appeared to serve as an important relief. This is especially true for the mothers, who had the main responsibility in most of the families. This was the case in Nora's family, and Nora's mother had reduced her working hours outside the family because of the extended task of taking care of their child. What needs to happen for parents like Nora's to experience sharing as a means of support and relief, and how do these parents proceed in making the arrangement of shared care meet their quality standards of care for their vulnerable child?

77.9 Matching the Needs of the Child with the Capacity of the Caretakers

Parents of all types of children are concerned about the quality of care when they leave their child with another caregiver, but there is even more at stake with vulnerable children, like children with asthma, who may be seriously ill if they do not receive follow-up according to their condition. Like all of the children in the asthma sample, Nora needs the correct type and exact quantity of medication, for use as a preventive measure as well as treatment during asthma attacks. When she was enrolled in day care, her mother could not take for granted that the caregivers had the relevant competence to care for her properly and therefore took on the responsibility to furnish them with a minimum of necessary knowledge, based on the kind of knowledge that she herself had acquired during the period that she had spent close to her child.

At the point of the interview, Nora's parents are happy about the quality of the childcare. However, they had had some bad experiences from the first childcare

centre Nora attended because the care providers did not realise how serious Nora's asthma really was. Her mother illustrates with an example:

> *One day they had taken all the children to a farm, without bringing the inhaler. It was too clumsy to carry, they told me afterwards. I was really shocked.*

She was even more shocked by their further explanation. They had been up to the same farm earlier, with another child suffering from asthma, and on that occasion it had not been necessary to bring the inhaler. So why bother this time?

> *That is exactly what I have tried to emphasise; that children with asthma are different, and what worked for the former child with asthma would not necessarily work for Nora.*

In the eyes of Nora's mother, this lack of individual adaptation revealed their ignorance about asthma. After another similar episode, Nora's parents hardly made use of the centre, and as soon as they were offered a place at another child care centre, they moved Nora there. In contrast to families like Adam's, it was impossible for them to just wait and give it another chance.

At the next child care center, they were met by nice and open minded people who had a totally different attitude. What really made the difference for the parents was the caregivers' willingness to join Nora's parents at a one day workshop at the regional centre for children with asthma. The knowledge gained from the workshop was communicated to the rest of the staff, and soon everybody knew how to administer the medicine, which was an effort that Nora's parents really appreciated. The preschool teacher on her end speaks about how they struggled in the beginning to recognise and interpret Nora's signs. They had no experience with asthma, and were anxious about the possibility that they would not recognise it when an asthma attack was in progress. Getting to know Nora took some time, according to the preschool teacher, and she reflected upon the new demands on them as day care workers. More observation and more discussion among those working at the day care centre and a much closer cooperation with the parents was absolutely essential. They had to phone Nora's mother, to call upon her expertise in interpreting Nora's signs with questions like 'Does this mean that Nora is tired? Perhaps she didn't sleep well last night? Does she need more medicine?' By paying close attention, and broadening the scope by including Nora's family hours, they gradually increased their skills in interpreting what might possibly be signs of an attack in progress and finding more effective ways of preventing such attacks.

77.10 Negotiating Relationships and the Focus of Attention

Even though day care represents an important means of relief for families with children suffering from asthma, there is no doubt that the parents remain the primary responsible caregivers. Still, to a greater degree than the parents of Adam and other non-sufferers, these parents try to gently push the relationship in a direction where

they assist each other in interpreting the signs of specific situations. To a greater extent than what was the case with Adam, it is crucially important not to lose sight of the big picture, all 24 h of the day, as the shared focus. Sleep may serve as an example. At Nora's childcare centre, they were flexible with the sleeping regime and adjusted the routines to Nora's fluctuating needs, as related by her parents in the morning. According to the other families that had children with asthma, this was not always the case. Sleep was a potential field of tension between the parents and care providers, because of the different areas of focus. Parents were generally concerned about their child's health conditions and wanted any health-related information pertaining to their child's stay at the childcare centre. They feel responsible for keeping the asthma as mild as possible, in order to both prevent the child's suffering and to facilitate sleep for everybody in the coming night. The childcare personnel directed their attention towards the educational programme, with elements like language development and self-confidence building, based on their views on what the child needs and what the child may get from them. The less insight they had into sleepless nights in the family, the more tension sprung up between parents and childcare personnel. In Nora's case, however, the parents and the day care workers gradually assisted each other in interpreting signs of care and reached a level where both parts understood particular episodes within the framework of daily routines and Nora's individuality. A continuous exchange of specific and contextualised information was crucial, and Nora's parents have gradually experienced the childcare centre as a supportive and cooperating partner.

77.10.1 III: Towards Joint Responsibility: Sharing of Care Between Parents

Our strategic choice when it comes to shedding light on the tendency towards increased sharing between mothers and fathers has been same-gendered couples (both females) living with small children. Even though the partners belong to the same gender category, there are biological differences related to reproduction; only one of them has given birth to the child and is capable of breastfeeding the child. What makes them useful for our purpose here is that, according to a number of studies, same-gendered parents share more than other couples (Patterson et al. 2004; Doucet and Dunne 2000) and elucidate what intensive parental sharing may look like. The sample of the study (Finsæther 2009) consists of six same-gendered couples, all female, with a child below 3 years of age. Our question is how do the parents in these same-gendered families proceed when they develop their parenthood and share the care for a young child, and how do they handle the differences as they proceed? These parents, like all the other parents interviewed, share care with a childcare centre, but this aspect is not a main issue in analysing their sharing.

77.11 Constructing Two Equal Caregivers and a Balanced Relationship

When conducting the individual interviews with the biological mother and her co-mother, the immediate impression was that both parents gave rich and detailed descriptions of their everyday life, and descriptions, reflections and evaluative statements that were very similar. This impression was supported and deepened when analysing the interviews in a systematic way: the task of taking care of the child was central in their everyday life, and it was presented as a shared project to create an equal, balanced parenthood. This was achieved by reducing the meaning of biological differences and at the same time establishing co-mother as a mother who is equal to the birth-mother.

An aspect of biology that has to be handled in both same-gendered and opposite-gendered couples is breastfeeding. Breastfeeding is highly valued in Norway (Ellingsæter 2010), and in opposite-gendered families, the mothers' capacity to breastfeed is often used as an explanation for why the mother's share of the parental leave is so much greater than the father's – and even greater than the couple's expressed ideal of gender equality (Ellingsæter 2010). When breastfeeding was practised in the same-gendered families, there was a mutual awareness to not interpret it as a capacity that reduces the co-mother to a second-best parent. Furthermore, breastfeeding during the night should not automatically be connected to other child-related nightly tasks, which was often the practice of opposite-gendered couples in the main study (Meling 2007). And on the symbolic level, they insisted on a mother name for both, as a signal to the world that this child really has two mothers. A typical solution was 'mum' for the biological mother and 'mother' for the co-mother.

In Gro's family, like in most of the same-gendered families, only the biological mother was entitled to paid parental leave. None of the benefit could be taken by the co-mother, and accordingly, the couple did not receive the same economic incentive to share as other parents at that time.[1] Nevertheless, the co-mother decided to reduce her working hours in order to stay at home with her partner and infant 1 day a week, with no economic compensation. In order to actively take part from the very beginning of Gro's life, she paid the parental leave out of her own pocket. She was also very active on the weekends and before and after work and very supportive towards her partner during this initial period. She took care of the infant, and she cooked, and thereby made it possible for her partner to get some sleep during the daytime. The biological mother described how happy she was about the arrangement and emphasised her pleasure when observing the close relationship that was developing between Gro and her co-mother, thanks to these practices.

Gradually, both mothers returned to their work outside the home, and Gro was enrolled in childcare. In the interview Gro's childcare teacher describes the two mothers as the most perfect parents: 'There is never a shortage of diapers or clean

[1] The children in this sample were born before same-gendered and opposite-gendered couples were equalised by Norwegian law (Ministry of Children and Equality 2009).

clothes for changing, they are never rushing during drop-off and at pick-up-time, always paying attention to what is going on at the childcare centre'. It strengthens the impression that they were both accountable for Gro's well-being on a continuous basis, by knowing the details and keeping an overview of Gro's everyday life, including her activities outside the home.

When the two mothers speak about the life they have set up for themselves and Gro, they underline the importance of conducting a predictable everyday life with routines that bring about a sense of security for their child. When they evaluate their way of sharing, they look first and foremost at their child: they observe that she is doing fine. Both mothers are confident with all of the different tasks related to Gro, and they especially point towards the emotional engagement, that is, the fact that the child is emotionally attached to both parents.

Even practical tasks in the home are shared, and both have all the necessary skills to run a household. What is more, they talk about sharing with joy. When the biological mother is asked whether she feels that she has succeeded in anything, her answer is about sharing:

> *I think that me and my co-mother, we make it work, together. I am so happy that we – I experience that we both take part in this project, and that we do it together. I can see that Gro learns a lot from co-mother and experiences a lot with her, and she talks a lot about things they have done together. We have a good time when we tell each other about things Gro has said or done – when we share the experience.*

According to their logic, the parental task does not 'steal time' from the romantic love between them. Caring for the child is highly valued, and they describe it as a way of expressing their love not only for the child but also for each other as partners. They both have the total care arrangement, including each other, in their minds.

77.12 Discussion and Conclusion

The presented analyses of caregivers who shared the care of a particular child have demonstrated how each one of them was able to develop mutual familiarity to the participants in the set of events that they participated in. Such events were repeated over and over again and thereby constituted a set of routines within the framework of an everyday life. And everyday routines do more than to create stability and reciprocal expectations for what is about to happen; they even enable the caregiver to tend to and interpret the child's state of mind.

Most of the caregivers carried a cultural awareness of what might be the contested issues in particular arrangements for shared care for the youngest children. They had however moved the question from *whether* a particular arrangement for sharing was appropriate to *how* they could adjust to the circumstances and create viable arrangements with the child's well-being and development in mind. Our assumption proved to be correct: an analytical strategy based on sensitivity for contested cultural issues in the repeated analysis of actual events, as such events were

represented in the minds of the caregivers, could direct us to the ways these caregivers personalise 'their' child. Each caregiver was able to connect to the child in the here and now and at the same time to build up and adjust their representation of him or her as a continuous being with a past and a future. We learned from the practitioners how they proceeded to accomplish this, and also how they assessed their own experiences.

In each family, at least one of the parents assumed an overarching responsibility for the organisation of care for their child, but in each case, they valued and assessed the engagement from the other parent who was involved on a regular basis. We conceptualised the ideation of sharing the care to appear in *chains of care*, with all the links carefully sequenced and with parents having and taking overall responsibility for the entire chain. Conceptualising shared care as links in a chain will also point to the cyclical character of care work. When parents talked about the needs of their small children, such needs emerged and became evident in the specific sense as reoccurring in a cyclical pattern. Any caregiver needs a number of ways to get acquainted with the cyclical regulation of their child in order to interpret their expressions at any particular moment in time. That is why *creating and following routines of everyday life* is so important for caregivers in the family as well as for those at the childcare centre. The caregivers got to know 'their' child, and in turn the child got to know his/her caregivers through the psychological qualities of these routines and the affects they evoked in each of them. The parents did not claim that exactly the same routines had to be followed, but rather they would make a request for certain routines that would be recognisable to the child and thereby ensure that the child could be included as an active participant. And the little child was actually taken as a partner in bringing personal experiences from one setting to another, all according to the individual child's capability and motivation.

The records from the caregivers were stacked with notions about how the child was doing and about 'growing older'. They targeted some events for interacting with 'their' child that could assure them that the child was doing all right but also events that pointed to ongoing changes and possible sources of discomfort. Comparison of such targeted events across different caregivers of the same child demonstrated that the caregivers did not necessarily have exactly the same sensitivities or the same responsibilities. They did not necessarily treat the child in exactly the same way, but they coordinated their efforts in order to make the child feel safe in both settings. Therefore, the exchanges between childcare providers and parents were not just a way to bring factual information about what had happened from one caregiver to another but also a kind of chat that could ensure that both parties had an individualised person on their mind.

The interviews with parents and professionals as practitioners demonstrated to us how the interactional patterns that were firmly established between child and caregiver also allowed for the mutual awareness of changes and further joint elaboration. Simply because caregiver and child would know each other so well from sharing a set of routines, they might at any moment notice whatever small divergences and digressions from such routines. By doing so, the child's engagements in routines of everyday lives allow caregivers to adapt to them as well as directing and

supporting them, enabling the caregivers to set up scaffolds in some correspondence with the personal and cultural meaning of 'growing older' (Aukrust 1992; Andenæs 2012).

All of the caregivers that we have presented here carried in their minds images of the total care arrangement that was designed for their particular child. They got to know each other in this particular capacity to relate to and take care of the child and also in learning to identify *the capacities of the other* caregivers. Thus, for each caregiver, shared care is about being recognised and valued, not only by the child but by the other caregivers as well.

It may be argued that the contested issues related to shared care are indications that the norms and standards for care in children's early years are increasing rather than being lowered and ignored and that the scope of how to care has been widened. The norm that caring for the smallest one should preferably be organised as one-one-person care has been challenged. Setting up care arrangements with more than one continuously engaged participant is a process of adaptation, not a sudden abdication from parental responsibility. Further, the cases have demonstrated the ways in which the caregivers coordinate their efforts and distribute responsibilities among them. The child is neither constructed as a baton in a relay race, delivered from one caregiver to the next, nor as a task that is easily split into pieces, one for each caregiver. What the caregivers do, according to these empirical studies, is to establish a number of ways to keep the child's state of mind in their own mind. This again enables them to direct their awareness towards how their own involvement and that of others fits in contributing to the subjectification and development of this particular little person. Thus, taking practitioners' experiences seriously may bring norms for tender care to a wider set of people and social arenas and accordingly transform such norms into procedures for recognising viable practices.

References

Ahnert, L., Rickert, H., & Lamb, M. E. (2000). Shared caregiving: Comparison between home and child care. *Developmental Psychology, 36*, 339–351.

Andenæs, A. (2005). Neutral claims – gendered meanings. Parenthood and developmental psychology in a modern welfare state. *Feminism & Psychology, 15*(2), 209–226.

Andenæs, A. (2011). Chains of care. Organizing the everyday life of young children attending day care. *Nordic Psychology, 63*(2), 49–67.

Andenæs, A. (2012). The task of taking care of children: Methodological perspectives and empirical implications. *Child & Family Social Work.* doi:10.1111/j.1365-2206.2012.00897.

Aukrust, V.G. (1992). *Fortellinger fra stellebordet. To-åringer i barnehage: En studie av språkbruk – innhold og struktur* [Tales from the changing table. Toddlers at child care: A study of use of language – content and structure]. Doctoral thesis in education, University of Oslo.

Aukrust, V. G. (2002). "What did you do on school today?" Speech genres and tellability in multipart family mealtime conversations in two cultures. In S. Blum-Kulka & C. Snow (Eds.), *Talking to adults: The contribution of multiparty discourse to language acquisition* (pp. 55–84). Mahwah: Lawrence Erlbaum.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.

Brandth, B., & Kvande, E. (2011). Norway: The making of the father's quota. In S. Kamerman & P. Moss (Eds.), *The politics of parental leave policies: Children, parenting, gender and the labour market*. Oxford: Oxford University Press.

Bronfenbrenner, U. (1979). *The ecology of human development. Experiments by nature and design*. Cambridge: Harvard University Press.

Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.

Chuang, S. S., & Gielden, U. P. (2009). Understanding immigrant families from around the world: Introduction to the special issue. *Journal of Family Psychology, 23*, 275–278.

Doucet, A., & Dunne, G. A. (2000). Heterosexual and lesbian mothers challenging 'feminine' and 'male' conceptions of mothering. In A. O'Reilly & S. Abbey (Eds.), *Mothers and daughters: Connections, empowerment and transformation* (pp. 103–120). Lanham: Rowman and Littlefield.

Ellingsæter, A. L. (2006). The Norwegian childcare regime and its paradoxes. In A. L. Ellingsæter & A. Leira (Eds.), *Polticising parenthood in Scandinavia. Gender relations in welfare states* (pp. 121–145). Bristol: Policy Press.

Ellingsæter, A. L. (2009). Leave policy in the Nordic welfare states: A 'recipe' for high employment/high fertility? *Community, Work and Family, 12*(1), 1–19.

Ellingsæter, A. L. (2010). Feminist policies and feminist conflicts: Daddy's care or mother's milk? In J. Scott, R. Crompton, & C. Lyonette (Eds.), *Gender inequalities in the 21st century* (pp. 257–274). Cheltenham: Edward Elgar Publishing.

Ellingsæter, A. L. (2012). Ideational struggles over symmetrical parenthood: The Norwegian daddy quota. *International Social Policy, 41*(4), 695–714.

Ellingsæter, A. L. (2014). Towards universal quality early childhood education and care: The Norwegian model. In L. Gambaro, K. Stewart, & J. Waldfogel (Eds.), *An equal start? Providing quality early education and care for disadvantaged children*. Bristol: Policy Press.

Ellingsæter, A. L., & Gulbrandsen, L. (2007). Closing the childcare gap: The interaction of childcare provision and mothers' agency in Norway. *International Social Policy, 36*(4), 649–669.

Finsæther, K. (2009). *"Vi prøver så godt vi kan, å dele på det ..." en kvalitativ tilnærming til et ganske hverdagslig dagligliv, i familier med likekjønnede foreldre* ['We do our best, to share…' a qualitative approach to an ordinary everyday life, in same-gendered families]. Master thesis in psychology, University of Oslo.

Gullestad, M. (1979). Passepiken. Om store barns omsorg for og tilsyn med mindre barn i en by i dag [The childminder. Older children taking care of younger children in a city today]. *Tidsskrift for samfunnsforskning, 20*, 523–545.

Haavind, H. (1987). *Liten og stor: Mødres omsorg og barns utviklingsmuligheter* [The little one and the big one: Mother's care and children's development]. Oslo: Universitetsforlaget.

Haavind, H. (2006). Midt i tredje akt? Fedres deltakelse i det omsorgsfulle foreldreskap [In the middle of the third act? Fathers' participation in the caring parenthood]. *Tidsskrift for Norsk Psykologforening, 43*(7), 683–693.

Haavind, H. (2011). Loving and caring for small children: Contested issues for everyday practices. *Nordic Psychology, 63*(2), 24–48.

Højholt, C. (2001) *Samarbejde om børns udvikling. Deltagere i social praksis* [Cooperation on children's development. Participants in social practice]. København: Nordisk Forlag.

Kousholt, D. (2008). The everyday life of children across early childhood institution and the family. *Australian Research in Early Childhood Education, 15*(1), 13–25.

Meling, A. (2007). *Foreldres fordeling av omsorgsarbeid i barnets første leveår. En analyse av sammenhengene mellom diskurs, omsorgsarrangement og kompetanseutvikling* [Parents' sharing of care work during the first year of the child. An analysis of connections between discourse, care arrangement and development of competence]. Master thesis in sociology, University of Oslo.

Ministry of children and equality. (2009, January 1). *Felles ekteskapslov* [A marriage act for all]. http://www.regjeringen.no/en/dep/bld/topics/equality-and-discrimination/homosexuality/a-marriage-act-for-all--entering-into-fo.html?id=509376 (Downloaded April 8, 2014).
Østrem, S. et al. (2009). *Alle teller mer, en evaluering av hvordan "rammeplan for barnehagens innhold og oppgaver" blir innført, brukt og erfart* [Everybody counting more, an evaluation of how the 'Framework plan for the content and tasks of kindergartens' is implemented, used and experienced] (Report No. 1). Tønsberg: Vestfold University College.
Patterson, C., Sutfin, E. L., & Fulcher, M. (2004). Division of labor among lesbian and heterosexual parenting couples: Correlates of specialized versus shared patterns. *Journal of Adult Development, 11*(3), 179–189.
Reve, E. M. L. (2008). *Med astma døgnet rundt. Omsorgskarriere og dagligliv i familier med småbarn med astma* [Living with asthma all day round. Care careers and everyday life in families med small children suffering from asthma]. Master thesis in psychology, University of Oslo.
Rogoff, B. (2003). *The cultural nature of human development*. Oxford: Oxford University Press.
Sæther, J. P. (2010). *Barn i barnehage. Foreldrebakgrunn og utvikling de seneste årene [Children attending day care. Parents' background and development the recent years]*. Oslo: Statistics Norway.
Singer, E. (1993). Shared care for children. *Theory & Psychology, 3*(4), 429–449.
Skjørten, K., Barlindhaug, R., & Liden, H. (2007). *Delt bosted for barn* [Shared physical custody for children]. Oslo: Gyldendal Akademisk.
Statistics Norway. (2012). *9 av 10 barn i barnehage* [9 out of 10 children attend child care]. Oslo: Statistics Norway.
Thorne, B. (2000). Pick-up time at Oakdale Elementary school: Work and family from the vantage point of children. In R. Hertz & N. Marshall (Eds.), *Work and family* (pp. 354–376). Berkeley: University of California Press.
Valsiner, J. (2006). The development of the concept of development: Historical and epistemological perspective. In W. Damon & R. M. Lerner (Eds.), *Theoretical models of human development. Volume I of handbook of child psychology* (6th ed., pp. 166–209). Hoboken: Wiley.

Chapter 78
Children, Families, and Communities in Brazil: A Cultural-Ecological Approach to Child-Rearing Values and Practices

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Abstract In this chapter we argue that variations in parents' child-rearing values, beliefs, and practices cannot be understood by viewing cultures as simply fitting somewhere along an "independent vs. interdependent" or "individualistic vs. collectivist" continuum. Instead it makes more sense to consider cultures as differing along two orthogonal dimensions (autonomy–conformity and relatedness–separation). Cultural-ecological theory requires attending to the everyday activities and interactions in which people engage, and how those activities and interactions are influenced (a) by the cultural group in which people live, (b) by the historical time in which they are growing up, and (c) by individuals' own personal characteristics. We use this theory to make sense of families and children in different communities in Brazil. Specifically, we show that within-society cultural differences of region, education, and income in Brazil are clearly reflected in parents' child-rearing values and beliefs and how those values and beliefs have changed over historical time. Most important, however, and as the theory predicts, these variations in values and beliefs have a strong influence on the activities and interactions in which parents engage with their children.

Keywords Brazil • Child-rearing values, beliefs, and practices • Cultural-ecological theory • Cultural context • Temporal changes • Within-society heterogeneity • Parent–child interaction • Autonomy-relatedness

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In the early 1990s two papers were published in the United States bemoaning the fact that the large majority of published research was being conducted with middle-class participants from European American backgrounds (Graham 1992; Hagen and Conley 1994). Children of different racial/ethnic groups from within the United States were rarely the focus of attention. Children's development in the rest of the world was even less studied. Despite what might have been seen as a wake-up call for researchers, the situation is no different today. A recent study of one issue of a leading North American journal of developmental psychology revealed that 95% of the citations were to works published in North America or the United Kingdom (Tudge and Freitas 2012a). Tomlinson and Swartz (2003) examined the content of 12 journals (most published in the United States) dealing with infancy and childhood over a 6-year period (1996–2001) and reported that 94% of the articles dealing with infancy had North American or European authors and, not surprisingly as a result, that only 5% of the populations studied were from outside of North America, Europe, and Australasia. Arnett (2008) made precisely the same point after having studied the authors and participants included in six of the journals published by the American Psychological Association. This is the case despite the fact that 90% of the world's infants are born in what Kağıtçıbaşı (2007) has termed the "majority" world, and the conditions of life in parts of the majority world are entirely unlike those of the predominantly white and well-educated world. It is thus not surprising that Henrich et al. (2010) noted major findings in psychology are based on samples that are drawn almost exclusively from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies. It is even more troubling when one realizes that citations within psychology journals published in other parts of the world widely cite North American studies (Tudge and Freitas 2012a) as though they are relevant to conditions in their own societies.

It is thus important that handbooks such as this and that of Fleer et al. (2009) focus their attention on children's development in different parts of the world. In this chapter our focus is on families in Brazil and specifically the child-rearing values and practices of Brazilian parents and others who are responsible for raising children. Rebhun (2005) wrote: "Until the 1970s most historians of the family in Brazil…characterized the Brazilian family as universally patriarchal" (p. 333), associated with large extended families and a view that women's roles were primarily in the house and raising children, while men provided for the family (and also had considerable freedom outside the home). As Rebhun discovered in her interviews with families in rural areas of the northeast, the patriarchal family was still widespread in the 1990s. As she recognized, however, Brazil is a huge country with enormous diversity. Its size (approximately 18.5 million square kilometers) is almost the same as that of the United States, and the two countries are similar, too, in the fact that the largest proportion of their inhabitants can trace their roots to Europe but with significant numbers of people who are descended from slaves brought from Africa, along with more recent immigrants from other parts of South America and Asia (Freitas et al. 2008; Piccinini et al. 2013; Seidl-de-Moura et al. in press).

In terms of the overall Human Development Index (HDI: a composite of longevity, education, and health), Brazil is currently ranked as 85th of a total of 187 countries, with an HDI of 0.73. However, once inequality-related HDI (IHDI) is taken into account, this drops to 0.53 (UNDP 2013). Brazil's HDI has been rising, however, and inequality has been reduced during the twenty-first century, largely due to the improved economic situation as well as the far greater attention paid to social programs for the poor, of which the "bolsa família" (which provides additional income to poor families while they continue to keep their children in school) is the best known example (Soares 2012). According to World Bank data, Brazil's GINI index (which ranges from 0 to 100, with 0 representing perfect equality and 100 perfect inequality of incomes) dropped from 60.1 in 2001 to 51.5 in 2014 (World Bank 2016). Although there was an overall drop in the GINI index in Latin America during the same period (from 53 to 50, according to The Economist 2012), the change was greater than average in Brazil. Of course, the recent political and economic crises, starting in 2014, may well reverse what had appeared a highly positive trend.

Overall HDI or GINI data for Brazil fail to take into account of the great variability across the country as a whole. For example, Piccinini and his colleagues (2013) cite data showing that individual cities across the country have HDI scores ranging from 0.47 to 0.92 (the equivalent of the difference between Tanzania and Norway). Brazil has five distinct regions, each with its own ecological characteristics, different patterns of immigration, degrees of wealth and inequality, and even accents (Piccinini et al. 2013; Rebhun 2005; Seidl-de-Moura et al. in press). Within each region, there are urban and rural differences and social class variations (wide differences of family wealth, land, power, education, and type of occupation). Despite the fact that all families in Brazil share a language and have experienced the same history (although often from different points of view), parents' values and beliefs about how best to raise their children vary by these ecological and sociocultural factors.

A useful theoretical framework within which to examine Brazilian families, parents' values and beliefs, and the ways in which parent–child interactions take place is cultural-ecological theory (Tudge 2008; Tudge and Freitas 2012b). Drawing on other systemic, ecological, and sociocultural theories, Tudge argued that there are four interrelated aspects that need to be considered in order to understand human development: (a) cultural context, (b) changes in that cultural context over time, (c) individual variability among the interacting partners, and (d) the types of everyday activities and interactions in which people typically engage. The latter are central to understanding development and of course vary along with changes in the other three. Although each of these factors is synergistically linked with each other, for ease of presentation, we will discuss each of them separately in terms of their relations with child-rearing values and/or practices.

78.1 Cultural Context and Child-Rearing Values

Before examining possible cultural variability within Brazil, it would be helpful to consider more broadly some of the possible links between culture and the ways in which parents try to raise their children. The term "culture" has been defined in many different ways. Here we will treat a cultural group as:

> A group of people who share a set of values, beliefs, and practices; who have access to the same institutions, resources, and technologies; who have a sense of identity of themselves as constituting a group; and who attempt to communicate those values, beliefs, and practices to the following generation. (Tudge 2008, pp. 3–4)

This definition does not specify the nature of the group; it can refer to an entire society or to groups within any given society, regardless of whether the groups are constituted regionally, ethnically, or in terms of their social class membership.

Currently there are two main ways in which the relation between culture and child-rearing values, beliefs, and practices has been conceptualized. The first, more traditional, approach is to treat cultures as varying along a single dimension or continuum; the second, more recent, approach is to place cultural groups within and across societies in one of four quadrants delineated by two orthogonal (independent) dimensions. In addition to these two main approaches there is a third, less commonly cited, approach, in which child-rearing values are linked to parents' social class (specifically their past educational and current occupational experiences), treating social class as a cultural category. We will consider each of these in turn.

The first conceptualization refers to the two ends of the continuum either as individualism and collectivism (e.g., Hofstede 2001; Triandis 1995) or as independence and interdependence (Markus and Kitayama 1991). Scholars using this unidimensional framework describe two basic cultural models relevant to the ways in which parents think about raising their children. One of these models (individualism or independence) is usually described as encapsulating the United States and, by implication, other majority-white and industrialized societies. The other model (collectivism or interdependence) is said to capture better Asian societies and non-industrialized traditional societies.

These two models may themselves differ along two or more dimensions (Triandis 2001) or consist of sub-models (Schwartz 2012), and all of these scholars would agree that no society is made up entirely of individuals who are either individualistic or collectivistic. Nonetheless, distinguishing societies according to their placement on a single dimension has proved a popular approach (see, e.g., Hofstede 2001; Hofstede et al. 2010). As the names suggest, parents living in societies that foster independence or individualism raise their children to become relatively autonomous, self-directing, and not well connected to groups outside the immediate family. By contrast, parents living in societies that encourage collectivism or interdependence encourage relations between their children and others in the wider society and are less interested in having their children be self-directing. In the

often-quoted saying attributed to the Japanese, the nail that sticks up above the rest will be hammered down.

The more recent position is that taken by Kağıtçıbaşı (2007, 2012) and Keller and her colleagues (e.g., Keller 2012; Keller and Kärtner 2013). Kağıtçıbaşı proposed that there are two orthogonal dimensions, one having to do with agency and the other with interpersonal distance. Along the vertical axis, it is possible to think of parents encouraging their children to be relatively autonomous or relatively heteronomous (or obedient to their parents and others). Along the horizontal axis, parents can encourage their children to be separated from others or more related to others. "Autonomy and relatedness are not end points of a continuum, as is often assumed. Such an assumption reflects an individualistic bias that claims that connectedness with others threatens autonomy or that related individuals lack autonomy" (Kağıtçıbaşı 2012, p. 6).

In this conceptualization four types of families can be identified, fitting within the four quadrants created by the two orthogonal dimensions. One type consists of families that encourage a close connection with the group and require the young to obey their elders and follow the traditions of the group (heteronomous-related). A second type consists of families that are very interested in fostering close connections between children and the broader community and its traditions but who also want their children to exercise some degree of autonomy, especially in the areas of education and occupation (autonomous-related). A third type consists of families that encourage their children to be both autonomous and not closely related to the wider community or to its traditions (autonomous-separate). The fourth type, which Kağitçibaşi considered to be relatively uncommon, consists of families that raise their children to follow the rules that others (particularly parents) lay down but not to be closely connected to the wider community (heteronomous-separate).

According to Kağıtçıbaşı, families with little or no education living in rural parts of what Kağıtçıbaşı has termed the "majority world" raise their children to be both connected with the group and to fit in with what parents, the elders of the group, and tradition requires (heteronomous-related). However, noting the move over time into cities in many parts of the majority world, and far greater educational possibilities, Kağıtçıbaşı (2007) and Kağıtçıbaşı and Ataca (2005) argued that educated and urban parents in the majority world are likely to still want to raise their children to feel connected to the group but also make their own decisions about their future, particularly with reference to their education and occupation (autonomous-related). By contrast, middle-class parents in societies in the industrialized world (the United States often used as the clearest example) encourage their children to be both autonomous and separate.

Keller (2012) and Keller and Kärtner (2013) expanded on Kağıtçıbaşı's ideas, introducing the idea of different types of autonomy. Keller thus notes that whereas middle-class families in countries like the United States encourage "psychological autonomy" in their children, traditional and rural families in the majority world encourage "action autonomy" in theirs. In other words, although North American and European families encourage their children to think and plan for themselves, wherever possible, rural parents with little or no education provide their children

with plenty of opportunities to walk early, to engage in simple tasks (running errands, etc.), and to care for younger siblings or look after the cattle (for examples from rural Kenya, see Tudge 2008; Wenger 1989; Whiting and Edwards 1988). Very much like Kağıtçıbaşı, however, Keller sees there being two "prototypical" socialization strategies (one for autonomy and one for relatedness) and one "hybrid" strategy (corresponding to the autonomous-related type).

The third position that we can delineate is that of Kohn (e.g., Kohn 1977, 1979, 1995) Although Kohn's focus is on the links between social class and parental child-rearing values, social class clearly fits as a category of culture, given the definition with which we are working. Kohn's position also fits well within the overall cultural-ecological theory laid out earlier in this chapter, in that it assumes that the everyday activities in which people typically engage, alone or with others (cultural practices, in other words), are central to the ways in which culture both influences individuals' development and is influenced by it. Specifically, Kohn argues that parents' child-rearing values, particularly about autonomy or self-direction and conformity or obedience, are related to their own past educational and current workplace experiences. His starting position is that parents all want success, in some form or other, for their children; they differ, however, in what they think will lead to success.

Some parents' formal education ended while they were still relatively young. In this case, their educational experiences were such that their models for success consisted of classmates who did what their teachers wanted and responded to questions with the same information that the teachers or the texts had provided. Limited education typically leads to jobs in which workers are rarely required, or rewarded, for thinking for themselves but instead need to follow rules that others have established and diligently perform what has been required. The work itself may well be difficult (particularly physically difficult) but often is repetitious, involving little complexity. Assuming that parents want their children to be successful, parents with this type of educational background and current workplace experiences are likely, Kohn argued, to see their children's eventual success in terms of learning to follow rules and doing well and carefully what they have been asked to do.

By contrast, other parents' educational experiences were perhaps similar during their adolescent years, but, because they went on to higher education, a part of those experiences involved seeing success not simply in terms of following the rules but thinking for oneself and providing a reasoned argument for one's opinions. People with a college degree (or more) have the potential for taking jobs that require more than simply following someone else's rules. Such jobs often are more complex and involve thinking for oneself and making collaborative decisions with others. Not surprisingly, Kohn argued, parents with these types of educational backgrounds and occupational experiences view eventual success for their own children as requiring more in terms of autonomy and self-direction and less in terms of conformity to the demands of others.

Kohn's argument is not that working-class parents only want their children to conform or that middle-class parents are only interested in fostering autonomy in their children. All children need to learn when to conform to what parents and teachers want, and all children must develop some autonomy if they are not to be

dependent on others for their entire lives (Deci and Ryan 2000). Kohn's point is simply that middle-class parents are more likely to see the value of encouraging self-direction in their children to help them become successful in later life, whereas working-class parents are more likely to see the value of conformity.

Kohn and his colleagues have provided clear support for his ideas with research conducted in the United States, Italy, Japan, Poland, and Ukraine (Kohn et al. 1986, 2001). Data from other researchers, in both the United States and Russia, have also supported Kohn's arguments (Alwin 1989, 1995; Curtner-Smith et al. 1995; Luster et al. 1989; Spade 1991; Tudge et al. 2000). Until recently, however, no research that we know of conducted in Brazil has used Kohn's approach.

There are some obvious similarities between the perspectives of Kağıtçıbaşı and Keller on the one hand and Kohn on the other, in that both are interested in parents' encouragement for autonomy and/or conformity. Although Kağıtçıbaşı and Keller make the clearer claim for autonomy–relatedness, Kohn also points out that parents do not encourage only autonomy or only conformity as they interact with their children but act in part depending on the nature of the situation. The major differences are that Kağıtçıbaşı and Keller, from a cross-cultural perspective, are concerned with what happens, over time, when people who have lived in traditional and rural cultural groups move to cities and have greater access to education. Kohn, by contrast, deals with parents in the industrialized world and focuses not in the changes in living experiences coming from a move to city life but in the nature of individuals' past educational experiences and their current workplace experiences. Another major difference is that Kohn does not assume that parents in industrialized societies typically value autonomy and raise their children accordingly; his position is equally relevant for any society in which there is variation both of educational and occupational possibilities.

A final important difference is the type of samples these scholars have used in their studies. Keller's research has primarily been conducted in cultural groups that are "maximally dissimilar" (Hallpike 2004), comparing, for example, the Nso people from rural Cameroon and middle-class Germans; Kağıtçıbaşı has focused most of her attention on changes over time in a majority-world society (Turkey), showing how moving to a city and gaining education changes parents' child-rearing values; Kohn's work has been done in different parts of the industrialized world (e.g., United States, Italy, Japan), showing the more subtle differences in parents' values stemming from variations in their educational and occupational experiences. From our point of view, Kohn's work might be most helpful when trying to understand the heterogeneity of values, beliefs, and practices within and between societies.

Having laid out the three conceptualizations regarding links between culture and values (the unidimensional notion of individualism vs. collectivism, the view of orthogonal dimensions of agency and connectedness, derived from Kağıtçıbaşı and Keller, and Kohn's position related to social class), we will turn to the four primary aspects of Tudge's (2008) cultural-ecological theory to discuss child-rearing values and practices in Brazil. First we will discuss Brazilian cultural contexts and their influence first on child-rearing values and beliefs and then on child-rearing practices,

next the ways in which cultural values change over time, then the influence of individual characteristics (those of both parents and children), and finally the crucial role of everyday child-rearing activities and interactions.

78.2 Cultural Context and Child-Rearing Values, Beliefs, and Practices in Brazil

Child-rearing values and beliefs. To what extent is there support for either the position of Kağıtçıbaşı and Keller (they are so similar that they can be treated as one) or that of Kohn with regard to child-rearing values and beliefs in Brazil? Neither Kağıtçıbaşı nor Keller collected data in Brazil, but it is reasonable to assume that Brazil and Turkey (the society in which Kağıtçıbaşı conducted her research) are similar in terms of the development of autonomous-related socialization patterns. Both are considered part of the "majority world"; both have developed economically and now have large majorities of their populations living in urban areas (Brazil 85%; Turkey 72%) (World Bank 2013) and have similar proportions of their 25- to 64-year-old population with higher education (Brazil 11%; Turkey 15%) (OECD 2013). It will thus be useful to examine the extent to which Brazilian families living in cities in which there are more educational opportunities try to raise their children to be autonomous-related whereas parents in rural areas or smaller towns try to raise their children to be heteronomous-related.

One group of Brazilian scholars that has conducted a good deal of research in this area is that of Seidl-de-Moura and her colleagues, and some of their findings seem supportive of Kağıtçıbaşı's position. For example, Seidl-de-Moura et al. (2008) reported (based on data gathered from Brazilian state capital cities) that mothers had child-rearing goals related to the development of both autonomy and of relatedness, although the measures used to assess these concepts were derived from Harwood (1992) rather than from Kağıtçıbaşı. Three main patterns of results were found, which seems to provide evidence for regional differences in the respective values for autonomy and relatedness. Mothers from capital cities in the north, northeast, and west valued their children developing autonomy and relatedness equally. Mothers from capital cities in the south favored the development of relatedness to autonomy, and mothers from Rio de Janeiro (in the southeast) favored the development of autonomy to relatedness. In all cases, however, the mothers clearly valued both autonomy and relatedness. Seidl-de-Moura and her colleagues reported, however, that mothers from larger cities and with more education were more likely to have goals favoring autonomy; those from smaller cities and with less education were more likely to favor relatedness.

Similar findings were reported by Vieira et al. (2010b) regarding mothers' beliefs about child-rearing practices. There were some regional differences, with mothers in the north responding that they were more interested in their children's "proper presentation" (such as learning to say "hello" and "thank you" and not putting dirty

things in their mouth) and those in the south being less interested in this type of presentation and more interested in "stimulating" their children by talking or reading with them. Mothers with greater education were more likely to report stimulating their children, whereas those with less education were more likely to report encouraging proper presentation.

Data gathered by Vieira et al. (2010a) allow a somewhat better test of the Kağıtçıbaşı/Keller position as they included mothers from much smaller towns (with less than 24,000 inhabitants) as well as capital cities from six states. As Seidl-de-Moura et al. (2008) had reported, mothers in the smaller towns were more likely to favor the socialization of relatedness than they valued autonomy. Contrary to their hypotheses, however, and despite the fact that mothers in the capital cities had significantly more education than did those in the small towns, education level was not related to variations in the extent to which the mothers valued autonomy in their young. Another study by members of this group (Seidl-de-Moura et al. 2013), using mothers who had the full range of educational background (illiterate to completed college and above) from Rio de Janeiro (with 6 million inhabitants) and a small city (170,000 inhabitants) in the southern state of Santa Catarina, found no significant differences by city size or by the educational background of the parents. Mothers in both cities reported valuing both autonomy and relatedness.

In sum, despite the great regional diversity that exists in Brazil, Seidl-de-Moura and her colleagues provide no compelling evidence for regional differences in terms of mothers' socialization beliefs and practices, at least in terms of their encouragement of autonomy and relatedness in their children. Differences at the regional level appear to be fairly small variations in the relative weight given to autonomy and relatedness (Seidl-de-Moura et al. 2008). Regional differences, it would seem, are less relevant than is the size of the city: mothers from small towns from different regions of Brazil were more likely to value relatedness and engage in relatedness-relevant practices than those relevant to autonomy, but mothers from capital cities equally favored autonomy and relatedness (Vieira et al. 2010b). Even more interestingly, despite the mothers from capital cities having significantly more years of education than their counterparts from the small towns, educational level was not associated with greater likelihood of encouraging autonomy. In other words, this set of findings appears to provide some support for Kağıtçıbaşı's (2007, 2012) position—mothers from Brazilian cities show clear evidence of the autonomy-related pattern of socialization. However, the fact that education was not more clearly linked to variations in the degree to which autonomy was encouraged runs counter to Kağıtçıbaşı's ideas.

Is there more support for Kohn's position? That is harder to evaluate, as very little research has been conducted that aimed at providing an empirical test of his ideas. However, Tudge and his colleagues (2013) collected data from 23 parents from two groups that were clearly distinguished in terms of both their education and occupation, with the 13 middle-class parents having at least some college and (if they worked outside the home) a professional occupation and the 10 working-class parents having no college and (if they worked outside the home) a nonprofessional job. The children were 3 months old when data collection began and continued

when the children were 36 and 72 months. At each age, middle-class parents were significantly more likely to value autonomy and self-direction for their children than were working-class parents. The latter, by contrast, were significantly more likely to value conformity for their children.

In a related study, based on 68 parents (49 working class, 19 middle class) of 3-year-olds in Porto Alegre, middle-class parents who worked outside the home were significantly more likely than their working-class counterparts to describe their occupation as featuring complexity and allowing them to exercise autonomy in the workplace (Martins et al. 2015). As in the Tudge et al. (2013) study, the middle-class parents were significantly more likely than were those from the working class to value autonomy and self-direction in their children and significantly less likely to value conformity.

One can argue, therefore, that both positions have support in Brazil, at least for the view that to the extent to which education is linked to parents' class position, those with higher education are likely to value autonomy somewhat more than conformity or relatedness for their children, whereas those who have not spent any time in post-secondary (i.e., above 18) education are likely to value conformity in their children somewhat more than autonomy. The evidence is clear, however, that both conformity/relatedness and autonomy are valued. From Kohn's perspective, however, the same is true in even the most industrialized of societies. Valuing relatedness and autonomy is something that will be found in any and all groups, although a person's current and past experiences are likely to influence the relative weight given to them.

Cultural context and child-rearing practices. There are, of course, other ways in which to think about within-society cultural context that are not related to past educational or current occupational experiences and that relate to other aspects of prevailing ecological conditions. Brazilian research in this area has focused on child-rearing practices, however, rather than on values and beliefs. In the south of Brazil, it is possible to find small cities that were settled almost exclusively by immigrants from one or other European country and to this day consider their cultural roots to be important. Piccinini et al. (2013) cite an unpublished study in which data were gathered from mothers of Italian descent from one city and those of German descent from another. The mothers were presented with hypothetical situations in which a child behaved badly and the mothers were asked how they would react if their child behaved in that way. The mothers of Italian descent were significantly more likely than those of German descent to mention permissive strategies for dealing with everyday situations (the child refusing to eat, go to school, or go to bed). No differences, however, were found for the mothers' responses to moral situations (hitting, stealing, or damaging something at home).

Another important aspect of the prevailing ecology is the type of economic conditions in which a family lives. Unfortunately, none of the researchers who use either Kağıtçıbaşı's ideas or those of Kohn examine families living in poverty. Is there evidence that Brazilian poor families raise their children in different ways to those who are relatively better off? Direct comparisons are not usually possible, because Brazilian scholars studying the lives of poor families do not provide any

comparative data. However, a number of scholars have reported a clear division of labor in such families, with mothers being almost exclusively involved in domestic tasks and raising the children whereas the fathers' responsibility (not always taken) is to provide monetarily for the family.

It is interesting to contrast the prevailing patterns among low-income families with those found in families whose circumstances are far better. Wagner et al. (2005) studied 100 families in Porto Alegre, in which over half of both the mothers and the fathers had a complete college education or more, and found that most child-rearing tasks were shared, although the mothers did the bulk of the work with regard to cooking and school-related tasks. Cluster analysis with this sample revealed two clear groups of parents: one group of parents shared responsibility for school-related tasks, whereas another group said that this was the mother's responsibility. Unfortunately, Wagner and her colleagues did not specify whether the two groups varied in terms of their educational background, but it is possible that those with higher education were more likely to share responsibility than were those with less education, given the studies with low-income families described above.

78.3 Changes Over Time

These studies provide good evidence that within Brazil, there are indeed cultural differences, whether related to region, degree of urbanicity, social class, or poverty in parents' child-rearing values and practices. It would be a mistake, however, to reify culture, assuming that cultural groups are themselves not developing over time, just as the people within them are developing. Kağıtçıbaşı (2007) pays particular attention to the movement, over historical time, from rural to urban living. Even without such movement, however, one generation does not simply pass on to the next generation its values, beliefs, and practices (despite the fact that it often attempts to do that and to some extent succeeds, providing continuity to the culture). Moreover, the next generation never simply copies, but appropriates, what has been done or valued before. The process is one of "interpretive reproduction" (Corsaro 1992). Cultural-ecological theory, therefore, requires that one attends to the impact of historical time on changes in values, beliefs, and practices.

In the case of Brazil, it is quite clear that parents' values, beliefs, and practices have changed over the past three generations. The research conducted by Biasoli-Alves and her colleagues and students, summarized in Biasoli-Alves (1997), provides clear evidence of changes both in child-rearing values and beliefs and in the day-to-day activities and interactions of mothers and their children. She pointed out that parenting in the 1930s and 1940s was primarily focused on raising moral and polite children, with most attention paid to good behavior. In the 1950s and 1960s there was much more evidence of raising children with tenderness and stimulation in order to help children's overall development, and mothers talked about the importance of play and other leisure activities. In the 1970s and 1980s, mothers stressed the need for dialog with their children, mutual understanding, and the child's subjective well-being.

Biasoli-Alves (1997) noted that women who had been mothers of young children in the 1930s, 1940s, and 1950s talked as though their children were "blank slates" and believed that appropriate parental socialization was all that was needed in order to raise the types of children that were desired. Subsequently mothers were increasingly likely to talk in terms of the relationship between mother and child, with the mother taking account of her child's subjective experiences. It is not surprising, therefore, that mothers were more likely to talk about allowing their children freedoms, whereas older mothers were more likely to talk in terms of the restrictions it was necessary to provide.

Two of the studies that Biasoli-Alves (1997) summarized drew on data collected in the state of São Paulo, and so any differences in the mothers' comments cannot be attributed to regional differences. On the other hand, those mothers who had young children in the 1930s and 1940s were obviously more reliant on their memories than was the case for the women who had children more recently. It is also worth pointing out that the majority of the mothers who were interviewed about their child-rearing values and practices in the 1970s and 1980s were well educated (with at least some college), and so some of the differences attributed to changes over time may be in part due to differences in the mothers' educational experiences. Other experiences changed as well, with Brazilian mothers from the 1960s onward being more likely to work outside the home (Benicá and Gomes 1998). Their children's experiences, too, differed quite dramatically, with more young children spending time in a preschool environment from the 1960s onwards (see, e.g., Freitas et al. 2008, 2009). Socialization forces become increasingly wider, the more time young children spend in preschool, and the family's role may well lessen as a result.

More recent data, collected as part of the Porto Alegre Longitudinal Study (PALS: Piccinini et al. 1998), revealed greater cross-generation consistency of parenting practices when the parents in this study were asked how they were raising their 3-year-old children and how they themselves had been raised (Marin et al. 2013). However, the similarities in practices were only found when comparing, quantitatively, the types of practices (inductive, coercive, or noninterference) parents mentioned. Qualitative analyses revealed that although some parents were happy to continue the types of child-rearing methods their parents had used with them, others were quite clear about having consciously chosen different methods for their own children. These intergenerational changes, however, appear to be more the result of individual variation rather than changes over time in a cultural group's values.

78.4 Individual Factors

It seems clear, so far, that it is difficult, if not impossible, to describe "the Brazilian family" without attending both to the within-society cultural context (region, urbanicity, social class, and poverty) and to changes over historical time. However, one

cannot discount the impact of individual characteristics on child-rearing values and practices, and this is the third important component of cultural-ecological theory. No cultural group is homogeneous, and individuals differ in the extent to which they want their children to be autonomous, obedient, related to others, and so on. Similarly, children themselves differ. One parent may think that raising a child to be autonomous is very important but has a child who is hyperactive or oblivious to danger. In this case the parent is likely to want to control her child far more than she would prefer.

A series of papers published by Piccinini and his colleagues (Alvarenga et al. 2009; Marin et al. 2011a, b; Piccinini et al. 2007) as part of the PALS (Piccinini et al. 1998) revealed the ways in which parents from Porto Alegre modified the ways in which they dealt with their children during the children's first 6 years of life. Not surprisingly, as children started to use language more their mothers used more explanations with them. However, as the children by 24 months became more active and were better able to express their own feelings and wishes, their mothers also said that they had to use more coercive practices (Piccinini et al. 2007). By the time the children were aged 36 months, their mothers reported that they used significantly more inductive practices than they had reported at 24 months and significantly more such practices than the fathers had reported; fathers too, however, reported using inductive practices more at 36 months than they had at 24 months (Marin et al. 2011a, b).

A second, related, study shows clearly the way in which children themselves influence their parents' child-rearing values and not just their practices. Tudge and colleagues (2013) collected longitudinal data on parents' child-rearing values as part of the PALS (Piccinini et al. 1998) referred to above. As mentioned earlier, middle-class parents were more likely to value autonomy and self-direction for their children than were working-class parents, who valued conformity more. Given previous research on social class, this result was not surprising. What was surprising was the fact that the parents' values changed over time, with both groups, on average, being more likely to say that they valued autonomy and self-direction when their children were aged 3 and 72 months and less likely to do so when their children were aged 36 months. As was clear from interviews, many (but not all) of the parents commented on the fact that at 36 months their children were more demanding and parents needed to be controlling of them. Other parents, however, did not change their values, in part because they felt no need for it, commenting on the fact that their children had not become more difficult as they aged.

Likewise, Martins' (2014) study indicated that middle-class and upper-middle-class mothers' socialization goals varied depending on the baby's sex. When the baby was about 6 months of age, mothers of girls mentioned more frequently self-enhancement goals, which emphasize the importance of autonomy. In contrast, mothers of boys more frequently mentioned social expectation goals, which emphasize the importance of adjusting to the prevailing social rules. When these children were about 18 months old, these differences were no longer found. According to Martins, it is possible that, when babies were younger, their mothers had more

idealized beliefs, which were more reflective of prevailing cultural views about gender. However, with their children's development and growth, their beliefs may have been more consistent with their perceptions of their children's individual characteristics.

78.5 Typically Occurring Child-Rearing Activities and Interactions

Families' culture-related values and beliefs, changing over generations as they do, and parents' and children's individual differences of personality and temperament influence children's development in the course of the typical types of activities and interactions in which parents and children are engaged (Tudge 2008). It is particularly in the course of their interactions that parents' child-rearing values and beliefs are likely to influence their children's development, although they also influence via the settings into which their children are placed, the objects that are provided, and the experiences that their children have. It is thus unfortunate that there is extremely little research devoted to examining the typically occurring everyday activities and interactions in which children engage with their parents, siblings, and teachers and friends in childcare centers.

Using PALS (Piccinini et al. 1998) data, Piccinini et al. (2010) found that middle-class mothers were significantly more likely than their working-class counterparts to engage with their 3-month-old children in ways that were likely to draw their babies into interaction (interpreting/talking for and accommodating to the baby), but were no more likely to talk to, look, or smile at, bounce, or caress/kiss the child. This was the case despite the fact that babies of middle-class parents were no more likely than those from working-class families to look at, smile, cry, or vocalize to their mother. In other words, the children in the middle-class families did not seem to be eliciting different types of interacting behavior; the mothers, valuing their babies' autonomy, were interacting in them in ways to encourage that autonomy.

In related research, a study of 20 children from PALS when they were aged 36 months featuring 20 h of observation of each child over the equivalent of an entire waking day, Tudge (2008) found that the children of middle-class families spent a greater proportion of their time than did working-class children in activities involving verbal interaction with adults ("lessons" about numbers, words, nature, how to do things, etc., and "distancing" conversations about things that were not part of the ongoing activity) and also spent more of their time playing with school-related objects. By contrast, children from working-class families spent a greater proportion of their time playing with toys and watching TV than did their middle-class counterparts.

Other data from the same PALS longitudinal study did not feature observations of parents' child-rearing practices but interviews with the parents about the practices they said that they typically employed. When the children were aged 6,

middle-class mothers reported that they used significantly more inductive practices and fewer coercive practices with their children than did working-class mothers (no differences were found for fathers) (Marin et al. 2012). Moreover, mothers who reported more coercive practices also were significantly more likely to report that their children had behavior problems, in particular externalizing problems. Fathers who reported using more inductive practices said that their children were more likely to be cooperative, whereas those who used more coercive practices noted that their children were significantly more likely to show internalizing problems.

Although Marin et al.'s (2012) study was purely correlational and could therefore make no claims about the direction of effects, it is worth noting that these were the same mothers who provided data about their child-rearing values when their children were aged 3, 36, and 72 months (Tudge et al. 2013). As pointed out earlier in this chapter, these mothers' values changed as their children developed. However, despite those age-related changes, it was also the case that, on average, middle-class mothers were consistently more likely than their working-class counterparts to value their children's autonomy and self-direction and less likely to value conformity and obedience. In other words, although there were changes in the strength with which individual parents valued autonomy or obedience, there was also consistency of values in the two social class groups. Given that inductive practices fit well with the goal of encouraging children's autonomy, whereas coercion might be more likely in cases in which obedience is required, the longitudinal data suggest that there may be some support for a predictive connection between inductive practices and social cooperation and coercive practices and behavior problems.

In other words, parents' values and beliefs have an influence on their children's development by means of the ways in which they interact with their children and via the everyday activities and interactions in which they encourage their children to participate. However, social class is clearly not a determinant of parents' values, beliefs, or practices, although it seems to influence them; individual parents from the same class background are not homogeneous. When analyzing parents' responses to a set of scenarios such as those in which children did not want to go to bed, parents varied in the extent to which they said that they would use coercive or inductive techniques with their 18-month-old children (Piccinini et al. 2007). These variations were not linked to the parents' social class, however.

It is also important, when considering the child-rearing role played by family members in Brazil, to recognize that it may be neither the mother nor the father who has the primary responsibility for the children. The Brazilian children who were observed in Tudge's (2008) study spent a large proportion of the time they were observed in childcare centers (about one-third of the observations). In some lower-income families, a grandmother or aunt may take on the parental role, and often, in poor communities, others within the immediate neighborhood look out for all children (Heilborn 1997). Sometimes it is older siblings who have the responsibility of caring for their younger siblings (Dellazzana 2008; Dellazzana and Freitas 2010, 2012; Ferreira 1991; Ferreira and Mettel 1999; Poletto et al. 2004). Dellazzana and Freitas (2010), for example, described the daily routine of 20 adolescents, 16 females,

who had between two and eight siblings, in socially vulnerable situations in Porto Alegre. Two types of sibling caregiving were discovered: (a) formal, when the older sibling is totally responsible for her or his younger siblings, or (b) informal, when a parent (usually the mother) is responsible and the older sibling helps to provide care of younger siblings. This study also showed that adolescents of both sexes can be involved in sibling care activities, even though this task is primarily performed by females. Dellazzana and Freitas (2010) found that adolescent caregivers' school performance suffered, and they had fewer opportunities to engage in leisure activities. Although Dellazzana and Freitas (2010) did not consider these adolescents' views on child-rearing, the adolescents revealed that although they did not believe that physical punishment was the best approach to deal with a younger sibling doing something considered wrong, they also did not think that dialog with the younger offender would help the situation (Dellazzana 2008).

Sibling care is not found among Brazilian middle-class or wealthy families. However, child-rearing responsibilities in these families with young children are often turned over, for at least part of the day, to the babá (nanny), who in some cases may be as old, or not much older, than the siblings who provide childcare in some poor families. As Fanti and Ristum (2008) discovered, these are girls or young women with little education or prospects, who earn little income, and whose ideas about how to raise children may not always coincide with those of the parents. They often take an authoritarian and directive approach with the children, whether in the course of play or when the children are eating, and rarely take into account the children's wishes. Fanti and Ristum also pointed out that very few of the parents in their study provided the nanny with any information about how they were expected to interact with their children, perhaps because the parents were unaware that their interactional styles might be different.

78.6 Conclusions

Brazilian families, it is clear, do not fit a single pattern, when considering their child-rearing values and practices. In this chapter we have shown why it is helpful to use a theoretical framework that requires attention be paid to four interrelated aspects: the cultural context, in particular cultural values and practices; how those values and practices change over historical time; the influence of individual variability; and, most important, the typically occurring activities and interactions in which children engage with those who are trying to raise them. Parents' child-rearing values, and the ways in which they try to put them into practice with their children, vary across cultural groups within the society, regionally, and also depending on the access to resources. We have shown, at least for values of autonomy, self-direction, relatedness, and conformity to the rules that others have laid down, that Brazilian parents (mostly mothers have been studied) differ in the relative weights that they place on these values depending on whether they live in rural areas, small towns, or major cities. One could argue that these degrees of variation

in autonomy and relatedness support Kağıtçıbaşı's (2007) and Keller's (2012) view that Brazil is a "majority-world" society in which many people currently live in urban areas and have access to education and therefore fit the "hybrid" autonomous-related pattern. However, without good data showing that rural families with limited education fit into the heteronomous-related pattern, the support is weak. It is weakened further by Kohn's (e.g., Kohn 1995; Kohn et al. 2001) data showing that even in industrialized societies, well-educated parents also value both autonomy and relatedness/conformity for their young as well as by Oyserman et al.'s (2002) analysis of studies showing that in the United States parents are as likely to value collectivism as individualism. As Kohn would have predicted, Brazilian middle-class parents are likely to stress the value of autonomy, given that their current and past educational and occupational experiences reward them for expressing it. They therefore provide their children with opportunities to be autonomous. This does not mean, however, that they are uninterested in obedience and conformity and, as Tudge et al. (2013) showed explicitly, valued autonomy relatively lower and obedience relatively higher, when their children were of an age to try to impose their points of view. Brazilian working-class families, by contrast, are more likely to stress the importance of relatedness and conformity, given that fitting in with what others require is most commonly linked to their experiences of educational and job-related success.

When considering children's development, culture (whether considered at the societal level or when thinking about within-society cultural differences, such as region, ethnicity, or social class) is not a determining factor, influential although it is. Culture, as Biasoli-Alves (1997) or Beticá and Gomes (1998) showed clearly, changes with succeeding generations, as one generation does not simply accept or imitate the values or practices of the previous one. When reading research about child-rearing, including in Brazilian families, in other words, it is as important to be aware of the time when the study was conducted (its temporal context) as where and with what group of families the work was done (its sociocultural context).

Individual parents, however, are not simple reflectors of either their cultural or temporal context. Parents, in any given cultural group and at any given historical period, reflect the culture's currently prevailing values, but they do not do so in any homogenous way. Their own personal characteristics, as well as those of the people they interact with, including their own children, influence which of those prevailing values they hold most dear and the extent to which they are valued. But for those values to be passed on to their children, parents (and others who are responsible for children's socialization) need to act and interact with those children in accord with those values and provide opportunities for their children to also put those values into effect.

The longitudinal research published as part of the PALS (Piccinini et al. 1998) illustrates clearly the ways in which mothers who value their children's autonomy provide more opportunities for their children to act autonomously by engaging with them in more inductive ways. By contrast, parents who valued conformity and obedience behaved in more coercive ways as they tried to get their children to conform to the parents' wishes. It is in the course of typically occurring activities and interactions that values and beliefs come head to head with individual variabilities.

References

Alvarenga, P., Piccinini, C. A., Frizzo, G. B., Lopes, R. C. S., & Tudge, J. R. H. (2009). Estabilidade e mudanças nas práticas educativas de mães e pais dos 18 para os 24 meses de vida da criança [Stability and change in the child-rearing practices of mothers and fathers from the 18th to the 24th month]. *Revista Interação em Psicologia, 13*(2), 253–262.

Alwin, D. F. (1989). Social stratification, conditions of work, and parental socialization values. In N. Eisenberg, J. Reykowski, & E. Staub (Eds.), *Social and moral values: Individual and societal perspectives* (pp. 327–346). Hillsdale: Erlbaum.

Alwin, D. F. (1995). Taking time seriously: Studying social change, social structure, and human lives. In P. Moen, G. H. Elder Jr., & K. Luscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 211–262). Washington, DC: American Psychological Association.

Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist, 63*(7), 602–614.

Benicá, C. R. S., & Gomes, W. B. (1998). Relatos de mães sobre transformações familiares em três gerações. *Estudos em Psicologia, 3*(2), 177–205.

Biasoli-Alves, Z. M. M. (1997). Famílias Brasileiras do século XX: Os valores e as práticas de educação da criança. *Temas em Psicologia, 3*, 33–49.

Corsaro, W. A. (1992). Interpretive reproduction in children' peer cultures. *Social Psychology Quarterly, 55*(2), 160–177.

Curtner-Smith, M. E., Bennett, T. L., & O'Rear, M. R. (1995). Fathers' occupational conditions, values of self-direction and conformity, and perceptions of nurturant and restrictive parenting in relation to young children's depression and aggression. *Family Relations, 44*(3), 299–305.

Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.

Dellazzana, L. L. (2008). Irmãos que cuidam de irmãos: Concepções sobre justiça retributiva. Unpublished master's thesis. Programa de Pós-Graduação em Psicologia, Instituto de Psicologia, Universidade Federal do Rio Grande do Sul. Porto Alegre, Brasil.

Dellazzana, L. L., & Freitas, L. B. L. (2010). Um dia na vida de irmãos que cuidam de irmãos. *Psicologia: Teoria e Pesquisa, 26*(4), 595–603.

Dellazzana, L. L., & Freitas, L. B. L. (2012). Cuidado entre irmãos: A parentalidade além da mãe e do pai. In C. A. Piccinini & P. Alvarenga (Eds.), *Maternidade e paternidade: A parentalidade em diferentes contextos* (pp. 319–340). São Paulo: Casa do Psicólogo.

Fanti, C. B., & Ristum, M. (2008). A mediação da babá na relação com crianças em ambiente doméstico [The nanny's mediation in relation to children in the home]. In L. Moreira & A. M. A. Carvalho (Eds.), *Família e educação: Olhares da psicologia* [The family and education: A psychological focus] (pp. 77–118). São Paulo: Paulinas.

Ferreira, E. A. P. (1991). Irmãos que cuidam de irmãos na ausência dos pais: Um estudo sobre desempenho em tarefas domésticas e interação ente irmãos. Unpublished masther's thesis, Curso de Pós-Graduação em Psicologia da Aprendizagem e Desenvolvimento, Instituto de Psicologia, Universidade de Brasília. Brasília, Brasil.

Ferreira, E. A. P., & Mettel, T. P. d. L. (1999). Interação entre irmãos em situação de cuidados formais. *Psicologia: Reflexão e Crítica, 12*, 133–146.

Fleer, M., Hedegaard, M., & Tudge, J. R. H. (Eds.). (2009). *The world year book of education 2009: Childhood studies and the impact of globalization: Policies and practices at global and local levels*. New York: Routledge.

Freitas, L. B. L., Shelton, T. L., & Tudge, J. R. H. (2008). Conceptions of US and Brazilian early childhood care and education: A historical and comparative analysis. *International Journal of Behavioral Development, 32*(2), 161–170.

Freitas, L. B. L., Shelton, T. L., & Sperb, T. M. (2009). Conceptions of early child care and education in Brazil. In M. Fleer, M. Hedegaard, & J. R. H. Tudge (Eds.), *The world year book of*

education 2009: Childhood studies and the impact of globalization: Policies and practices at global and local levels (pp. 279–253). New York: Routledge.

Graham, S. (1992). "Most of the subjects were white and middle class": Trends in published research on African Americans in selected APA journals, 1970–1989. *American Psychologist, 47*(5), 629–639.

Hagen, J. W., & Conley, A. C. (1994, Spring). Ethnicity and race of children studied in child development, 1980–1993. *SRCD Newsletter*, 6–7.

Hallpike, C. R. (2004). *The evolution of moral understanding*. London: Prometheus Research Group.

Harwood, R. L. (1992). The influence of culturally derived values on Anglo and Puerto Rican mothers' perceptions of attachment behavior. *Child Development, 63*, 822–839.

Heilborn, M. L. (1997). O traçado da vida: Gênero e idade em dois bairros populares do Rio de Janeiro. In F. Madeira (Ed.), *Quem mandou nascer mulher? – Estudos sobre crianças e adolescentes pobres no Brasil* (pp. 291–342). Rio de Janeiro: Editora Rosa dos Tempos.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*(2–3), 61–135.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks: Sage.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind: Intercultural Cooperation and its importance for survival* (3rd ed.). New York: McGraw-Hill.

Kağıtçıbaşı, C. (2007). *Family, self, and human development across cultures: Theory and applications*. New York: Psychology Press.

Kağıtçıbaşı, C. (2012). Sociocultural change and integrative syntheses in human development: Autonomous-related self and social-cognitive competence. *Child Development Perspectives, 6*(1), 5–11.

Kağıtçıbaşı, C., & Ataca, B. (2005). Value of children and family change: A three-decade portrait from Turkey. *Applied Psychology: An International Review, 54*(3), 317–337.

Keller, H. (2012). Autonomy and relatedness revisited: Cultural manifestations of universal human needs. *Child Development Perspectives, 6*(1), 12–18.

Keller, H., & Kärtner, J. (2013). Development: The cultural solution of universal developmental tasks. In M. J. Gelfand, C. Chiu, & Y. Hong (Eds.), *Advances in cultural psychology* (Vol. 3, pp. 63–116). New York: Oxford University Press.

Kohn, M. L. (1977). *Class and conformity: A study in values* (2nd ed.). Chicago: University of Chicago Press.

Kohn, M. L. (1979). The effects of social class on parental values and practices. In D. Reiss & H. Hoffman (Eds.), *The American family: Dying or developing?* (pp. 45–68). New York: Plenum Press.

Kohn, M. L. (1995). Social structure and personality through time and space. In P. Moen, G. H. Elder Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 141–168). Washington, DC: American Psychological Association.

Kohn, M. L., Slomczynski, K. M., & Schoenbach, C. (1986). Social stratification and the transmission of values in the family: A cross-national assessment. *Sociological Forum, 1*, 73–102.

Kohn, M. L., Zaborowski, W., Janicka, K., Mach, B. W., Khmelko, V., Slomczynski, K. M., Heyman, C., & Podobnik, B. (2001). Complexity of activities and personality under conditions of radical social change: A comparative analysis of Poland and Ukraine. *Social Psychology Quarterly, 63*(3), 187–208.

Luster, T., Rhoades, K., & Haas, B. (1989). The relation between parental values and parenting behavior: A test of the Kohn hypothesis. *Journal of Marriage and Family, 51*(1), 139–147.

Marin, A. H., Piccinini, C. A., & Tudge, J. R. H. (2011a). Estabilidade e mudança nas práticas educativas maternas e paternas ao longo dos anos pré-escolares da criança. *Psicologia: Reflexão e Crítica, 24*(1), 74–79.

Marin, A. H., Piccinini, C. A., & Tudge, J. (2011b). Práticas educativas maternas e paternas aos 24 e aos 72 meses de vida da criança. *Psicologia: Teoria e Pesquisa, 27*, 419–427.

Marin, A. H., Piccinini, C. A., Gonçalves, T. R., & Tudge, J. R. H. (2012). Práticas educativas parentais, problemas de comportamento e competência social de crianças em idade pré-escolar. *Estudos de Psicologia, 17*(1), 05–13.

Marin, A. H., Martins, G. D. F., Freitas, A. P. C. O., Silva, I. M., Lopes, R. C. S., & Piccinini, C. A. (2013). Transmissão intergeracional de práticas educativas parentais: Evidências empíricas. *Psicologia: Teoria e Pesquisa, 29*(2), 123–132.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.

Martins, G. D. F. (2014). Metas de socialização maternas e estilos de interação mãe-bebê no primeiro e segundo ano de vida da criança. Unpublished doctoral thesis. Programa de Pós-Graduação em Psicologia, Instituto de Psicologia, Universidade Federal do Rio Grande do Sul. Porto Alegre, Brasil.

Martins, G. D. F., Gonçalvez, T. R., Marin, A. H., Piccinini, C. A., Sperb, T. M., & Tudge, J. R. H. (2015). Social class, workplace experience, and child-rearing values of mothers and fathers in southern Brazil. *Journal of Cross-Cultural Psychology, 2*, 1–14.

OECD. (2013). *Education at a glance 2013: OECD indicators*. OECD Publishing. http://dx.doi.org/10.1787/eag-2013-en

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta analyses. *Psychological Bulletin, 128*(1), 3–72.

Piccinini, C. A., Tudge, J. R. H., Lopes, R. S., & Sperb, T. M. (1998). O impacto de fatores iniciais do desenvolvimento nas interações pais-crianças e no comportamento social de crianças: Estudo longitudinal da gestação ao 7th ano de vida das crianças [The impact of initial factors of development on parent-child interactions and on the social behavior of children: A longitudinal study from gestation to the 7th year of life]. Unpublished research proposal, Porto Alegre, Brazil.

Piccinini, C. A., Frizzo, G. B., Alvarenga, P., Lopes, R. S., & Tudge, J. R. H. (2007). Práticas educativas de pais e mães de crianças aos 18 meses de idade [Mothers' and fathers' childrearing practices with their toddlers]. *Psicologia: Teoria e Pesquisa [Psychology: Theory and Research], 23*(4), 369–378.

Piccinini, C. A., Tudge, J. R. H., Marin, A. H., Frizzo, G. B., & Lopes, R. C. S. (2010). The impact of socio-demographic variables, social support, and child sex on mother–infant and father–infant interaction. *InterAmerican Journal of Psychology, 44*(2), 203–212.

Piccinini, C. A., Alvarenga, P., & Marin, A. H. (2013). Child-rearing practices of Brazilian mothers and fathers: Predictors and impacts on child development. In M. L. Seidl-de-Moura (Ed.), *Parenting in South American and African contexts* (pp. 17–33). Rijeka: InTech.

Poletto, M., Wagner, T. M. C., & Koller, S. H. (2004). Resiliência e desenvolvimento infantil de crianças que cuidam de crianças: Uma visão em perspectiva. *Psicologia: Teoria e Pesquisa, 29*(3), 241–250.

Rebhun, L.-A. (2005). Families in Brazil. In J. L. Roopnarine & U. P. Gielen (Eds.), *Families in global perspective* (pp. 330–343). Boston: Allyn and Bacon.

Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, *2*(1). http://dx.doi.org/10.9707/2307-0919.1116

Seidl-de-Moura, M. L., Lordelo, E., Vieira, M. L., Piccinnini, C. A., Siqueira, J. E. O., Magalhães, C. M. C., et al. (2008). Brazilian mothers' socialization goals: Intracultural differences in seven cities. *International Journal of Behavioral Development, 32*(6), 465–472.

Seidl-de-Moura, M. L., Mendes, D. M. L. F., Vieira, M. L., Kobarg, A. P., Pessôa, L. F., & Bandeira, T. T. A. (2013). Brazilian mothers' description of their children: Dimensions of autonomy and relatedness. *Psicologia: Teoria e Pesquisa, 29*(3), 63–70.

Seidl-de-Moura, M. L., Carvalho, R. V. C., & Vieira, M. L. (in press). Autonomy and relatedness and their importance in social-emotional development: Evidence from Brazilian studies. *Journal of Latin American Studies*.

Soares, S. (2012). *Bolsa família, its design, its impact and possibilities for the future*. Institute for Applied Economic Research: United Nations Development Program.

Spade, J. Z. (1991). Occupational structure and men's and women's parental values. *Journal of Family Issues, 12*(3), 343–360.

The Economist. (2012). *Latin America: GINI back in the bottle*. Retrieved on line December 30, 2013, from http://www.economist.com/news/special-report/21564411-unequal-continent-becoming-less-so-gini-back-bottle

Tomlinson, M., & Swartz, L. (2003). Imbalances in the knowledge about infancy: The divide between rich and poor countries. *Infant Mental Health Journal, 24*(6), 547–556.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder: Westview Press.

Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality, 69*(6), 907–924.

Tudge, J. R. H. (2008). *The everyday lives of young children: Culture, class, and child rearing in diverse societies*. New York: Cambridge University Press.

Tudge, J. R. H., & Freitas, L. B. L. (2012a). Internationalization, globalization and culture. *Psicologia e Sociedade, 24*(3), 547–556.

Tudge, J. R. H., & Freitas, L. B. L. (2012b). Parenting: A cultural-ecological approach. In C. A. Piccinini & P. Alverenga (Eds.), *Maternidade e paternidade: A parentalidade em diferentes contextos* (pp. 171–191). São Paulo: Casa do Psicólogo.

Tudge, J., Hogan, D., Snezhkova, I., Kulakova, N., & Etz, K. (2000). Parents' childrearing values and beliefs in the United States and Russia: The impact of culture and social class. *Infant and Child Development, 9*, 105–121.

Tudge, J. R. H., Lopes, R. S., Piccinini, C. A., Sperb, T. M, Chipenda-Dansokho, S., Marin, A. H., Vivian, A. G., Oliveira, D. S., Sonego, J., Frizzo, G. B., & Freitas, L. B. L. (2013). Parents' child-rearing values in southern Brazil: Mutual influences of social class and children's development. Journal of Family Issues, 34(10), 1379–1400. doi: 10.1177/0192513X12453820

UNDP. (2013). *Human development report*. United Nations Development Programme. Retrieved on line December 8, 2013, from http://hdr.undp.org/en/humandev/

Vieira, M. L., Seidl-de-Moura, M. L., Mafioletti, S. M., Martins, G. D. F., Tokumaru, R. S., Lordelo, E., … & Keller, H. (2010a). Autonomy and interdependency: Beliefs of Brazilian mothers from State capitals and small towns. *The Spanish Journal of Psychology*, *13*(2), 816–824.

Vieira, M. L., Seidl-de-Mouro, M. L., Lordelo, E., Piccinini, C. A., Martins, G. D. F., Macarini, S. M., Moncorvo, M. C. V., Pontes, F. A. R., Magalhães, C. M. C., Salomão, N. M. R., & Rimoli, A. O. (2010b). Brazilian mothers' beliefs about child-rearing practices. *Journal of Cross-Cultural Psychology, 41*(2), 195–211.

Wagner, A., Predebon, J., Mosmann, C., & Verza, F. (2005). Compartilhar tarefas? Papéis e funções de pai e mãe na família contemporânea. *Psicologia: Teoria e Pesquisa, 21*(2), 181–186.

Wenger, M. (1989). Work, play, and social relationships among children in a Giriama community. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 91–115). New York: Wiley.

Whiting, B. B., & Edwards, C. P. (1988). *Children of different worlds: The formation of social behavior*. Cambridge, MA: Harvard University Press.

World Bank. (2013). *Urban population (% of total)*. Retrieved on line December 30, 2013, from http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS

World Bank. (2016). *GINI Index*. Retrieved on line January 12, 2017, from http://data.worldbank.org/indicator/SI.POV.GINI?locations=BR

Chapter 79
Children's Cultural Learning in Everyday Family Life Exemplified at the Dinner Setting

Mariane Hedegaard

Abstract The aim in this chapter is to propose a way to conceptualize children's learning through their participation in activity settings in everyday practices at home. I argue that children learn practice traditions and values through the demands that children experience both indirectly through the setting and directly from parents and siblings. Children's also put demands on the setting and its participants and how these are met leads to children's development of new forms of social interaction, new motive orientation, and competences. The argument builds on a research project following children through participant observations in their everyday activities in two families (Hedegaard & Fleer. 2013. Play, learning and children's development. Everyday life in families and transition to school. New York: Cambridge University Press). The family members in the two families got an instant camera and were asked to take photos of what were important for them. In this chapter, the focus is on how demands and motives influence both parents and children at the dinner setting.

Keywords Activity setting • Demands • Motive orientation • Social situation • Cultural learning • Position

Inspired by research that has focused on children's everyday activities and learning in a broad frame of family settings (Barker and Wright 1954; Berger and Luchmann 1966; Bronfenbrenner 1979; Grieshaber 2004; Hedegaard and Fleer 2008, 2013; Højholt 2012; Kousholt 2011; Tudge 2008), I will in this chapter argue that it is important to see learning not only as resulting in person's acquisition of new competences but also of values leading to new motive orientations and new positions in concrete activity settings. This form of learning may be seen as cultural learning. Cultural learning in families takes place through parents and children negotiation of demands in concrete activity settings that may lead to new forms of social

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interaction between children and parents and to children's development of new motive orientation and competences. In this chapter, I will analyze how children's cultural learning takes place in their family with focus on an activity setting that is seen in Scandinavian families as central – the dinner setting – and how not only the demands from specific family members but also from the child's position in other practices such as school may influence and create new motive orientations.

The aim in the following sections is to get deeper into an understanding of children's cultural learning with focus on motive orientation, values, and traditions. The analysis is divided into four sections. In the first section, I will outline a theoretical approach to children's learning and development that can be seen as a wholeness approach. Children are seen in this approach as engaged in activities in different activity settings across different institutional practices. In the following section, a concrete project is presented analyzing what is important for children in Danish families illustrated with four children's photo-taking in two different families. The third section focuses on how societal demands influence the family practice and its concrete activity settings and through this creates children's social situations. Even though children participate in the same activities in a family setting, their social situation may be quite different, because demands from other settings may place demands differently on the different participants and also that children in different age periods have different motive orientations. This will be illustrated in the last section in an analysis if changes in a family's interactions in a dinner setting over time.

79.1 A Wholeness Approach

Barker and Wright (1954, 1971) were pioneering with their Midwestern study following children in their everyday life throughout the day. I have been inspired by their study, but instead of doing a behavioral study to analyze children in their everyday life, I have chosen an activity theory approach, and thereby changed the focus of analysis from children's behavior in behavioral settings to their activities in activity settings, whereby children's motive orientation become central and changes in motive orientation can be followed.

Leontiev's theory of activity, with motive as a central concept (Leontiev 1978), gives a tool for analyzing how the dynamic in a person's activities evolves through their development of motives. Studying children in their everyday life, the focus is on the child in his or her everyday activity settings in the different institutional practices that he/she participates in. The main practices for children in Scandinavian societies are home, school, and after-school care with the different activity settings during a child's weekday: morning activities, the different subject classes in school, recess, afters-chool care, snack time coming home, dinnertime, and bedtime (see Fig. 79.1, Table 79.1).

Leontiev's theory of children's development starts with the concept of primary needs, but when a child's need through his or her acts according to Leontiev becomes

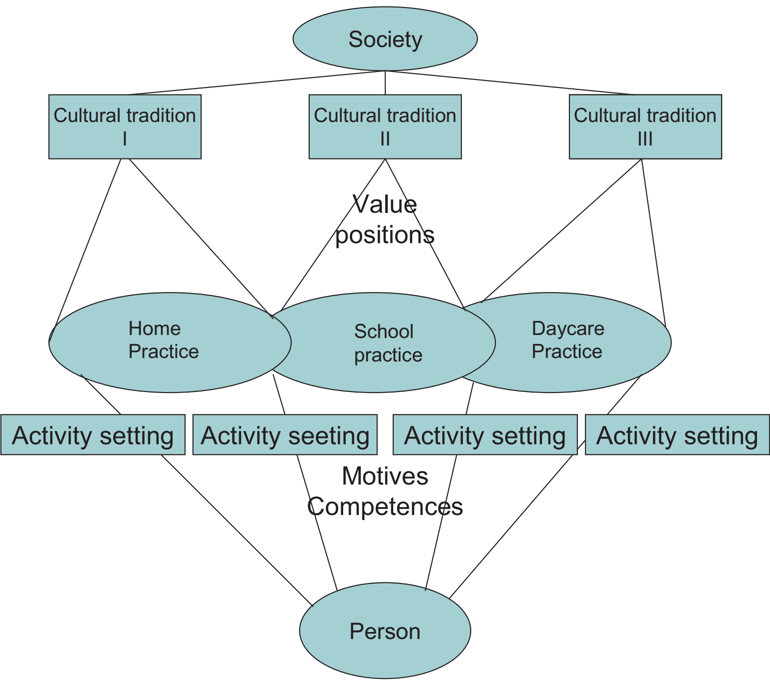

Fig. 79.1 A model illustrating the relations between society, practice, and persons with cultural traditions and activity settings as mediating links

attached to an object, the object becomes the motive for the child's activity. The concept of object, however, is not to be associated with "things" as such, as pointed out by Davydov et al. (1983). They write that an object should not be understood as a thing that exists in itself but as that toward which an act is directed; this can be a person's activities and ideas, but also things that become the "object" of a person's activity. I have argued (Hedegaard 2012a) that Leontiev's theory of the dynamic of a person's activity has to be extended and located within the cultural practice of the dominating institutions in a child's life. Thereby, it becomes possible to distinguish between institutionalized objectives as valued motives for institutional practice and persons' motives and intentions. To highlight the difference between institutionalized valued motives and a person's motives, the terminology of motive orientation has been used (Hedegaard 2012a). This catches the idea that a person's motives are always established as a relation between the person and what the person's activity is directed toward. Thereby, it becomes possible to analyze the dynamic between the environment and the child as a relation between institutional demands and values and a person's motivated activities within his/her social situation.

In earlier writings, I have advocated (Hedegaard 2009, 2012b) for a wholeness approach taking into consideration the societal conditions, the institutional practices and its activity settings, and the child's social situation and motive orientation (see Fig. 79.1). In my theoretical conceptions (Hedegaard 2012b) of the relations

Table 79.1 Content of the photos

Martin	Anna	Emil	Lulu
Photos taken at home			
Mother, father, and Anna in the sofa	Mother, father, and Martin in the sofa	Two photos of mother	Two photos of mother with children at the dinner table doing homework
Family at dinner	Family at dinner	Two photos of the family at the dinner table	Family at the dinner table
Grandmother I in her kitchen	Grandmother I and grandfather on their sofa	Mother at home	Kaisa and Laura at the dinner table eating snacks
	Grandmother II in a chair at home	Mother with Kaisa at her lab	Mother reading for the three siblings sitting in bed
		Two photos of father at home	Mother in coat ready for leaving
		Two photos of grandmother at coffee table (one includes Kaisa)	Aunt with Kaisa at her lab
	Two photos of the family at their dinner club	Two photos of the breakfast table	Family at the breakfast table
	Anna playing a board game with Emil	Kaisa at the swing	Laura washing dishes
	Cathy dressed up	Lulu in her bedroom	Kaisa and friend blowing soap bubbles in the bathroom
	Cathy and Anna dressed up	Laura in the sofa	Lulu taking on boots
		Niece and Kaisa	Laura in bed, Kaisa at the bedside
		Niece and Emil	
	Photo of the map of Vanløse	Living room upstairs	
	Photo of a family, photos of all family members	Lulu and Laura at homework	
Aunt in the kitchen	Aunt at the dinner table	The young girls that babysit	
Aunt at the coffee table		Emil and Kaisa's bedroom	
Teddy bears	Teddy bears	A small figure	Small figurines
Researchers		Two photos of researchers	
Photos from places outside home			

(continued)

Table 79.1 (continued)

Karla in school		Afters-chool pedagogue 1	Best friend in her home
Three photos of the school interior		Afters-chool pedagogue 2	Best friend looking at books in the library
Photo of the school building	All classmates arranged to be in a photo	Niece and Kaisa	Three school friends
Three photos of friends in the school yard	Two photos of friends eating at a church arrangement	Aunt and Lulu	Teacher and three school friends
Four photos of day care interior	Two photos of friends doing creative work at after-school care		Visiting friends and playing
Three photos of friends in day care			Lunch in the after-school care
Two photos of Karla at home	One photo of the family feeding ducks		Schoolmates climbing in a net construction
One photo from family excursion	Two photos from family excursion	Father at his boat	Two photos of gymnastic activities
	Playing restaurant in after-school care		
Peers at gymnastic	Two photos of playing flute at music lesson		

between society and its institutions, these are seen as mediated by cultural traditions for institutional practices. Culture thereby becomes located in the different activity settings that may be found in an institution. In the family, this may be traditions for breakfast and leaving for school, for afternoon snack, and for dinner and bedtime. When new institutions are introduced into a child's life (or a parent's life), it influences the whole family (e.g., a child enter school is reflected in changes in a child's positions at home). Becoming a school child means getting new responsibilities which influence home practice and the family's life as new demands and motive orientations. These new demands and motive orientations change a child's relation to other family members and thereby his or her social situation in the different activity settings changes (Hedegaard and Fleer 2013).

79.2 What Is Important in Children's Everyday Life: A Family Study

The analyses presented here are taken from a research project where the aim has been to follow children's different activities over an extended period in their everyday life in families and beyond, with special focus on the demands they meet and

the motive orientation and competences they develop.[1] The examples in this article focus on four children from two different families, Martin and Emil who just started school (6 years old) and Anna and Lulu who are, respectively, the older sisters of Martin and Emil. The girls have been in school for 2 years when the project started. In this presentation, I focus on the school starters to be able to show how their activities in the family changes and to compare their initiated activities to their older siblings. The idea is to follow (interpret) how a child's position in a family changes by the child's acquisition of a new motive orientation that leads to new demands that are directed at the other family members.

Anna and Martin are from a Danish middle-class family living in a suburb in Copenhagen – the Vanløse family. Emil and Lulu are also from a middle-class family from a Copenhagen suburb – Frederiksberg; in this family there were two other children, Kaisa (4 years) and Laura (10 years). Participant observation was conducted over a period of 10 months, with 30 visits to each family around 3 h each time to study the activities at home between parents, children, and siblings and also to follow the children entering into the different activities outside home, primarily, school and day care, but also leisure time activities, such as gymnastics and music. At the start of the study, all members in the family got an instant camera and were asked to take photos of what was important for them. The cameras were returned within the first month of the study. The researcher then made a photo-book for each member and sat down with the whole family at a home visit and asked each member to explain why they took each of the pictures. The whole family was gathered in this event following each other's explanation. This took place in each family over two home visits, one for the parents and one for the children.

79.3 Four Children's Choice of What Is Important in Their Everyday Life

One can get an impression of what is central for many Danish children in early school age by focusing on the themes in Martin, Anna, Emil, and Lulu's photos. The instruction for the families when getting the cameras was that they should take pictures of what was important for them.

The four children all documented persons and places in their life that were important (see Table 79.1). There are clear similarities among the children's choice of topic in their pictures, which I ascribe to their living in the same community of Copenhagen with shared traditions for children attending school, after school activities and leisure time activities, and visiting school friends after school hours.

What we found was that all children took picture of all family members, and they all took the cameras to school and after-school care and leisure activities to take pictures of friends and pedagogues. All four children really tried to get around

[1] Part of this project is described in Hedegaard and Fleer (2013).

photographing what was important for them, not only taking pictures at home. All four children took photos of the family at the dinner table; the older children also took photos at the dinner table with grandparents and/or the families' friends.

Starting school is an important event. This is very explicitly demonstrated in Martin's photos. In his photos, he starts to take a photo of his best friend in school Karla. Then he takes a photo of the interior of his classroom and one of the outside and one of the playground.

The primary differences between the two youngest children Martin and Emil and their older sisters were that for the younger children, the pictures primarily focused on the persons without focusing on the activities, except for the dinner photos, where the older sisters focused on the persons in the activities at home and in school and after-school care. This became even clearer when they explained why they took the photos, because the two youngest children only pointed out who were on the photo and could not say much more about each photo even when the researcher or parents prompted them to explain what was going on in the picture.

The dominating theme in children's photos was dinner – perhaps because this activity is shared and well known as an activity where the whole family is together.

In the following section, a microanalyses of the Vanløse family at the dinner table demonstrate how family dinner traditions and values become a cultural learned activity for children. Children's cultural learning at the dinner setting has to be seen in relation to the dinner setting as a societal tradition with values of what is right and wrong. In the next section, I will outline how societal demands on family practice frame the traditions found in the different family settings.

79.4 Societal Demands on Family Practice and How the Demands Influence Children's Social Situation

Demands directed to both parents and children are connected with children entering new institutions. The parents have to care for the child in new ways when the child enters kindergarten and later school. These institutions indirectly structure a family's life together with institutions such as parents' workplaces, their church, health care institutions, etc.

Most nations have formulated some general laws for child care, so that in severe cases of abuse and neglect of children, they can be removed from their families. The United Nations (1990) Convention on the Right of the Child contains a wide range of children's rights that are ratified by many countries (see also Arhard 2003 for a discussion of this document and children's rights in families and societies). In most homes though, there is not a focus on societal demands (i.e., on laws and regulations) for how families should care for children, except for bringing their children to school. Instead, cultural traditions dominate the activity settings, traditions that both reflect societal traditions and families' individual versions.

The family members meet the societal demands in the extended family in the community and in the media. Grieshaber (2004) describes this as "regimes of truth," meaning how in the community and media people talk about raising children and what mothers and fathers and children should accomplish. Each family develops more or less their own individual traditions of home practice described by Grieshaber (2004) as "regimes of practice."

The family practice is important for how children come to play, learn, and develop. Different research projects show that Scandinavian parents value being together with their children and managed this through the mealtime and shared daily activities, such as doing house chores and bringing children to and from school (Aronsson 2006; Aronsson and Cekaite 2011; Nairn 2012). Parents take care to be with their children through the daily activities, they take time to sit down and eat together and talk with their children when they drive them or fetch them from school, and they draw the children into the daily chores at home.

This tradition was also found in the two Danish families presented above, where families were together for daily meals in the morning and in the evening, and children were drawn into the daily chores together with the parents.

79.5 Children's Social Situation

Adults' values influenced the shared activity settings but the single child's motive orientation and demands also influence the activities in the shared setting. Children are not just socialized to be part of the adult's practices, through their interaction with other persons, but they also contribute to create the different activity settings in a family. By focusing on the family, it became clear that both children and the parents through their daily activities cooperate in creating the different settings in a family practice (Hedegaard and Fleer 2013). Viewed from family practices, this means that the parents are the primary creators of the different settings in their family with traditions and values, but children through their motive orientation create the actual activities in interaction with the parents. The children can be seen as cultural learners contributing to their own conditions for learning and the families' evolvement of traditions and values. It is striking though how much demands from other practices influenced and contributed to a family's way of interacting in the different activity settings of a family.

Bronfenbrenner (1970) has pointed to the importance of the involvement of parents, teachers, and other adults that are central in the child's everyday life in his/her daily activities, as well as across institutional practices. In his book *Two Worlds of Childhood*, Bronfenbrenner discussed the importance of the emotional relation for a child in imitating activity and especially the importance of the adults in taking an ethical responsibility for supporting children in their relation to community and society. Bronfenbrenner wrote that adult's involvement as models for children will lead children's growing involvement and responsibility on behalf of their own family, community, and society as well as to individual autonomy (Bronfenbrenner 1970, pp. 165–166).

Each child in a family contributes to the creation of a family's activity settings through the activities they initiate. However, the different children in a family initiate or enter into the same activity setting differently, depending upon the child's social situation of development that characterizes their specific age period. Also they bring with them demands and motives from settings in other practices.

Bozhovich (2009) points to how the affective relationship between children and the environment creates children's positions, but also how their positions influence the affective relationship with other persons and how the same events in a family can lead to different social situations for siblings in the same activity setting. A child's actual emotional expression in a social situation can be a clear indicator of his/her motive orientation to shared activities and how this orientation is realized in interaction with others.

79.6 Eating Dinner Together in Scandinavian Families Is an Important Event

Dinnertime in the evening is seen by many as a period in the day when family members can be together and where the feeling of a shared family can be created (Aronsson 2006; Aronsson and Cekaite 2011; Aronsson and Gottzén 2011; Holm 2001; Korvela et al. 2007; Demuth and Keller 2011; Pontecorvo et al. 2000, 2001). In our research, we found that the families we studied followed the Scandinavian tradition of eating dinner together in the evening, even during midweek, without watching television or listening to the radio. We noted that these families took the "togetherness of family mealtimes" rather seriously.

In the research with the instant cameras, both adult and children took photos of the dinner as a shared event. The mother in the Vanløse family expresses this view – the importance of togetherness at the mealtime – in her explanation of her photo of the family at the dinner table. Her first photos were of the family at the dinner table, one eating dinner and one after the dinner. Her comment to the one when they still sat at the table having finished their dinner was:

> This photo is when we have finished the dinner. The others [the children and the husband] wondered why I would also take the picture after the dinner. But when we eat we talk so much, we sometimes stay an hour at the dinner table because we talk and talk about everything. So I think it is important; it is cozy when we eat, but also to stay afterwards.

This mother also took photos of eating together with grandparents and friends. And they have a community event – a church service for children each week. This was organized so that the member of the church community had dinner together afterwards. They call this church event "spaghetti church service." Commenting on this photo she says:

> This is from the "spaghetti church service" I have been thinking, that this is also a picture of being together in the family when being with other people. If it is in a church or a sports club it does not matter.

The father in this family also expressed the importance of having dinner together he says to his picture of the dinner:

> I also think like Hanne [his wife] that to sit and eat and talk together is a very cozy thing. So many times during the day where we are only together very little or even each of us just makes our own things. In the morning we are very busy. This is the place where we all can be together, and where we may talk about what we have experienced during the day.
>
> Martin continues: One can relax.
>
> Father: Yes relax and sit on the lap if one is called Martin.

The cultural learning that takes place around the dinner table between parents and children is not only from parents to children but may be seen as bidirectional. This is both indirectly, as when adults make children eat their vegetables, the adults themselves have to eat their vegetables (Waksler 1986), but also directly, as when children correct the adults or imitate them and thereby function as a mirror of the adults. The bi-directionality of cultural learning around the dinner table has also been put forward by Pontecorvo et al. (2001). They use the concept of apprenticeship for both adults and children, writing that "Parents learn to be parents with their children and children learn to be sons or daughters of their specific parents" (Pontecorvo et al. p. 344).

The dinner setting can be seen as a moral arena (Aronsson and Forsberg 2010; Aronsson and Gottzén 2011) where parents negotiate with children about what to eat and how to interact. The dinner setting also gives opportunities for discussion and reflection in relation to what might be right or wrong in the events in which the different family members participated during a particular day.

In the following section, children may be seen as having different social situations in the same dinner setting and in different ways influenced by their attendance to other institutional practices.

79.7 A Family at the Dinner Table[2]

I will examine the settings for dinnertime in the Vanløse family over two separate observations. The first example is from the beginning of the visits to the family. The second example is from the last visit to the family 8 months later. Following the two children over 30 visits, I was able to follow the change in position that took place especially for Martin through establishing a position as a school boy at home. At the first dinner setting, each of the siblings had a school friend visiting, who also stays for dinner, which is not an uncommon event in Denmark, when children have playmates coming home with them. At the last dinner setting, there were no schoolmates visiting. What becomes obvious is that Martin's demands on the parents have

[2] The analysis of the Vanløse family at the dinner table is an extended version of the analysis in Chapter 9 in Hedegaard and Fleer (2013), with a focus on the concept of cultural learning.

changed from the first to the last dinner observation and conflictual and provoking activities have entered into the last dinner setting.

79.8 First Dinner Observation

There are two playmates visiting: Karla, who is Martin's best friend, and Cathy, who is Anna's friend. They both stay for dinner. The two researchers have been in the Vanløse home together with the children since they arrived home from day care at 3:30 PM. The children have watched television and have had an afternoon snack. Later, the researchers went with each child when they played in their respective bedrooms with their friends.

> At the dinner table: Anna and Karla have set the table and all four children were asked to go to the bathroom and wash their hands. They are now sitting around the dinner table. The food served is lamb steak, taziki salad, green salad, and bread. The family and their guests are expected to all sit down at the table and wait until the parents gives a sign to start eating the food.
>
> The mother and father sit down at the table and the mother says "Please start."
>
> The father sends the bread around. When the mother passes the bread to Anna, a piece falls down.
>
> The mother says, laughing, "See what happens now."
>
> Anna: "Ehh! Mooom, it was you."
>
> The meat is sent around. When Anna tries to take two pieces, her mother says "You can take only one." Then Anna asks if she can take the large piece.
>
> Her mother responds with "Do not take this big one," but then she serves Anna the big piece.
>
> Anna comments that her mother has given her the big piece that she was not allowed to take herself. All children put meat on their plates.
>
> The father cuts Martin's meat up and asks whether he wants to have the thin fatty edge cut off.
>
> First, Martin said yes, and his father says "this is what you call the salt edge."
>
> Martin: "Then I like it – I would like to have it." Martin likes to have salt; he heaps almost a full teaspoon onto his plate, and then dips his meat into it.
>
> Karla says to Martin, "This is much more than we may take at home."
>
> The mother explains that one should not eat too much salt.
>
> Martin: "But it's healthy to have salt if you do not get too much of it, but unhealthy if you get too much."
>
> The family talks about how the butter knife has changed. It turns out that Karla has swapped her knife with the butter knife.
>
> In her attempt to cut a piece of meat, Anna spills taziki down into her lap.
>
> Her mother says with a grin, "OH! Anna what are you doing?"
>
> Anna: "Well …"
>
> Mother: "It's okay – we will do washing again another day."
>
> Martin comments on why Karla has the butter knife by saying. "We have killed the butter." Karla and Martin giggle together.
>
> Mother: "Martin and Karla – have you finished kissing now?"
>
> Grins from the two girls across the table.
>
> Martin: "We are not! Mooom!"

79.9 Demands for Conduct at the Table

The parents are aware of the children's problems with eating, perhaps because there are two observers present. The mother demands that Anna should not take too much meat onto her plate, thereby setting a norm for the rest of the family to balance what they put on their plates. Anna then corrects her mother when her mother gives her a big piece of meat after first telling Anna that she should not take the big piece.

The mother's relation to Anna and Martin is to use teasing for corrections to their actions. We see this when Anna drops a piece of bread and when she spills taziki salad, and her mother comments on both events while at the same time grinning, or when she comments on Karla and Martin's giggling at the table as "kissing." The mother reacts to the children's mistakes by teaching them table manners, but the children also turn these situations into demands on the adults, as can be seen when Karla says that in her home they are not allowed to take so much salt on their plate as Martin is doing. The mother supports this and says that too much salt is not healthy, which leads to Martin's explanation of a little salt as being healthy but too much as being unhealthy.

79.10 Last Dinner Observation 8 Months Later

The family sits down at the table. They are having East Indian food, with chicken, rice, fried bananas, peanuts, raisins, and pineapple.

Martin does not take chicken, but he does take rice and peanuts, and he gets ketchup. He is going to start eating. His mother tells Martin to wait to eat until everyone has got food on their plates:

Anna loses a spoon on the floor.

Mother: "It's good I have washed the floor."

Martin: "Can I start eating?"

Mother: "Wait a little."

Martin begins to count down from 10.

Mother: "Do you want to have bananas today, Anna?"

"No," she answers.

Mother: "Please start." But Martin is still counting; he is at eight and continuing to count down to zero, and then says "Fire!"

The father brings up the theme of athletics in school. The mother says, "Let us talk about this later."

Martin: "I have to go out to do a piss."

Mother: "Talk properly."

Martin: "If I feel like it."

Anna says that she remembers something important and leaves the table.

Father: "She should probably write something on her mind board."

Martin comes in with a lamp shade, and says, "Look what I found [in the bathroom]."

Mother: "You can put that back and come and sit down."

The father brings up a topic about an American lady who talked about not showing off. (He uses the Danish concept of "Jante Law").

Martin says thanks for dinner and rises to leave the table.

Mother: "No, you should not leave the table."

Anna comes back to the table and says that they have swimming during the last two hours in school tomorrow. She says she wants to learn to swim.

Martin says that he thinks he can (swim).

Anna says sarcastically: "If this is so, I can too."

Mother: "You have to be fonder of swimming as I understand you did not want to join."

Martin: "I do not want to. Anna can do it instead of me."

Mother: "Then you do not learn to swim."

Anna: "We need to go to the swimming pool more often – we get there just once a year."

Martin stays at the table and starts to ask about getting more peanuts. His mother tells him that he needs to have it with rice, but he has already told everyone that he was finished. This goes on for some time, with Anna now also wanting peanuts. They fuss about how they can share.

Mother: "I miss that you say: "Yes mom", as in the beginning when the researchers' came here."

Martin: "Yes Mom!"

Anna says "Yes Mom!"

Mother: Anna do you want a banana piece?

Anna screams: "Yes Mom!"

Martin screams "No it is too much" when his mother gives him some rice.

Mother: Could we please get the chamber tone!

The father leaves for the kitchen and Martin tries to follow him, but his mother tells him to sit down. Anna is slow to finish eating so her mother tries to hurry her up.

When they all have finished, the children are asked to get into their night clothes. The mother then tells the children that she will read when they all are sitting at the table, and then they all can have some licorice. Anna is supposed to clean the table but because she is slower than Martin, and he comes back ready in his night clothes and announces he is ready, his mother asks him to do the job instead, which he does. When Anna comes back he says "I cleaned the table for you."

Anna: "Good, for this is boring."

Martin: "It is fun."

79.11 Demands for Conduct at the Table

In all dinner observations, the whole family sat down together at the table and began eating when everybody was seated and the mother had said "Please start." Nobody is allowed to leave the table before the mother sees that all have finished their meal, which causes some tension between Martin and his mother. Both children though are allowed to go away and come back, Anna to check some school matters and Martin to go to the toilet. In all our observations, table manners are central; the mother is the one who is responsible for ensuring that table manners are followed. The father is the one who often introduces the themes for discussion.

79.12 Children's Initiatives and Conflicts

In this last observation, Anna also had a small incident with losing something on the floor, but otherwise she was much the same, and again she corrects her mother, this time by criticizing the family for not going enough to the swim bath. However, Martin objected a lot to his mother's demands both directly by using improper speech and asking to leave the table several times and indirectly by his demands for peanuts. So much that Mother asked for a nicer tone at the table.

Martin's conflicts may be seen as Martin becoming agentic in a new way, as a boy who tries to get a new position. He has moved from grade 0 (the kindergarten class) to grade 1 in school, which means he had developed school competencies, sitting quietly during school time and started to learn math and to read. At the first visits to the family, he would often sit on his mother's or father's lap when he had finished eating. We have several examples from the breakfast settings where he sits on his mother's lap before they leave for school, but this changed after he started his second year in school and he became "a real school child." In general even at this last dinner observation, he is not in opposition to his mother's demands. Here, he rose at once when his mother asked him to set the table, and later he did Anna's job, when the mother asked, so it is not that he is cross with his mother – it seems more that he was trying out a new social position of being more independent and taking initiatives.

79.13 Cultural Learning at the Dinner Table

The mealtime can be seen as related to how a community shares general values and motives for being together at the evening meal, as pointed out by Korvela et al. (2007). In Scandinavia as well as in Italy (Pontecorvo et al. 2001), we find values about the practice of sharing dinner. Children become socialized (Aronsson and Forsberg 2010; Aronsson and Gottzén 2011; Nairn 2012) around the dinner table to orient to what is important. How parents orient their children both depends on the pressure they have from other chores, the age of the children, and what the parents actually see as important in the upbringing of their children. The parents in the Vanløse family appreciate the togetherness at the mealtime as they formulated in relation to their photos. The analyses of the Vanløse family show how the parents used the dinner setting as an important site for learning manners (cf. Aronsson and Gottzén 2011), and as opportunities to learn healthy eating habits (Ochs et al. 1996), as when they in the Vanløse family had a discussion of eating salt. In the Vanløse family, the food that was served was not especially children's food, even though it was modified in relation to them. They were served steaks and Indian curry.

In this family, we saw how table manners went two ways both as children learning to be at the table and also the parents learning what children expect from them (i.e., being consistent in their care) as pointed out by Pontecorvo et al. (2001). In the

first dinner observation, the mother wanted to be nice to Anna and gave her the big piece of lamb steak though she just have said that she should not take the big piece. Anna commented on this and asked why her mother was not consistent. In the last presented dinner observation, both children teased and opposed their Mother, so she asked for a nicer tone at the table.

To learn table manners and values about eating, I will interpret as cultural learning, because it is as much an acquisition of values and motive orientation as it is acquiring competences to act in situated practices. This learning goes both from parent to children and also from children to parent that have to learn to handle children's opposition, so a good tone is kept at the table.

Martin took several photos related to school (i.e., school friends, school interior, and school building). In the observation period, it could also be seen that Martin orientation to school grew. Therefor Martin's obstruction toward especially his mother in the last dinner observation is interpreted as a claim for a new position at home that fits with his change in school of becomming a "first grader" and not a "kindergarten class" child any more.

Following Vygotsky (1998), change in children's development may lead to obstruction of relations to the child's social world for a new developmental period to emerge, where new relations are created. In line with Bozhovich (2009), I will argue that change in a child's position in an institutional practice influences the way the child orient in relation to other persons. This change can be followed in the children's relation to persons in all the different institutions they attend, which means in Martin's case that his relations to his parents and sister at home could be interpreted as changing.

References

Arhard, D. W. (2003). *Children, family and the state*. Aldershot: Ashgate.

Aronsson, K. (2006). Commentary 1. Doing family: An interpretative accomplishment. *Text & Talk, 26*, 619–626.

Aronsson, K., & Cekaite. (2011). Activity contrast and directives in everyday family politics. *Discourse & Society, 22*, 137–154.

Aronsson, K., & Forsberg, L. (2010). Generationspositioner og förhandlingar ved middagsbordet. In A.-M. Markström, M. Simonsson, I. Söderlind, & E. Ânggård (Eds.), *Barn, barndom och föräldraskap* (pp. 23–37). Stockholm: Carlssons.

Aronsson, K., & Gottzén, L. (2011). Generational positions at a family dinner: Food morality and social order. *Language in Society, 40*, 1–22.

Barker, R. G., & Wright, H. (1949). Psychological ecology and the problem of psychological development. *Child Development, 20*, 131–143.

Barker, R. G., & Wright, H. (1954). *One boy's day – a specimen record of behavior*. New York: Harper.

Barker, R. G., & Wright, H. F. (1971). *Midwestern and its children. The psychological ecology of an American Town*. USA: Archon Books.

Berger, P. L., & Luchmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Garden City: Doubleday 1966.

Bozhovich, L. I. (2009). The social situation of child development. *Journal of Russian and East European Psychology, 47*, 59–86.

Bronfenbrenner, U. (1970). *Two worlds of childhood*. New York: U.S. and U.S.S.R.

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harward University Press.

Davydov, V. V., Zinchenko, V. P., & Talyzina, N. F. (1983). The problem of activity in the work of A. N. Leontiev. *Soviet Psychology, 24*, 22–36.

Demuth, C. & Keller, H. (2011). *Mealtime as "cultural sites for socialization": Evidence from a longitudinal study in southern Germany*. Paper presented at the 4th Congress of the International Society for Cultural and Activity Research, August 2011.

Grieshaber, S. (2004). *Rethinking parent and child conflict*. New York: Routledge.

Hedegaard, M. (2009). Children's development from a cultural-historical approach: children's activity in everyday local settings as foundation for their development. *Mind, Culture, and Activity, 16*, 64–81.

Hedegaard, M. (2012a). The dynamic aspects in children's learning and development. In M. Hedegaard, A. Edwards, & M. Fleer (Eds.), *Children's development of motives: A cultural-historical approach* (pp. 9–27). Cambridge: Cambridge University Press.

Hedegaard, M. (2012b). Analyzing children's learning and development in everyday settings from a cultural-historical wholeness approach. *Mind Culture and Activity, 19*, 1–12.

Hedegaard, M. (2012c). Children's creative modeling of conflict resolutions in everyday life as central in their learning and development in families. In M. Hedegaard, K. Aronsson, C. Højholt, & O. S. Ulvik (Eds.), *Children, childhood and everyday life. Children's perspectives* (pp. 55–74). Charlotte: Information Age Publishing.

Hedegaard, M., & Fleer, M. (2008). *Studying children. A cultural-historical approach*. New York: Open University Press.

Hedegaard, M., & Fleer, M. (2013). *Play, learning and children's development. Everyday life in families and transition to school*. New York: Cambridge University Press.

Højholt, C. (2012). Communities of children and learning in school. In M. Hedegaard, K. Aronsson, C. Højholt, & O. Ulvik (Eds.), *Children, childhood and evryday life*. Charlotte: Information Age Publishing.

Holm, I. (2001). Family meals. In U. Kjaernes (Ed.), *Eating patterns. A day in the lives of Nordic people* (pp. 199–212). Lysaker: SIFO – National Institute for Consumer Research Report No 7.

Korvela, P., Ellegård, K. Palojoki, P. Together or individually – An activity – Theoretical and tim geographical study of how families construct their evening meals. Paper presented at the Nordic ISCAR conference, Oslo, June 15–17, 2007.

Kousholt, D. (2011). Researching family thorugh the everyday lives of children across home and day care in Denmark. *Ethos, 39*(1), 98–114.

Leontiev, A. N. (1978). *Activity, consciousness, and personality*. Englewood Cliffs: Prentice-Hall.

Nairn, A. (2012) *Children's well- being in UK, Sweden and Spain: The role of inequality and materialism*. A qualitative study. Bath: Report from Ipsos Mori.

Pontecorvo, C.; Pirchio, ? & Steponi, L. (2000) Are there just two people in a dyad? Dyadic configurations in multiparty family conversations. *Revue Suisse des Sciences de L'education, 3*, 535–558.

Pontecorvo, C., Fausolo, A., & Sterponi, L. (2001). Mutual apprentices: Making of parenthood and childhood in family dinner converstations. *Human Development, 44*, 340–361.

Ochs, E., Pontecorvo, C., & Fasulo, A. (1996). Socializing taste. *Ethnos, 61*, 7–46.

Tudge, J. (2008). The everyday lives of young children. In*Culture, class, and child rearing in diverse societies*. Cambridge: Cambridge University Press.

United Nations. (1990) Convention on the right of the child. http://www2.ohchr.org/english/law/crc.htm

Vygotsky, L. S. (1998). *Child psychology. The collected works of L. S. Vygotsky* (Vol. 5). New York: Plenum Press.

Waksler, F. C. (1986). Studying children: phenomenological insights. *Human Studies, 9*, 71–82.

Chapter 80
Domesticating Markets: Early Years Education and Middle-Class Parenting in India

Henrike Donner

Abstract Over the last two decades, much has been written about India's new middle classes and their lifestyles, but little attention has been paid to the way liberalisation policies and the attending neoliberal ideology is transforming the family. In this chapter I will discuss some of the changes pertaining to the way children are brought up in this social strata based on two decades of fieldwork in Calcutta/Kolkata, India.

This chapter provides an ethnographically based perspective on middle-class parenting and argues that where in China extensive government intervention and in Malaysia Islamist agendas frame the reordering of the social world of early childhood under processes of globalisation, in India economic liberalisation and neoliberal ideology shape the same processes. This is the case even where they are introduced as part of a right-wing Hindutva (Hindu way of life) agenda, and they affect middle-class children and their families in multiple ways. More specifically, the chapter shows how the middle-class family becomes a prime site where neoliberal values are reproduced and enacted in relation to new government agendas and economic conditions.

Keywords

80.1 Introduction

Over the last two decades, much has been written about India's new middle classes and their lifestyles, but little attention has been paid to the way liberalisation policies and the attending neoliberal ideology is transforming the family. In this chapter I will discuss some of the changes pertaining to the way children are brought up in this social strata based on two decades of fieldwork in Calcutta/Kolkata, India.

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With reference to Bengal, the role of formal education in the establishment of specific ideals of being middle class and therefore modernity is closely related to reconfigurations of the family through ideologies pertaining to motherhood during the colonial period. Appropriate femininities played a key role in the teachings of Hindu reformers concerned about the lifestyles of the emerging middle class, and thus nationalist discourses highlighted the importance of mothers as emblems of Indian womanhood (Bagchi 1990; Chatterjee 1993;Walsh 1995; Sangari 1999; Kumar n.d.). In post-independence India the link between middle-class identities, schooling and parenting became even more accentuated. As the idealised and educated middle-class mother was opposed to the undesirable motherhood of the poor, middle-class parenting became a matter of upward mobility and the reproduction of inequality and therefore education (Beteille 2001; Sen 2014).

As I have argued elsewhere, the post-liberalisation period has seen a sharp rise in emphasis on women as mothers (Donner 2008a, b), this time as educators of future consumer citizens. This is partly achieved by a mother's focus on education and a renewed emphasis on maternal roles in relation to the transmission of culture.

Kumar suggests, with reference to literature on childhood and education in South Asia, that mothers are absent due to the 'unattractiveness of certain spaces inhabited by women', which 'lies' in the categories themselves: 'mother', 'home' and 'childcare' versus 'intelligentsia', 'the nation' and 'education' (Kumar n.d.). Whilst prominent in the writings on childhood per se, parenting is generally not seen as productive of class and inequality (see for example Kakar 1979, 1981; Vashanti 2003 for general approaches to childhood in India). This chapter addresses this lacuna by focusing on a group present in writings about the middle class more generally, namely, Bengali-speaking middle-class families in Calcutta/Kolkata, whose parenting trajectories are from the colonial period onwards (see for example Bose 1995).[1] Focusing on early years education, I will discuss how the ongoing processes of globalisation, locally enabled from the 1990s onwards by economic liberalisation,

[1]The data stems from two decades of work in Calcutta/Kolkata, India's most Eastern metropolis. My interlocutors belong mostly to Bengali-speaking backgrounds, and my research focused on women and their families. The main bulk of my data stems from the mid-1990s to early 2000s and was collected during extended periods of fieldwork using participant observation and semi-structured interviews. Some follow-up visits allowed me to update the material. I have only conducted a few interviews with staff in two schools my son attended whilst we were staying in Kolkata.

the emergence of a consumerist culture associated with global lifestyles and the attending neoliberal ideologies, have brought change to families. Since the families I study are middle-class families and education plays a major role in suitably modern middle-class personhood, I am focusing on early years education as a site that allows us to understand the transformation of childhood under new economic and social conditions. My argument is that in this context, the early years of childhood have taken on new, and very significant meaning, which can best be described as the extension of economic logics and the importance of 'markets' to encompass all spheres of life, beginning with the parent-child relationship. In the wake of liberalisation, education has become fully commodified and having gained access to private education, a process that middle-class parents embrace and describe through neoliberal idioms of choice and merit, the contestations that come with it causes extreme anxiety. In this chapter I will discuss how the production of global Indian citizens starts with preschool education, a novel and spreading practice that is changing the roles of the family members, but especially the role of mothers. Thus, let me sketch the historical and cultural context within which these transformations are situated.

80.2 Contextualising Early Years

Child-centred pedagogies, and therefore extensive advice for parenting, can be traced back to Western, bourgeois ideals of childhood as a period of innocence, spent in the family home – the site of 'true' relationships. Today embellished with attending ideas about developmental phases and psychological understandings of relationships between parents and children, such idealised imagers are often superimposed on indigenous models. However, Indian folk models depict early childhood as a phase of carefree enjoyment and identify logical steps in the maturation of children, which match such pedagogies in popular consciousness (Kakar 1979). Based on ideas the introduction of formal schooling for middle-class boys and – gradually – girls childhood among the Bengali middle-class changed from the middle of the nineteenth century onwards (Roy 1995). But according to my elderly informants and historical research, early childhood was until very recently still devoted to play and socialisation in the family home (Roy 1972). Clearly distinguished from the extremely rigid regime imposed on schoolchildren, at home younger members of extended families were mostly left to their own devices and enjoyed the attention of multiple carers, including grandparents, older siblings and servants.

But more recently, this picture changed drastically from the 1980s onwards, when Kolkata's Bengali-speaking middle class came under pressure as the much coveted secure employment in the public sector began to dwindle, and privatisation reshaped formal education. Significantly, parents now feel that English-medium education, earlier a privilege of the upper middle-class elite, which had been abolished by the ruling Left Front in state primary schools, is a precondition for even

less prestigious jobs. By the 1990s, all middle-class parents I spoke to were adamant that their children needed English language skills to gain employment, and all but the most disenfranchised parents agreed that early years education would provide the basis of English-medium schooling (Donner 2005). It was during that decade that private nursery schools teaching some basic English and other kinds of 'modern' attributes parents imagined would provide competitive advantages mushroomed all over the city. As will become clear, these nurseries, or 'Montessoris', are representative of an assortment of neoliberal ideas, shared between those founding and running the nurseries and the parents. They are, I argue, indicators of the change in middle-class lifestyles, aspirations and values. Invested with parental hopes for children's success in a competitive educational system, they function as institutional nodes for the association of the family and neoliberal ideologies.

The households we are concerned with here are usually extended, with more than one couple sharing living space and finances and women working together in the home. Even where an adolescent lives today in a nuclear family, they are likely to have spent some years in a joint family.[2] Before 1990, children entered formal schooling only once they were between 4 and 6 years of age. Today most middle-class urbanites send their kids to preschool, which may take pupils after their second birthday. Contrary to what has been reported in other contexts, neither the joint family nor nurseries are a matter of childcare (pace Fuller and Narasimhan 2013), as mothers are not usually in employment. Secondly, the vast majority of children spend their early years in a joint family with more than one female household member looking after them, and such 'shared parenting' is seen as highly desirable. Early years education is here clearly related to shifting parental aspirations, as the skills it enables are seen as predisposition for employment in very specific kinds of global workplaces. Furthermore, liberalisation has also brought wider cultural shifts, and the Indian middle class today is identified with a transnational lifestyle and often the dream of migrant fortunes. These new trajectories require different and novel personal traits to support claims to middle-class status, for example, confidence, English language skills and computer literacy, but above all a degree of engagement with individualism as a value. Lastly, there is the commodification of educational institutions and the proliferation of certificates to be taken into account. All these factors, I argue, have changed the way early childhood is conceptualised and experienced by children and their carers in Indian middle-class families.

[2] Guilmoto summarises the debates on family change and highlights recent demographic trends (Guilmoto 2011). The shift from joint to nuclear families among a modernising urban middle class and its implications for child-rearing has been discussed in detail by Seymour in the context of 1980s urban Orissa (1999). However, pervasive economic, regional and communal differences mean that Kolkata's Bengali-speaking middle-class families are still often adhering to patrilocality and multi-generation households.

80.3 Experiencing the Educational Environment

Whilst walking down the road in Central Kolkata, my 3-year-old son remarked 'this place is full of school children' and pointed at groups of pupils at the gates of a Central Calcutta nursery school. But equally conspicuous were their mothers, who can be found sitting next to the gates of schools, standing in the shade of a nearby tree or are waiting for their offspring to emerge from examination centres. Mothers can be seen in the morning on the way to school and afterwards when those who travelled from further afield delivered preschoolers for morning sessions, whilst away the time gossiping on the steps of a shop. They reappear in the afternoon to collect children, hurrying home before going again to deliver their kids to a tuition, music or computer lesson later in the evening. If this is a city of school children, it is equally a city of their mothers, who relate to this 'educational environment' (Jeffery et al. 2005) and have to constantly adjust to the changes education is undergoing in the post-liberalisation period.

Schooling has for long played a role in the way that early childhood was conceptualised since middle-class Indian families came under the spell of reform in the nineteenth century. During the colonial period, formal education for boys became the norm, whilst girls' mass education only really took off in the 1920s (Engels 1996). Whilst all the mothers in my interlocutors' homes had attended school, the degree to which schooling was supported by the family varied, and some had to leave after class 10.

Speaking to mothers and grandmothers of adolescents in the mid-1990s, early childhood had in their view been an important period of socialisation, explicitly achieved at home and within a family environment. In the accounts older women provided on their own schooling careers, school presented a desirable – and often still contested – achievement in many families but also became a serious concern in later childhood. Early childhood was constructed as liminal, explicitly idealised where it occurred in a multi-generational, 'joint' family that shared a residence with collaterally related households. Furthermore, parents never fail to mention that the city boasts some of the country's finest secondary schools and that the Bengali middle-class sees itself as particularly well educated. However, a few notable vernacular schools aside, provision for those not able to join prestigious schools, was often rather poor up until the 1990s. Thus, a sharp divide prevailed between those with access to the few elite English-medium schools, who would join prestigious universities, and those educated in the vernacular, whose best possible option would have been 'service' work for the government.

Today pressure on middle-class parents to provide their children with new types of knowledge has increased. Preschools, which became conduits of these changes, were first introduced by the state to help poor pupils in the transition to primary schools (Rana et al. 2002; Sreeranjan et al. n.d.). However, gradually throughout the 1990s, the idea of preschooling in privately run 'nurseries' began to encompass middle-class imaginations. Today, teachers and parents like the ones I work with have come to see early childhood as a prime period within a framework of

'developmental stages', and though critical, adopt this rationale for early years education.

The notion that children should be shaped early on is of course not new. Although folk models associate few traits beyond parental social status with young children as such, life in middle-class families was from the nineteenth century onwards marked by pedagogical intervention. How to bring up suitably modern sons (and later on daughters), and the notion that mothers need to be educated in order to so, is well established (Walsh 1995; Bose 1995). Within this discourse early childhood figured as a period when parents ought to foster very close emotional bonds with their children, and mothers were to model positive values to be inculcated in the 'perfect Indian child'. Today, early childhood is presented as a phase during which children are particularly susceptible to acquiring discipline and 'manners' – necessary for making a successful middle-class pupil. Determined by the ever present spectre of failure (see Kumar 2011), educational choices are seen as the most important responsibilities of parents. In middle-class discourses, such choices are related directly to new ideas about aspirational regimes, which link the personality of the child to status and future mobility for the family (Sancho 2012). Just as it was the parents' duty to develop a child and nurture their abilities, today the same parents are asked to create a successful citizen through an early focus on academic performance (Sen 2014). Extending the age old idiom of maternal sacrifice, mothers agree that in today's competitive urban educational landscape, one of the sacrifices to be made is sole control over a child's development.

80.4 The Preschool Environment

All Indian middle-class parents, just as many middle-class parents across the globe, fret and worry endlessly about schooling – often from the day a child starts to walk. With entry into a 'big' school constituting the moment when successful parenting is confirmed, the preparations for that day start early on in the home. Regardless of household income and set-up, admission of a son or daughter to a school of choice is a major labour of love, even where money places no obstacles in the way. To enhance the chances of success, 2-year-old boys and girls were enrolled in preschools, some locally and others in well-known larger institutions further afield.

A good number of children from more affluent homes had been practising for the 'tests', but mothers across the board assumed that at the tender age of two few truly academic means would be employed. In the school my son attended, the headmistress was meant to place particular importance on independence and children not being tutored. This did not stop parents from purchasing primers intended to teach basic skills, which were usually counting up and identifying colours and animals in English.

Here as at primary level, a standardised and highly bureaucratic procedure was implied, with mothers frequently queuing for hours to collect admission forms. In

some cases parents would be able to then 'put down' the name of the child against payment of a deposit, in others they would sign their children up for an interview.

Although only a few 'reputed' Montessori nurseries in Calcutta are oversubscribed, admission to non-selective, mostly local kindergartens, emulates procedures of prestigious schools. To parents enrolment itself was a major effort, and successful admission represented a rite of passage. In the case of prestigious kindergartens or the newly emerging nursery sections of sought-after schools, the process also involves bribes and the cultivation of patron-client relationships.

But most parents choose small establishments situated in a residential unit with large classes of up to 30 2-year-olds in one group. They are usually run by a female founder/proprietor, although there are some upmarket franchises. Whilst their quality varies, they promise to teach children basic academic skills, mainly the three Rs and English vocabulary, as well as preparation for interviews in 'big' schools. However, interviews are 'sat' between the ages of three and five, and only selective schools expect good 'Montessori' nursery education. But even less competitive schools ask their prospective pupils to come for a test during which they may be asked to produce English phrases, alphabets, numbers and songs as part of the admission procedure. Whilst this functional aspect of nursery education is highlighted by parents, longer conversations offer other more complex explanations for the rise of early years education. They mentioned old-fashioned 'civilising' agents of discipline and obedience, but they are also keen on 'development' and 'maturity' associated with the notion of 'exposure'.

Where a son or daughter was admitted for preschool education depended on three factors: the financial circumstances of the household, the place of residence and the ethnic identity of the parents. Fees in selective institutions varied between 700 and 1200 rupees per month at the beginning of the 2000s, whereas many local 'Montessori' schools located in the garage of an apartment building or the spare rooms of a family home charged less than 500 rupees. Both types may offer different 'classes' for each grade, and the age of admission can be as low as 18 months. In both settings, prospective students are carefully screened with a view to economic and ethnic homogeneity, but depending on the location, neighbourhood 'Montessori schools' can nevertheless be mixed, so that local shop keepers, doctors and the children of teachers may attend the same preschool for a whilst. Preschools may or may not employ trained teachers but always have helpers (ayahs) to deal with children's physical needs.

When speaking to parents about nursery education, it is apparent that Indian preschools are in the business of creating global – and assumedly transferable – experiences of education. These are modelled on ideals of schooling associated with the USA, Europe and South East Asia and are consumed by all newly entitled middle-class consumers. Because preschools stand for a global lifestyle that middle-class Indians are aspiring to or tie in with, these playschools emphasise their cosmopolitan character, and unlike proper schools, they do not display any Indian national symbols like flags or portraits of nationalist leaders and 'indigenous' educationists. Preschooling is very clearly about tapping into what is represented as a 'global' middle-class lifestyle, and this also implies that in a setting where subtle signifiers

of ethnic and religious community are present in almost every context, no identifiable communal or Indian imagery is associated with preschool education in these urban settings.[3] The reality of such markers of class-based appropriations of a global form does however also speak of intra-class differentiation. Although English as medium of instruction is highlighted in the way all the nurseries present themselves, the knowledge of staff might be limited, and in less prestigious places children may not be exposed to much regular teaching in English. All nurseries are using vernacular languages as well, for example, when ayas (lower-class helpers) deal with children. As teaching at this level is not standardised, many teachers do hold language degrees in Bengali but may not have been trained in English-medium environments themselves. But the nurseries manage to tie in with the demand for globalised cultural discourses by using signifiers of global culture, for example, in names like Little Angels, Morning Glory, Blooming Rose or Playhouse Montessori, which act as markers of an English-medium orientation. Furthermore, indicating 'fun' and 'playful learning', the sites draw on similar imagery – the walls are adorned with popular cartoon characters, English alphabets and number charts. Another global reference is the display of foreign-made or counterfeit toys and books which nurseries never fail to show parents and visitors as 'equipment' to emphasise their pedagogic programme.

80.5 The Ideal of the Committed Mother

The novel practice of preschooling and the resulting 'common sense' that nurseries are useful for children can only be attributed to the wider narratives that are related to the way education is perceived today. In many conversations it became clear that with admission to preschool, middle-class parents and in particular mothers feel that they are involved in the wider project of producing global graduates – Indian white-collar workers for a global market. Much has been written about the way neoliberal values, apparent in talk about choice, self-improvement and market mechanisms, are key to envisage, represent and condition these new subjects. In the Indian context, the imagery of small children going to nursery, being trained in English and computer skills and being removed from the home environment in order to be 'exposed', has all the makings of a neoliberal reframing of childhood. Nurseries are therefore prime sites for the production of such global Indian citizens and tie in with trends to reform the family found elsewhere, for instance, in China (Rofel 1994; Anagnost n.d.; Zhao and Murdock 1996; Fernandes 2000; Donner 2005). In this section, I will analyse how the reproduction of the related values relies on preschool education and subjects mothers and children to the related disciplining regimes.

The changes that the introduction of early years education has brought about affect all members of the family, but mothers are more involved in managing the

[3] This is markedly different in provincial contexts, where religious and nationalist symbols may be present.

new field of schooling than others. I have written elsewhere on how globalisation and the changing educational strategies employed by the middle class in India contest and challenge the way intra-household relationships are conducted and understood (Donner 2005).

Like Malaysian middle-class mothers studied by Stivens (1998), Bengali middle-class mothers compare their own parenting practices with supposedly 'Western' ways. This opposition dates back to the colonial period, when nationalist discourses and regional variations on the theme of motherhood produced a distinct modernist version of 'traditional motherhood' in Bengal (Bagchi 1990: 65).

But whilst institutional childcare was earlier associated with negative cultural stereotypes, 'nurseries' are today seen as markers of distinction. Earlier, those same families referred to these institutions as 'unsuitable for Indian families/children'. However, those from similar backgrounds would today send her children to nurseries 'study'. The ambivalence, still very much at the fore in the 1990s, has given way to a more or less complete embrace of preschool.

It is clear from what has been said before that nurseries represent novel ideas about education, but this does not necessarily imply a radical break with older ideas. Some of the owners are well trained, like the head of my son's nursery, who prided herself of 'real' Montessori training abroad. Consequently, she was quite cynical about parental expectations as well as the level of pedagogic involvement in other nurseries. However, mixed in with her general liberal and pedagogically framed outlook were distinctively Indian footnotes, which came to the fore when we were talking about admission procedures. Like other teachers I met, she argued that strict admission procedures, a rigid schedule and attention to even minute details in the behaviour of pupils was a must, as 'Indian children' were not usually brought up to cope with 'nondomestic environments'. In line with common ideas, the alleged lack of discipline was a result of joint family life, where mothers shunned responsibility, and children were spoilt by competing caretakers. She asserted that demographic change, and the new affluence of the 1990s, had transformed that caring environment into a space for consumerist indulgence. And finally, she explained what she was looking for in the 'interview' with 'confidence' a major virtue:

> In the interview I am looking for a well-rounded child—, I show them this pencil holder here for example, and say 'this is a key' and wait how they react, and if they react—if they shake their head or if they say no, then that is a good sign. I ask them 'what have you had for breakfast ?' and if they say chicken then that is a good sign… ()…Of course you cannot expect a two-year old to say much, what can you see in a two-year old—but I rarely make a mistake, I can tell. In general I am looking for a well-adjusted child, not for one clinging to his mummy ….

Given the rigid admission procedures, self-help books provide guidance for parents who feel under scrutiny and want to know what to expect during interviews. These manuals also bridge the gap between older ways of thinking about education which link parenting and civil virtues and the new demands of a competitive marketplace:

> An ordinary child with average intelligence and initiative, when treated with respect and dignity as an individual, and is given proper guidance & motivation by you, will turn out to be a great citizen. Here comes the best gift you can give to your child: the most wanted qualities of the 21st century. (Jain 2000: 9)

The author then provides a list of 50 traits ranging from pride to sincerity, and from courtesy to love for nature. The accompanying text emphasises that parents ‘cannot expect overnight results’ but will have to ‘spend endless hours, months, years together with hard work, sleepless nights and total dedication’ to make a child a success (Jain 2000: 19). Bringing this project back home, the author asserts that tests and interviews are in the interest of the school and the child, because the authorities ‘have to assess in what type of environment the child is growing and how much committed you are towards your child’. But, ‘no matter how much committed, and sincere the teachers are, it is the parent’s commitment and sincerity towards the child’s education that plays the most effective role as the child spends most of the time with his/her parents’ (Jain 2000: 20). Finally, parents are asked to be ‘very frank and let them know exactly how much intelligent (sic) your child is. And please don’t tell us, that you don’t know, as that will clearly indicate that you haven’t given proper time to your child’ is the slightly threatening advice provided for parents (Jain 2000: 20).

Whilst the authors of such manuals are not known to the parents, far from being regarded as naïve or misleading, such books reflect popular ideas about the role of parents in early childhood today. Mothers in particular are cast as facilitators of future success. Although the home environment of a child is checked in interviews with both parents, fathers attending the ‘interview’ for admission are assumed to engage with their children’s ‘education’ as part of their leisure pursuits. Mothers, on the other hand, cannot get away that easily, as their role in the education of children is changing drastically in line with neoliberal ideas about the person; interviews have become quite tricky. Firstly, they are asked about employment, which may go in their favour where mother is a doctor, but which will be seen as problematic with less prestigious jobs. Teachers will ask direct questions like ‘When do you come home at night?’ and ‘Who cooks for your child and feeds her?’ to express their concern about the degree of commitment displayed by a working mother. Only teachers and doctors are much sought-after brides, as they are expected to be able to combine maternal commitment with professional experience. As one of the mothers explained: ‘I was a teacher and all my sisters-in-law are teachers, you see, my in-laws were very keen that the women should be well-educated so that they can help their kids with the homework’.

Apart from employment, the interviews at preschool level explore domestic relationships which are expected to have an impact on a child’s schooling. Since siblings are increasingly rare, teachers direct their interest in social skills by zooming in on the presence of grandparents and servants in the home. Both sets of relationships may in the view of the mothers involve different moralities – grandparents are loving carers who have rights and are often seen as co-carers, though increasingly less worthy, whereas servants may be loving but represent a potentially bad influence. Where it would have been entirely acceptable a generation or two ago that a servant delivered a child to school and that a grandfather took responsibility for a child’s schooling, ‘other people at home’ and the presence of grandparents at the gates or a servant picking up a child is today often interpreted as an indicator of neglect by a mother. In the new millennium, coparenting is not promoted as a posi-

tive force in schooling as mothers are expected to act as intermediaries between the school and the home and become practically involved in every aspect of the education of their children. Where a mother does not appear at the gates daily, she is quickly cast as unmindful or worse, and her child might be seen as problematic in turn.

This moral judgement meted out to mothers is significant, as it ideologically constructs the parent-child relationship as exclusive in a setting where a nuclear family may be the exception and residential patterns differ over time (see Seymour 1999). But as one Montessori teacher argued 'Parents have to work with the children at home—we expect them to do the homework themselves, but you can always help that with reading, writing and little number games—after all parents know what the child needs and wants'. Here, as in many other cases, the discursive construction of a child's needs is linked exclusively to the parental bond, and in particular the mother, even if homework is set by the school in the first place, and arguably a grandparent might be equally well equipped to help with it. And, where it was earlier sufficient for a middle-class mother to be fairly educated, it is today necessary to buy into a whole set of ideas that highlight the parent-child unit as the main force of social and economic advancement for the family. Thus, mothers are expected to utilise the readily available labour power of servants and grandmothers, but these roles are to be channelled towards the more 'mundane' tasks in the house. In theory at least, only the mother and her child are involved in schooling, and the mother is encouraged to devote her day to school-related activities even where children spent the majority of hours either at school or at tuition.

The ideological construction of an exclusive mother-child bond in relation to education does furthermore diminish maternal input to that of a facilitator for smooth transactions between the many players in a child's education. Far from being lightweight in terms of commitment and effort, mothers are kept on their toes with constant demands and errands created by the school, many of which pose a challenge to those in employment. Furthermore, it is during these years that the values of maternal care and intimacy between mother and child are redirected away from the home environment. By ignoring other carers, the institution enforces the global imagery it tries to project and frames mothers in relation to schooling as most significant others. This exclusive relationship is often embraced by mothers, who might complain about the fact their children won't 'work' by themselves or with anyone else but use this argument to gain more control in a joint family setting.

'She will not learn anything with her father, she doesn't listen to what her grandmother says, and anyway, the old lady has no idea about Montessori education, the numbers games etc.—I am the only one, with whom she would study—and I am worried what will happen once she joins 'big' school and has to attend tuition classes' is a common refrain, here articulated by the mother of a 4-year-old girl.

Unlike the 'culture of care' (Hochschild 2003) emerging in China or many Western countries, and even other cities and communities in India, the vast majority of Bengali-speaking middle-class mothers are housewives (see Fuller and Narasimhan (2013) for a different example). Here, as in the case of some European countries, modern motherhood implies the withdrawal of women as mothers from

paid work,[4] and my interlocutors were more often than not proud to not need to seek employment. Thus, whilst a discourse on women's engagement in paid employment forms an important part of debates about liberalisation and its effects, jobs are largely confined to young women (see Ganguly-Scrase and Scrase 2008).

In spite of this, Bengali middle-class families, like most middle-class families in India, rely heavily on domestic workers, who perform a wide range of tasks related to childcare in the home. Concerns about servants feature large in the literature on nineteenth century reform (see Walsh 1995) and children in middle-class homes are socialised into their status through the experience of domestic work (Quayum and Ray 2011), whilst concerns are reiterated in popular media on a daily basis. However, in more affluent families, very young children are routinely looked after dedicated domestic workers (often adolescents), whose main responsibility is the feeding, bodily care and physical surveillance of a toddler. The management of servants, a crucial task of mothers in these families, is also a site upon which teachers regularly dispense advice. This is internalised by mothers, who, on the topic of relationships between servants and children, emphasise their 'responsible' 'use' of labour. As Sneha, mother of a 3-year-old child, recognised the presence of servants in the home might compromise the demand for the 'right environment':

> As I go along I decide what she can do and what she can't do, and obviously with my daughter going to school now there is less for her to do—she cannot read and playing with a four-year-old is more demanding than the earlier stages. It is fine as long as the children cannot really speak, but after that you have to be careful, because they will pick up foul language from them, and I don't want that.

This brief passage reflects concerns raised by teachers and mothers alike and highlights implicit assumptions about childhood and developmental stages as well as class relations, which are all mediated by the mother-child relationship.

Whilst concerns about language are not new, the importance given to educational games and knowledge about child development is of very recent origin and ties in with ideas about 'all-round', 'wholistic' and 'pedagocially' useful pastimes. Manual engagement with the world, on the other hand, is not encouraged, and, increasingly, IT-related activities take the place of games and picture books enjoyed at home.

In my research it was clear that child-rearing is seen by mothers themselves as status-production work (Papanek 1989: 103) and that mothers construct raising appropriately middle-class children in terms of a professional relationship, with knowledge acquired in routinised ways and employed in a strategic fashion to enable 'results'. In order for their engagement to be successful, their domestic environment must be adjusted to the task at hand as well, and this has required a significant reordering of 'home' as the 'world' changes.

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[4] Among middle-class women voluntary retirement schemes in the wake of liberalisation attracted working mothers: 'A tidy sum in the form of a golden handshake, time that one could finally call one's own, a more leisurely lifestyle and the option of working a few hours a day form the home were attractive propositions. At least the children would get better attention' (Bose 2003).

80.6 Pedagogising the Domestic Environment

In this section I will discuss how preschooling promotes a focus on the parental bond through discourses on a variety of knowledge and practices. Although in my conversations with mothers as well as teachers the emphasis on the domestic environment and how it can support schooling was diffuse and often contradictory, it did usually general critique what the domestic environment usually looked like and focused specifically on two main areas, namely, English language acquisition and food consumption. Both are arenas that play a huge role in the local construction of middle-class identity (Donner 2008a, b) and mark class as well as ethnic and religious differences in this multicultural setting.

With reference to the acquisition of language skills, the complex 'English-medium education' did reference a range of practices mothers felt schools now asked them to engage 'actively' in. These included educational games and the like, and some articulated their concern about these new demands which they felt they were not well equipped for, whilst others felt that they were unnecessary.

Generally speaking, whilst homework is not usually set for preschoolers, mothers are reminded by nursery teachers that they should spend time on 'useful' activities at home to support their children's development. Many of these do today include explicitly pedagogical pursuits, for example, word games in English. Interestingly, it was never stated that grandparents should take on that responsibility, instead teachers would caution against the influence of family members, who they argued may not be as committed to the individual child's education: 'It is you, who has to ensure that a two-year old is learning the English numbers, while the child herself may want to go upstairs and play hide-and-seek with the grandmothers' Tanuka's mother was reminded by a teacher when she picked up her child from nursery.

Many mothers were concerned about these demands on their time and worried that they lacked the knowledge to provide such apparently necessary kinds of engagement. These concerns stemmed mostly from the fact that they felt such activities could only be conducted and appropriately understood with a command of English. Given the close relationship between intra-class differences and English-medium education, it is hardly surprising that mothers who do not speak English feel inferior when confronted with ideas clearly related to upper middle-class educational formats. Thus, mothers mentioned that whilst they were aware of the need to employ new methodologies like 'playful' learning, they worried about having to use educational resources, in particular English books, and media. However, in practice the demands made by schools did usually not exceed young children performing simple English rhymes, the alphabets, numbers and commercial jingles.

Whilst English was coded positively, the fact that Viruru points out, many schools in urban India are multilingual environments (Viruru 2001: 134–136), was not seen as an asset by mothers or teachers alike. In some nurseries, teachers claimed that vernacular languages were banned or only used for 'extracurricular activities' whilst English was reserved for 'study' purposes. At home the way English-medium preschooling was understood varied with the background and individual capability of

mothers, most of whom expected their children to become confident in using English phrases and expressions by repeating them to them. But more importantly, very young children were encouraged to learn English by watching children's programmes on TV, which was among all mothers seen as a valuable educational resource for preschoolers.

Thus, the nursery environment was clearly marked as a place where vernacular languages needed to be disciplined, had no practical value in relation to schooling and were not supported because they were 'second best'. The acquisition of English was, on the other hand, approached as a skill and seen in rather functionalist terms. Seen as related to numeracy, literacy and IT skills, it had to be actively pursued. In this context the 'work' mothers would ideally envisage themselves doing would involve activities centred on training materials related to these areas of learning. Some households had a computer, but in all cases children were given a supply of small books and games to enhance literacy and numeracy skills, practice colour charts and instil simple moral messages in English. Most of these 'teaching aids' resembled textbooks in the way they were compiled and laid out. In this setting, parents took the position of a teacher supervising the 'work' done by the child, and they are very didactical, as this example shows:

> The child is more interested in playing rather than in studying. Hence it is very difficult for the parents to prepare him or her for school admission. Keeping this fact in mind this book includes study materials for your child which help in playing and learning at the same time. (Karn 2003: V)

Where mothers themselves had attended English-medium schools, 'learning English' was slightly more broadly conceived. Thus, they would also try and teach children tales and increasingly storybooks related to TV serials and movies to make learning English fun. In these households children were more often than not never expected to read in the vernacular. Furthermore, spin-offs of Disney productions were popular as well. Teaching the preschool child English at home does therefore include familiarity with a set of narratives and artefacts largely identified with 'Western' consumer culture, which mothers introduce as part of the preschool system.

Next to concerns about English language education, the preparation and consumption of food play a crucial role in the way Bengali middle-class family life is subjected to new discourses.

At nursery stage, the tiffin (lunchbox) presented a second important arena for parenting to be assessed.[5] Whilst preschooler only spent a couple of hours at school, even this short period warranted a snack. Mothers were very concerned with issues around those meals. Here as elsewhere, conversations about children's eating habits and their preferences, aversions and daily routines, are of utmost importance to most mothers.

[5] Allison (1991) provides an interesting comparative perspective on the compulsion to send lunchboxes with Japanese pupils. In the given context, it is the content, not the aesthetics, which serves as an indicator of identity.

As preschool is in many ways a test run for big school, the content of the lunch-box is taken very seriously and provides the stuff of endless discussions at the school gates. It is a a continuation of such conversations about children, exchanges with teachers and tales of love and betrayal between mothers and their children. Often when children were picked up from nursery school, I overheard a mother asking her child: 'Did you have your tiffin?' On opening the container she would then turn around to a wider audience and continue 'I don't know what to do, he never finishes his lunch'. Here as elsewhere, conversations about children's eating habits and their preferences, aversions and daily routines, are of utmost importance to most mothers.

In Bengali households in particular, the preparation and consumption of full meals represents the hallmark of a distinctive Bengali domesticity, and 'Bengali cooking' features as the most distinctive indicator of ethnicity among the middle classes.[6] Just as in the case of Stivens' study of the Malay middle classes, the domestication of middle-class mothers within a nationalist discourses relies on a 'cuisine' promoted as part of class-specific child-rearing practices (Stivens 1998: 62).

In Bengali middle-class families and in some cases in Hindi-speaking families as well, children's tastes in foods are taken very seriously and are actively developed by mothers and grandmothers. Once a son or daughter enters school, the preparation of a lunch box (tiffin) becomes a major signifier of 'good mothering'. For nurseries, these lunch boxes are matter of concern and are a prime area for the imposition of discipline – via discourses on practicality, hygiene and cleanliness.

Even the small neighbourhood nurseries made it a point to send notes regarding suitable foods and the right packaging to home with the students, and teachers emphasised that with respect to lunch boxes, all mothers, regardless of economic standing or education, were irresponsible and unreasonable. In return, many mothers I spoke to displayed contempt for the nurseries' policies regarding food and subverted the attempts to impose order in the school environment by sending 'inappropriate amounts' and 'unsuitable food' on a daily basis into the preschool. I would like to suggest that far from being a mere boycott of the nursery's teachers, this attitude can be read as a refusal to accept the school's messages about good and reasonable mothering and probably also contests the need for education outside the home at this young age.

When a son or daughter entered school, mothers often felt that their loving and controlled 'education of the senses' was disrupted. Furthermore, they had to rearrange the whole routine around the lunch taken in the nursery. Anxieties about social status, urban environments and the contaminating effects of modernity, which are translated into negative discourses about eating 'outside' more generally, were implied in talk about lunch taken at school. One major concern was the widespread and very culturally appropriate fear of contamination, which was raised in discussions through debates on where, when and with whom lunch was taken at school. The children I spoke to did often see lunch as enjoyable occasion for chat, mucking

[6] Janeja provides a detailed discussion on how 'everyday' food is constructed as productive of Bengali persons and culture (Janeja 2009).

about and for complicated exchange relationships. The mothers, on the other hand, saw this arrangement in terms of contamination, social boundaries and adequate care: they worried about the cleanliness of staff, the floor and mats and the ability of different children to feed themselves (many Bengali children are fed by hand until at least 3 years of age). But most importantly, they worried about intercommunity interaction and the resulting food contamination, which needs to be understand as a ritual, rather than hygienic concept deeply embedded in South Asian ideologies.[7]

Although teachers acknowledged that children needed a snack and depicting lunchtime as an important opportunity to teach children manners, sharing and tidiness, they felt that a nursery could not channel the various meanings of food and the related maternal transgressions very well. Moreover, increasing consumerism tended to aggravate the problem of lunch boxes through the introduction of new, and in the view of teachers, highly competitive, foods, marketed by multinational companies. Teachers and mothers alike felt that such foods, starting with the ubiquitous Maggi instant noodles, made the children greedy and seemed to contain inappropriate messages about being a child related to consumption. However, over the last 20 years, a huge number of processed and commercially available foods associated with new middle-class lifestyles have entered homes and schools. Today, even very young middle-class children demand snacks advertised on TV or in the shops for their lunch boxes, and mothers need to accommodate such commodities, as they have become an important part of symbolically constructing and appropriately constructing ideal middle-class families (Donner 2008b).

80.7 Modern Times

Far from being seen as a necessary evil, preschools are largely conceived as an environment that opens opportunities, nurtures and creates desirable traits and skills and is in that way – probably even more so than further education, which can rarely be entirely divided from state interference and day-to-day politics – provides the most purified institution associated with markets, and therefore desirable future careers. On the surface preschooling, it seems, brings all the positives of neoliberal ideologies, including the vocabulary of opportunities, exposure and choice within reach – as it is expected to provide social skills and a 'well-rounded personality' not produced by the home environment. However, it is also the case, as the example of the lunchbox shows, that the practices and discourses that reproduce the wider field of preschooling beyond the nursery devalue a number of cherished relationships,

[7] This is most obvious with reference to caste and religious community amongst Hindus, who traditionally follow strict rules where different groups are expected to be in close contact and food might therefore be contaminated. In urban, secular settings, it is common to avoid such concerns by providing less easily contaminated food stuff, including dry foods, pre-packaged foods and stick to vegetarian meals. This explains why lunchboxes of Bengali children will never contain rice, the main staple food in the family, as it is said to be easily contaminated by touch.

values and institutional arrangements. This is at the same time a continuation of older tropes, for example, where mothers and their children are not disciplined enough, but also new challenges where mothers need to 'smarten' up and learning includes 'exposure' beyond the family. If this new approach rests on the promotion of early learning institutions as 'just like home' to make early separation of mother and child more palatable, this implies not so much that nurseries become more homely but that homes become more like coaching stations. The new maternal ideal is not only a teacher, but a mentor as well, who takes full responsibility and extends opportunities for learning of a single child to encompass new areas of knowledge and engagement.

The need for children from middle-class families to attend nursery schools is no longer a recent trend. Neoliberal ideas about the market, which shape parenting practices, reflect the experience of mothers and their children and evoke larger aspirational images of globalisation and India's integration into global middle-class culture. These depend on discourses about upward mobility, which mothers and their families can enable and have internalised. The new focus on early years is therefore no longer merely reflective of competition for entry into secondary schools, though this is very important in the Kolkata context as well. Unlike the discussions of schooling in general, preschooling suggests an embrace of privatisation and services, and its provision is always discussed from a consumer point with a focus on the individual learning programmes on offer.

Furthermore, within the field of nursery education, long-term research like mine can trace changes and the effects of neoliberal ideologies. In many instances, earlier mothers would focus mostly on behavioural aspects of early years education, with the more educated mothers emphasising the preschool's importance in establishing discipline. However, today, such a focus on behavioural patterns is intimately related to neoliberal ideologies of entrepreneurial selves – a discourse that links character traits including smartness, self-assured behaviour and 'exposure' to skills including English language competence. Clearly, nursery education feeds into the new enterprise culture embraced by the Indian middle class, which links education, youth culture and consumer identities to specific kinds of labour in the global economy (Goopta 2013).

Accordingly, mothers chose a mix of strategies to help their children, involving classic root learning at home and learning is fun educational toys instilling the same kind of knowledge. Indeed, since preschool education has become synonymous with Montessori, which some of the better-educated mothers identified as 'child-centred' learning, a more labour-intensive type of parenting akin to home schooling has emerged. Thus, today mothers educated to degree level and from upper middle-class families were mostly conversant with the educational tools and the 'method' employed at the preschool their child attended, which was constructed as the opposite of 'rote learning' and discursively represented in terms of individual development. Here, to be a modern mother clearly implied a critique of the old regime but was not translated into actual activities through which a son or daughter acquired skills and knowledge beyond a set of already popular skills. Enhanced through the common practice of recommending specific material, mothers could easily be con-

vinced that in order to become competent consumers, they themselves had to ‘learn’ about such child-centred approaches education.

80.8 Conclusion

Earlier on I had identified processes of ‘nationalising a foreign product’, in the process of which early years education becomes part of wider middle-class formation in an era of economic restructuring (Fernandes 2000: 615; Donner 2006). Now, two decades after I first started my work with middle-class mothers and their families, it has become clear that framing these processes through a nationalist lens does limit the analysis of the class-based aspects shaping them, which can be much better observed when middle-classness is compared across the globe.

As research on places as socially diverse as China and Fiji (Naftali 2010; Brinson 2011) suggests, early years education and primary schooling are prime sites for the negotiation of neoliberal values. This is due to the spread of modern pedagogies, including the association of specific age groups with developmental stages and the psychology of child development. However, these may be key words promoted by teachers, but as my material suggests, parents interpret them in a much wider framework. Thus, the idea of developmental stages and special needs in early childhood, so closely associated with notions of ‘play’, ‘fun’ and the acquisition of ‘social skills’, is framed by these middle-class parents in terms of neoliberal demands of self-regulation, self-assertion and flexible work places. In the Indian context, as in many other contexts, key values that nurseries promote are interpreted in terms of competition and the imagery of global markets in education and employment. Consequently, as household strategies were directed towards future upward mobility for the family, children are seen as a necessary investment, and their schooling becomes a paramount concern of parents. Thus, whilst there is a high degree of intra-class differentiation apparent, the symbolic dominance of specific careers and global lifestyles cuts across regions and unites this section of the Indian middle class with others elsewhere in the aim of producing migrant workers for global industries.

Thus, what Chatterjee and Riley argue in relation to family planning, namely, that a neoliberal market logic has entered even the most intimate relationships, applies to early years education as well: ‘While individual’s happiness is linked to material and physical, rather than spiritual, well-being, the materialism promoted has a recognizable Indian, local and middle-class character’ (Chatterjee and Riley 2001).

Interestingly, however, where preschool education has elsewhere allowed for an insertion of the state into home lives (see Naftali 2010), with the deliberate objective of reforming parenting to fit wider developmentalist agendas, the new demand for early years education in India is closely related to the privatisation of services and consumerist middle-class identities. Within families, these wider frameworks are realised step-by-step as part of multiple decisions over children’s education, which

on the one hand are important and far reaching but need to be integrated into household strategies beyond the child and his or her parents. Here, older idioms, for example, the opposition of the joint and the nuclear family, the controversies about servants and grandparents interfering in education and lastly the idea that early childhood should be carefree, need to be considered and reinterpreted as well, before they are inserted into such new discourses.

Clearly, a market-driven educational provision and a rhetoric of choice determine what may appear as an opportunity and the shape global Indianess will take in the minds of children and parents alike. Thus, the provision of nursery education brings a huge number of outside processes to bear on the family, through the highlighted relationship between mothers and their children.

The emphasis on global markets is reflected in the way in which preschool education is helping to reorganise the mothering practices in an environment where downward social mobility is common, increasingly 'the idea of early childhood represents a 'latent potentiality' that must be seized' (Anagnost n.d.). Mothers and teachers are not alone in making this child/citizen happen. Increasingly their efforts are supported by expertise and services, which in the absence of state institutions are dispensed more often than not by commercial providers and a variety of often self-styled specialists. Their suggestions, predictions and solutions address the anxieties of their customers, and affect more and more middle-class children. Furthermore, the making of middle-class persons is markedly communalist (i.e. identifiable Hindu) here as in any other regions. Where in the Malay example Islam and state-sponsored religiosity is featured at school, regional and language-based identities are emphasised in Bengal. But apart from Hindu nationalist discourses (Benei 2008) many scholars have emphasised children as pupils have become the subjects of multiple practices resulting from liberalisation policies. Preschools, with their easily interpreted idioms of 'personhood', are a perfect site for this. In Kolkata, as middle-class families are anxious to create a 'global lifestyle' in the city itself, this desire often sits uncomfortably with local idioms of appropriate personhood. Preschools are part of this framework and are promoting a neoliberal ideology of entrepreneurial selves and self-regulation, which 'reorganise(s) the family from within' (Anagnost n.d.). Considering children as part of wider families enables us to see how preschools make neoliberalism, and its prioritisation of markets as productive of social relationships, tangible in the lives of a great number of people.

References

Allison, A. (1991). Japanese mothers and obentōs: The lunch-box as ideological state apparatus. *Anthropological Quarterly, 64*(4), 195–208.

Anagnost, A. (n.d.). *Is the fatherland really a motherland?* Position paper for "From Development to Cultural Nationalism in Asia".

Bagchi, J. (1990). Representing nationalism: Ideology of motherhood in colonial Bengal. *Economic and Political Weekly*, *25*(42&43), WS 65–71.

Banerjee, S. (1995). Hindu nationalism and the construction of women: The Shiv Sena organises women in Bombay. In T. Sarkar & U. Butalia (Eds.), *Women in right-wing movements: Indian experiences* (pp. 216–232). London: ZED.

Benei, V. (2008). *Schooling passions: Nation, history, and language in Contemporary Western India*. Stanford: Stanford University Press.

Beteille, A. (2001). The social character of the Indian middle class. In I. Ahmad & H. Reifeld (Eds.), *Middle-class values in India and western Europe* (pp. 73–85). New Delhi: Social Science Press.

Bose, P. K. (1995). Sons of the nation: Child rearing in the new family. In P. Chatterjee (Ed.), *Texts of power* (pp. 118–144). Minneapolis: University of Minnesota Press.

Bose, B. (2003, December 29). Working women: Decline in urban sector linked to VRS. *The Statesman*.

Brison, K. (2011). Producing "Confident" children: Negotiating childhood in Fijian kindergartens. *Anthropology & Education Quarterly, 42*(3), 230–244.

Chatterjee, P. (1993). *The nation and its fragments: Colonial and postcolonial histories*. Princeton: Princeton University Press.

Chatterjee, N., & Riley, N. (2001). Planning and Indian modernity: The gendered politics of fertility control. *Signs, 26*(3), 811–845.

De Neve, G., & Donner, H. (Eds.). (2006). *The meaning of the local: The politics of space in India*. London: Routledge.

Donner, H. (2005). Children are capital, grandchildren are interest: Changing educational strategies, women's work and kin-relations in Calcutta middle-class families. In J. Assayag & C. Fuller (Eds.), *Fragments of globalisation* (pp. 119–139). London: Anthem Press.

Donner, H. (2008a). *domestic goddesses: Maternity, globalization and middle-class identity in contemporary India*. Aldershot: Ashgate.

Donner, H. (2008b). New vegetarianism: Food, gender and neo-liberal regimes in Bengali middle-class families. *South Asia, 31*(1), 143–169.

Engels, D. (1996). *Beyond Purdah?: Women in Bengal, 1890–1939*. London: SOAS Studies on South Asia.

Fernandes, L. (2000). Nationalising 'the Global': Media images, cultural politics and the middle-class in India. *Media Culture & Society, 22*(5), 611–628.

Fuller, C. J., & Narasimhan, H. (2013). Marriage, education, and employment among Tamil Brahman women in south India, 1891–2010. *Modern Asian Studies, 47*(1), 53–84.

Ganguly-Scrase, R., & Scrase, T. J. (2008). *Globalization and the middle classes in India: The social and cultural impact of neoliberal reforms*. London: Routledge.

Goopta, N. (Ed.). (2013). *Enterprise culture in neoliberal India: Studies in youth, class, work and media*. London: Routledge.

Guilmoto, C. Z. (2011). Demography for anthropologists: Populations, castes and classes. In I. Clark- Decès (Ed.), *A companion to the anthropology of India*. Chichester: Blackwell.

Hochschild, A. R. (2003). *The commercialization of intimate life: Notes from home and work*. Berkeley: University of California Press.

Jain, M. (2000). *How to prepare your child for school admission test and better education for better future*. Calcutta: Good Book Distributors Publishers.

Janeja, M. (2009). *Transactions in taste: The collaborative lives of everyday Bengali food*. Delhi: Routledge.

Jeffery, R.; Jeffery P. and Craig Jeffrey 2005.Parha'¯ıkam¯ahaul?': An educational environment in Bijnor, UP.

Kakar, S. (1979). *Indian childhood: Cultural ideals and social reality*. Delhi: Oxford University Press.

Kakar, S. (1981). *The inner world: A psychoanalytical study of childhood and society in India*. Delhi: Oxford University Press.

Karn, N. (2003). *All colour children's guide to school admission tests*. Delhi: Adarsh Books.

Kumar, N. (2011). The middle-class child: Ruminations on failure. In A. Baviskar & R. Ray (Eds.), *Elite and everyman: The cultural politics of the Indian middle classes* (pp. 220–245). Delhi: Routledge.
Kumar, N. (n.d.). *Mothers and non-mothers: Expanding the discourse of education in South Asia*.
Naftali, O. (2010). Recovering childhood: Play, pedagogy, and the rise of psychological knowledge in contemporary urban China. *Modern China, 36*(6), 589–616.
Papanek, H. (1989). Family status production work: Women's contribution to social mobility and class differentiation. In M. Krishnaraj & K. Chanana (Eds.), *Gender and the household domain: Social and cultural dimensions* (pp. 97–116). Delhi: Sage.
Qayum, S. Q., & Ray, R. (2011). The middle classes at home. In A. Baviskar & R. Ray (Eds.), *Elite and everyman: The cultural politics of the Indian middle classes*. Delhi: Routledge.
Raman, V. (2003). The diverse worlds of Indian childhood. In M. Pernau, I. Ahmad, & H. Reifeld (Eds.), *Family and gender: Changing values in Germany and India* (pp. 84–110). Delhi: Sage.
Rana, K., Abdur, R., & Sengupta, A. (2002). *The delivery of primary education: A study in west Bengal*. Delhi: Tlm books.
Sreeranjan, & Awathi, A. S. (n.d.). *Early childcare and education: Indian Perspective*. http://www.unesco.org/education/WCECCE/presentations/Sheeranjan-Awathi.pdf. Accessed 29 Feb 2014.
Rofel, L. (1994). Liberation, nostalgia and a yearning for modernity. In L. Gilmartin, G. Hershatter, L. Rofel, & T. White (Eds.), *Engendering China: Women, culture and the state* (pp. 226–249). Cambridge: Harvard University Press.
Roy, M. (1972). *Bengali women*. Chicago: University of Chicago Press.
Roy, G. C. (1995). The Pathshala and the school: experiences of growing up in nineteenth and twentieth century Bengal. In R. K. Roy (Ed.), *Mind, body and society: Life and mentality in colonial Bengal* (pp. 195–231). Calcutta: Oxford University Press.
Roy, A. (2003). *City Requiem, Calcutta: Gender and the politics of poverty*. Minneapolis: University of Minnesota Press.
Sancho, D. (2012) 'The year that can break or make you': The politics of secondary schooling, youth and class in Urban Kerala, South India. Ph. D thesis, University of Sussex.
Sangari, K. (1999). *Politics of the possible: Essays on gender, history, narratives, colonial English*. Delhi: Tulika.
Sarkar, T. (1995). Heroic women, mother goddesses: Family and organisation in Hindutva politics. In T. Sarkar & U. Butalia (Eds.), *Women in right-wing movements: Indian experiences* (pp. 181–215). London: ZED.
Sen, H. (2014). *Time-out' in the land of Apu: childhoods, Bildungsmoratorium and the middle classes of urban west Bengal*. Wiesbaden: Springer.
Seymour, S. C. (1999). *Women, family, and child care in India: A world in transition*. Cambridge: Cambridge University Press.
Stivens, M. (1998). Modernizing the Malay mother. In K. Ram & M. Jolly (Eds.), *Maternities and modernities: Colonial and postcolonial experiences in Asia and the Pacific* (pp. 50–80). Cambridge: Cambridge University Press.
Viruru, R. (2001). *Early childhood education: Postcolonial perspectives from India*. Delhi: Sage.
Walsh, J. (1995). The virtuous wife and the well-ordered home: The reconceptualisation of Bengali women and their worlds. In R. K. Ray (Ed.), *Mind, body & society: Life and mentality in colonial Bengal* (pp. 331–363). Calcutta: Oxford University Press.
Zhao, B., & Murdock, G. (1996). Young pioneers: Children and the making of Chinese consumerism. *Cultural Studies, 10*(2), 201–217.

Chapter 81
Creatively Enhancing Community Transformation Through Work with Children and Families

Fernanda Coelho Liberali and Alzira Shimoura

Abstract This chapter discusses community transformation through a teacher education project, Learn through Playing, which works with young children and their families in some deprived neighborhoods of São Paulo, Brazil. It examines how young children, parents, teachers, principals, coordinators, even teacher educators, and researchers develop collective intentionality based on a shared object which is created and recreated throughout different interlinked activities that compose the project, i.e., its Creative Chain. This creation of a shared intentionality demanded that each activity created the meaning of a reading community as an object of the activity (Vygotsky. In M. Cole et al. (Org.), Mind in society. Harvard University Press, Cambridge, 1930/1978). In each activity, subjects presented their points of views, support, explanations, descriptions, definitions, and performances as part of a responsible community that developed means of going beyond the previous limitations of their own ideas. Therefore, the transformation occurred not only in terms of individuals changing their ways of seeing and participating in the world through reading but also by means of the transformation of the collectivity as a reading community. The importance of thinking about the transformation of collectivities, and not simply about changing or refocusing immediate activities in which individual subjects are involved, was central for the development of human potential through a culture of de-silencing and understanding which generates potential for community transformation (Freire. Pedagogia do Oprimido. Paz e Terra, Rio de Janeiro, 1968).

Keywords Community transformation • Children • Families • Creative chain

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81.1 Introduction

In the deprived contexts of many Brazilian public schools, young children, parents, teachers, principals, coordinators, and even teacher educators and researchers feel deprived of the possibility of creating conditions for a better future. Thus, a culture of alienation and domestication leans toward dehumanization and reduction of human potential (Freire 1968) into reproductions of uncritical conscience and the proliferation of the practice of repeating words, without understanding their meaning.

In contrast, Freire (1968) suggests a culture of de-silencing and understanding which generates potential for transformation. In this culture of dialogue, people take charge of seeking the "emersion of conscience, which results in critical insertion in reality" (Freire 1968, p. 80). In this problematizing approach to life, the practice of freedom and dialogue needs to emerge. In a dialogical basis, an internally persuasive discourse, as proposed by Bakhtin (1934–1935/1998), argues that multiple voices can be interwoven in a context in which questioning becomes essential because it arises from disturbances and/or needs and is associated with the subjects' actions and reflections. It may involve enhancing community transformation because it presupposes that, through multivoicedness, subjects will constantly review their own ideas, consider those of others, and create possibilities for creative production of the world.

The point of departure for this chapter is the understanding that working with small children in their lived environments should contribute not only for the child but also for the families as participants in compound and historical social practices. The study centers on small children in poor communities of the city of São Paulo, Brazil.

São Paulo is a leading financial, industrial, and commercial center with important cultural, economic, and political influence, both nationally and internationally. However, its socioeconomic problems are huge: high crime rates, rampant drug use, poor public health services, very low achievement in education, lack of green areas, homeless squatting, precarious conditions of the sewage network and in the disposal of solid wastes, soil contamination, air and water pollution, and sound, visual, and electromagnetic pollution.[1]

In this context, communities are threatened and deprived of basic needs and demands. Many young children grow up on the streets, apart from all the riches that the city offers to an elite few. In this unfair context, families whose parents had a very limited education struggle to educate their children. Local governments (municipal and state) are responsible for establishing free educational programs through the guidelines and funding supplied by the federal government. In São

[1] Sources: http://www.cbd.int/authorities/casestudy/saopaulo.shtml#threats; http://www1.folha.uol.com.br/saopaulo/864360-dez-problemas-atormentam-toda-a-cidade-de-sao-paulo.shtml; http://www1.folha.uol.com.br/saopaulo/1112587-datafolha-revela-os-11-principais-problemas-da-cidade-para-eleitores.shtml (11/11/2013).

Paulo, about 770 schools serve kindergarten children, aged 0–5 years, the focus of this chapter.

This chapter discusses how community transformation is enhanced through the collaborative work of researchers, educators, children, and families. The focus relies on the Learn through Playing Project, part of the Acting as Citizens Program – PAC,[2] a program for school communities' development in São Paulo, Brazil. The importance of thinking about the transformation of collectivities, and not simply about changing or refocusing immediate activities in which individual subjects are involved, is essential for the project since the goal is the intentional creation of communities for reading with adults and with children. In this sense, the project focused on how the participants make cultural practices explicit and include adults and children in creating environments for community enhancement.

In this chapter, children are seen as constituting themselves through the relationship they establish with others and with the environment and that their psychological development and the development of their identities are directly related to the cultural-historical-social context in which they are inserted. While being influenced by the context they are in, they also contribute to transform this context. Therefore, a collaborative environment can be seen as a tool to involve and enhance families and community's transformation.

Children's development is then understood from the perspective of their participation in everyday activities and in situated interplays with others. Vygotsky (1934c) adds that one can only understand the human mind historically because it is created and produced through the participation in and through the internalization and externalization of historical-social forms of activity. In this manner, the subject's individual constitution is inseparable from his social, cultural history.

This can be better understood in Vygotsky's explanation of the importance of cooperation in young children's development:

> (…) a completely unique form of social relations develops between the child and the adults around him. Specifically owing to the immaturity of biological functions, all of what will later be in the sphere of individual adaptation of the child and will be done by him independently now can be done in no other way than through others, in no other way than in a situation of cooperation. Thus, the first contact of the child with reality (even in carrying out the most elementary biological functions) is wholly and completely socially mediated. (Vygotsky 1934c, p. 215)

As stated, children's relationship and cooperation with adults may create multiple possibilities of becoming for this children who, in turn, may set grounds for adults to reorganize their ways of being and acting in the world through them. They can relate to each other, constituting and transforming themselves mutually.

In order to better understand this interdependent perspective, one needs to go beyond the individual perspective to take into account the social aspect of the experience, in other words, what Vygotsky defined as perezhivanie:

[2] PAC – Programa Ação Cidadã.

> The essential factors which explain the influence of environment on the psychological development of children, and on the development of their conscious personalities, are made up of their emotional experiences: [perezhivanie]. (Vygotsky 1934b, p. 338)

Rene van der Veer and Jaan Valsiner, editors of the English translation of the text (Vygotsky 1934b: 354), give this explanation for the word perezhivanie:

> The Russian term perezhivanie serves to express the idea that one and the same objective situation may be interpreted, perceived, experienced or lived through by different children in different ways. Neither 'emotional experience' (which is used here and which only covers the affective aspect of the meaning of perezhivanie), nor 'interpretation' (which is too exclusively rational) are fully adequate translations of the noun. Its meaning is closely linked to that of the German verb 'erleben' (cf. 'Erlebnis', 'erlebte Wirklichkeit').

In this chapter, the discussion lies on the perezhivanie experienced by participants. In other words, it is based on the interpretation of how the "changing child life in a changing world," as stated by Højholt (in this section), changes this world. In this sense, not only the children and their transformation will be important but the transformation of all those connected to them. In this sense, the family, for example, becomes an essential aspect of children's and society's development. The experiences the children have with the world and the way these influences interfere back in the lives of their families is a way to trigger community transformation.

This chapter focuses on a project developed to trigger community transformation through working with children and their parents at nurseries and preschools in very deprived neighborhoods of São Paulo Municipal Schools.

81.2 The Learn Through Playing Project

Since their beginning, schools for children under five in Brazil have emphasized "minding" so that parents were free for their own activities (Kishimoto 2005; Barbosa 2006; Faria Filho and Veiga 2000; Guerra 2010). Thus, there wasn't much demand for professional qualification for the workers in these educational institutions. However, in the 1960s, due to a series of social movements, people started questioning this. In response to that, educational theorists began to discuss early childhood education as a child's right and a state duty, and cities transferred the responsibility for young children from health departments to educational ones. This demanded that professionals in charge of taking care of young children had university degrees in education, and educational theorists began to discuss early childhood education as a child's right and a state duty. This created a demand for the professionalization and the development of educators to work with young children.

Since 2007, the Learn through Playing Project, which is the focus of this chapter, has been developed in the public nurseries and preschools of the deprived neighborhoods of São Paulo and aims to develop possibilities for researchers, principals, coordinators, teachers, young children, and parents to use play (Vygotsky 1930/1978) as the locus for development. This project is part of the Acting as

Citizens Program (PAC), an Extramural Program developed by PhDs, Doctoral students, Master students, undergraduates, participants, and fellow researchers from the Pontific Catholic University of São Paulo (PUC-SP). Its major topic is creating and planning activities that will "educate" the whole community. The project (Liberali and Shimoura 2011) includes a:

> Principals' and Coordinators' Segment for transforming principals and coordinators into teacher educators who support teachers' projects with students and the community.
>
> Children's Story Telling Segment for developing teacher support teams (Daniels and Parrilla 2004) to develop ways of playing that use storytelling as a means of community development.

From 2010 to 2012, the project focused on the development of reading as a general aim of the Municipal Secretariat of Education. The objective was to promote reading communities through activities for sharing reading. Thus, a critical and collaborative position of the researchers as well as of the other participants as apprentices throughout the project was necessary (Magalhães and Fidalgo 2010).

In 2010, the Learn through Playing Project focused on the Municipal Secretariat of Education's general demand for the development of reading as a goal of the whole community, including coordinators, principals, teachers, students, and parents. The year's objective of the project was to develop a reading community through activities for sharing reading, such as soiree, storytelling sessions, comments on movies, book sessions, and book clubs, among others. This objective derived from the research group's understanding that in poor areas where the young children in this project live, people in general are deprived of the possibility of fulfilling their potential as culturally engaged subjects who can experience reading as a means of community participation. In these places, it is commonly acknowledged that reading is a means to get a job, to take the bus, and to vote but not as a means of becoming a full member of society, as a way of "being for oneself," as Freire puts it (1968).

Essentially, there were two main contrasting positions at the beginning of 2010: the idea of connecting reading to a cognitive process and the idea of reading as participating in the community's social reading activities. This contradiction was chosen as a way of contributing to the development of a collective object that should permeate each of the initial activities that composed the network of the project. Accordingly, the researchers proposed a chain of activities in which the contradiction could be understood, analyzed, evaluated, reconstructed, practiced, and reformulated so that a collective meaning would develop about what reading was. In this sense, the contradiction, transgression, recreation, and transformation of these initial views came out as an imagined object where the multiplicity of ideas was its main tools and opportunities for the clash of senses as locus. In these situations, subjects were invited to present their points of view on the importance of reading and sharing reading by the posing of controversial questions, supporting their statements, and performing in situations.

81.3 The First Movement in the Chain: Preparatory Meetings

At the first planning and workshop of the 2010 semester, participants wrote the agenda (i.e., citizen attitude to be focused on, books to be read, and materials to photocopy) they used to organize their plan for the year. For each item, they discussed what they could choose and how they would deal with it in the first meeting with school participants. In the excerpt attached (Appendix 81.1), researchers discussed how they were going to deal with the theme of the year for the project. In 2010, they decided to follow the Municipal Secretariat of Education's focus on developing reading.

Anticipating a possible difference in the interpretation of the Secretariat and that of the research group, the general coordinator, F, became the one to question the choice of theme and the way to conduct it. The researchers also pointed out the problems not having had a contact in everyday life with the topics participants would deal with. To prepare for that, the researchers listed ways of thinking about reading in contexts of activities that could become constitutive of the spheres of circulation (Bakthin 1953) of the whole community. This triggered the first contradiction among researchers and sparked the expansion of the possibilities of understanding among researchers (see excerpt in Appendix 81.1).

Two different positions were discussed for the 2010 theme. One assumed that the Secretariat of Education had a demand – working with reading skills – which the researchers were supposed to fulfill. This objective had to be appropriated by the researchers once the project was in tune with the needs posed by the Secretariat to develop cognitive skills. The other position was based on a reorganization of the demand for the development of reading skills as necessary, but it focused on its reconceptualization, supported by the revaluation of the role of education as decided by the research group. In this sense, any project, developed within PAC, had to aim at developing the community and at emphasizing recognizable situations in which the community could effectively trigger transformation in their ways of acting and being, in overcoming oppressive circumstances.

The researchers deciding on their main theme for the project focused not on deciding who was right or wrong or stating which idea was the best but on how to be coherent to the aims of the project and how to combine different positions in order to better achieve the intentional objective of the group: the transformation of the whole community and not only of individuals or their cognitive potentials. This was going to be the collective object of the group, the collective intention leading the project throughout the year. Therefore, the discussion would delimit all the procedures for the workshops and the artifacts used to initiate the chain.

Participants thus needed to have what was considered the ideal form of the product: what all participants were aware of and in search of. It was through argumentative discussion such as this that participants presented, opposed, supported, and combined their positions in order to create shared objects (e.g., E: But wasn't it focused on reading? F: Yeah, but this topic came from the Secretariat of Education).

When presenting controversial questions, different positions, questions, counterarguments, examples, oppositions, explanations, acceptances, agreements, restrictions, support, suggestions, and conclusions, they created the opportunity for new ideas to arise. Because participants presented their positions with a strong attention to the way they would work with the concept in the development of the educators (teachers, coordinators, principals), there was the opportunity to listen and contrast ideas. The intentionality of transforming community was expressed in the way they introduced the connection to the work to be developed in the school community. Participants were clearly not passive in the face of reality and, although contradictions occurred, they were essential triggers of the development of the group.

Accordingly, many of the activities suggested and described became part of the tasks that guided the organization of the educator's workshop.

81.4 Increasing Collective Awareness for Shared Responsibility

During the second workshop after the preparatory meeting (previously discussed), researchers invited teachers, principals, and coordinators to perform as if they were participating in a Poetry Clothes Line Soirée. The conductor of the workshop instructed participants to pretend they had been invited to a soirée by a friend and that they decided to go and enjoy it as much as possible. The conductor of the workshop also direct group members that they should get in the mood of the situation by forgetting they were at the university and by imagining they were at the host's house. The performance took place in a different room that was organized with poems hung from clothes lines (see photo below) where people could move around and read. The soirée involved reading poems aloud, mentioning feelings and emotions that some of the poems triggered. By the end of the soirée, some participants even cried while reading or dedicating the poems to one another. Participants were then asked to return to the previous room to discuss the event performed (Fig. 81.1).

Fig. 81.1 Workshop: poetry clothes line – 2010

The conversation in Appendix 81.2 is part of this discussion. In this conversation there was a conflict generated by the need to express the emotional and cognitive impact of the performance on each person. The discussion of the performance emphasized the opportunity for participants not only to experiment with a situation of sharing reading but also to critically reflect about its importance to them. When discussing the activity, participants not only said what they thought about it but also offered opinions about whether they liked it or not. They told stories from their personal life, presented comparisons, discussed generic inferences about needs and wants of their cultural group, and presented their impressions and feelings. This generated a spectrum of possibilities to draw from in creating their understanding of what reading is and how they could deal with it. They also had a chance to recreate the meaning of a soirée and of this reading experience in their lives. Moreover, they dealt with the influence it could have on them as a basis for reflecting about how this activity can affect their young children.

When one of the educators (E4, turn 15) described her preschool experience and everyone congratulated her, they might also have been reflecting about how such events and experiences could create an important impression on their own students. When reporting on her childhood experience with reading a poem aloud and the rejection she suffered in that context, the educator found support from her colleagues, expressed by their questions, cheering up, and applause. According to the educator, the performance served as a moment for her to overcome the trauma she had once faced.

15E4: May I speak? I did not know what a soirée was. I went there... And you said we could enjoy it, and maybe not, then I was more comfortable. I thought, “I’ll see what it is.” And I began to read. And actually, I was enchanted by it, but I know that this was because I remembered an episode from my preschool days. I’d be the person who would read to all children. Only I could not read well at that time because I could not get the cadence, could not put the letters together faster. So it was a friend of mine who read for the group.
16Q: And you remembered, right?
17E4: So to me at this time was: now I’ll read it!

Because it took her through a real experience and not only through a narrative of a once lived experience, the effect of this experience is stronger than the simple presentation of information. Through play, as pointed out by Vygotsky (1930), people have a chance to go beyond who they are and can transform who they will be. In the continuation of this discussion, some participants pointed out how important it would be for their students to participate in activities such as what they had just experienced.

Once again, the intentionality of developing a reading community, in which reading is a source of cultural participation and enjoyment with others, becomes reinforced by the experience. The collective discussion of the performance and the subjective experience of exchanging views, ideas, and feelings about it contributed to the creative thinking of the participants. New senses were produced about reading activities through the sharing of a collective meaning about the experiences they had

together. Because they used the performance as an arena to experience the concept of "developing a reading community" and as the basis for discussing it, they could deal with the concept in different formats that, in turn, gave rise to different perspectives or voices that could echo possibilities of meaning construction for the children as well.

81.5 Engaging and Transforming

At each participating school, teachers, coordinators, and principals organized their own specific sub-projects, based on the theme of the Learn through Playing Project: developing a reading community through shared reading activities. As a guiding motive that directed and gave intentionality to and organized the actions of the project participants, the theme was enacted with the young children through performances that played with an interesting reality that was not necessarily part of their everyday lives. In the examples to follow, the school chose to work with book club reading and going to a library.

As part of the project, the teacher of a group of 4 year-olds took them to a patio where she read to them using some puppets. The young children sat on a blanket (see photo below) and pretended to be participating in a book club at a park. This is a very unusual activity for young children from the impoverished communities in São Paulo. Before reading, the teacher asked if anyone already knew the story of Cinderella. All young children said yes in a chorus. After that, she asked which character they liked best. Next, the teacher started reading and stopped at certain parts to create suspense and to question students about certain aspects of the story, just as if they were participating in a real shared reading event (Fig. 81.2).

In this example, children could experience in a play format the context of the situation and the pleasure and the challenge of being at a shared reading event. They

Fig. 81.2 Reading at the patio – 2010

also learned how to behave and what to do and expect once the teacher discussed with them afterwards about their behavior and the way they acted during the reading performance. The performance and the conversation about it were practical experiences and reflections that turned out to support the value of such shared reading activities. By enacting the book club activity and discussing it, the young children could create new meanings about reading and belonging to a reading community. Thus, they developed new personal senses that could trigger future possibilities of how to participate in social events and in society as a whole through reading with others.

When presented with such pleasurable and challenging situations, young children stretch their potential and can create new possibilities of being (Holzman 2009). They had the opportunity to learn about the story and to deal with reading as a cognitive strategy. Clearly, some of the initial cognitive aspects of reading were being developed while they experienced this activity: e.g., the understanding of the usual words for starting a narrative, the postures of reading, the need for a problematization and resolution, and how intonation changes in relation to these movements in the text, the directionality of the sentences, the relationship between words on the paper and ideas presented, the conventionality of graphic symbols that should be followed when reading which they recognize when they point to letters and words in the text, the importance of paying attention to images, and of showing that to the audience while reading. Moreover, they could profit from a social practice from the social and cultural background of their society. They were also invited to see the importance and the pleasure of what they learned, not only for themselves but also for the whole community.

In the performance, meaning was being produced not as a specific predetermined and particular end or behavior but as the means for transforming the community. When participating in the reading activity, children could experience a context not common in their or their parents' everyday lives. Through this, and the enjoyment of it, young children start to want to have more as part of their daily lives. In turn, this can begin to trigger changes in the way their families enjoy their everyday context: to include reading activities as part of what they do and who they can become.

Therefore, some weeks later, young children and teachers in the same project organized shared reading moments in the class, following a similar pattern. They took home some of the school books they got in a library-like performance. After they read them at home, they had a book club where they read them back to their peers (from the same or another class). In one example of this (see picture below), a 3-year-old sat on a chair while his peers sat in a semicircle on the floor. In order to start his reading session, he said: one, two, three, four, nine, with the special rhythm normally used by his teacher as part of the convention for starting a reading session. Afterwards, he started looking at the book and pretended to read: Once upon a time, there was a little red riding hood. She went to the forest. He stopped, looked at his friends and asked: Look here. See! Where is the forest? Can you see? After some young children responded his question, he kept "reading" the story (Fig. 81.3).

In this context, the young children experienced possibilities for having fun/pleasure with the books and the moments of sharing reading. Readers felt responsible

Fig. 81.3 Reading to friends – 2010

for the enjoyment of their peers, for engaging them in the activity. They assumed some responsibility for creating a reading community within their immediate setting. Therefore, turning reading into part of their experience was not the teachers' responsibility alone. The young children also became important members in the collective intentional movement of the object through the network of activities, expanding the network of activities in an intentional way. Performance, as a kind of support, enabled the young children to go beyond their familiar perceptions and possibilities and gave them a chance to see themselves as active agents in the construction of the reading community. In contrast with the educator reported above who experienced a sense of failure as a child reader, here young children feel comfortable and responsible for the development and the collective enjoyment of the activity. In a collaborative way, they were challenged by situations that required collectively overcoming constraints. Therefore, all shared in the creation of a new meaning – a reading community – thus expanding the collective understanding that was developed from researchers, discussed by the educators, and reconstructed by the young children.

81.6 Enhancing Community Development

In the parents' meeting of that school, teachers, parents, coordinators, and principals discussed the impact of the project. Many parents revealed how they had changed reading in their home because of the school project. And they discussed some essential issues related to the focus of developing a reading community. Regarding this, it is essential to reiterate that many who live in poverty have rare moments of relaxation. On any free days, they generally work in their houses and take care of their families. If they have any free time, they sleep more hours, just

relax, watch TV, go to the church, or choose other activities in their cultural communities. Mostly, these do not include reading or writing.

In most of these communities, libraries are uncommon and, even if present, are not part of their cultural practices. Many parents cannot read or struggle in reading and use it just for very necessary circumstances, almost never for pleasure. To read for pleasure, in certain contexts, is even considered weird. Therefore, the project included in the lives of the young children a new possibility for their leisure time either alone or with their parents or older children in their families. This instigated different and new practices in their communities.

In the examples that follow, parents involved in the project emphasized that they could feel their young children were developing important reading skills for future success in academic life. Moreover, they supported the importance of the project by explaining how they changed their own habits and started to spend more time with their young children and/or families in reading activities. Their young children took books home for them to read together; the school staff required parents to contribute to the school library. Most had never been to a library before and, when invited, did not even know how to act. Moreover, their young children helped them change their own attitudes toward reading and sharing reading moments.

This can be seen in their discussion during the meeting (Fig. 81.4 and excerpt 81.1).

Some parents still direct their reflections about reading as if it were mainly related to the development of academic skill (when he grows older, he will not have so many problems with reading, because he is experiencing it now). This is a result of the process of "academizing" preschool in Brazil: parents are eager for their young children to learn how to read because they know that many children, from poor communities, graduate from high school with very precarious reading skills. However, they also realize that reading can be a family activity (P1 and P4), that they can change their own relationship with reading, as well (P2), and that reading can bring pleasure and understanding (P3).

In this way, the project opened new possibilities of seeing reading not as an individual practice but as a way of transforming community realities. The initial

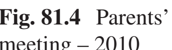
Fig. 81.4 Parents' meeting – 2010

Excerpt 81.1 Parents' meeting – 2010

P for parent	Utterances
P1:	And this initiative for loaning books is wonderful because I really never had the habit of reading too much for my son before
P2:	It's true, I never had the habit of reading, but now with the loan of the books I started reading
P3:	The other day I saw that she brought the same book and so she said to me: "Mom, I still do not understand the story". And she wanted to so much
P4:	Yesterday, for example, my son got nursery rhymes. When he grows older he will not have so many problems with reading, because he is experiencing it now
	This reading also reunited family members

collective object of the network of activities was transformed into a motive for each activity. And through participating in these activities, subjects were oriented toward collective achievement.

This movement demanded that each activity created the meaning of a reading community as an object of the activity. And this object became a tool in what could be called a Creative Chain of activities (Liberali 2009) that was developed to enhance the creation of a reading community. For each activity, subjects kept traces of previous activities. At the same time, their support, explanations, descriptions, definitions, and performances as part of a reading community developed means of going beyond the previous limitations of their own ideas. Therefore, the transformation occurred not only in terms of individuals changing their ways of seeing and participating in the world through reading but also by means of the transformation of the collectivity as a reading community. Each participant had to cross boundaries to reach new possibilities of being and becoming. Obviously, the meaning of a reading community sharing reading experiences was infused with contradictions, but it became the driving force for all the participants.

81.7 Concluding Remarks

This chapter and the project described was based on the idea of a "Creative Chain" (Liberali 2009) in which a collective intentionality of what a reading community could be constructed, analyzed, evaluated, criticized, reconstructed, practiced, and reformulated in a collective way. Community building and transformation were enhanced in this process triggered by families', children's, educators', and researchers' development.

According to Vygotsky (1933/1991), the human capacity to imagine and plan their future, i.e., intentionality, is what creates human freedom. In order to achieve this, the author (Vygotsky 1934a/1962) states that meanings act as tools connecting human beings. In intentionally interwoven activities, the chain of senses grows infinitely, allowing meaning to be creatively renovated. Therefore, meaning and sense are both tied in collective intentionality. In the Creative Chain of activities, the interplay of senses in producing new meanings expresses both the individual's subjectiv-

ity and the collective possibility for transformation into a new totality throughout the communities. In other words, it corresponds both to the views expressed by the subject and to the construction of the joint meaning the community seeks. This joint construction belongs to the collectivity and, therefore, to the whole.

Changes in collective meaning seem to stem from the struggle established between different subjective senses that are created in the process of active and responsive understanding. In a collaborative setting (Magalhães 2010; Magalhães and Fidalgo 2010), argumentative dialogue can be responsible for the expansion and restriction of the "objects" (i.e., meanings) that will intentionally fulfill, not individual needs, but the needs of an interdependent community (Liberali 2009). That is, when differing opinions are exposed and combined to create new ones, some of the original perspectives have to be left behind. However, this new object expresses the general interest of the community; it can be its shared motive. Thus, it cannot fulfill simply one person's need but the needs expressed by the community actively engaged in its production. In this sense, it refers to the totality not as a universal one but as created through the debate generated by the conflict of ideas.

Such transformation of individuals in the process of creating a reading community also entails that each participant is committed to transforming the whole. The project emphasizes not only the transformation of individuals but, as a result, also the transformation of the whole community. In very poor communities, such as the ones served by the project, a tendency exists to emphasize the development of the child and opportunity of the child to overcome his/her restriction in order to achieve a better life. In this project, this is also important. However, more than focusing on changing the individual's condition, the emphasis relies on making each participant responsible and responsive in transforming the conditions of the community itself.

It is not enough, then, that the young children become efficient and effective readers, for instance. It is essential that their parents, brothers, sisters, cousins, friends, and neighbors are also engaged in transforming their contexts so that the whole community can become a reading community where sharing books, discussing films and music, etc., build a springboard for the transformation of everyone's life. Therefore, the Creative Chain is seen as essential for making everyone responsible for the transformation of the whole. Each participant in an activity becomes interdependently responsible for the development of the chain and for the transformation of the whole.

When each person realizes that expressing, contrasting, and supporting a position contributes to the expansion of the general understanding about the topics in discussion, they start to see themselves as important agents in the construction of the group and of its activities. When they understand that their role is not to impose ideas but is to be responsible for promoting discussion on essential issues for the realization of senses in the production of shared meanings, there is a change in the way discourse and power relations are organized. Senses and meaning begin to intermingle and new opportunities of understanding and creating are devised. Consequently, concepts, such as the example of a reading community, move in all directions, in the spiral of the Creative Chain to enhance community transformation.

Appendices

Appendix 81.1

Excerpt 81.2 Preparatory meeting – 2010

Initial of the person	Utterance	Analysis/coding
1F:	Aspect number seven: theme of the year?	Controversial question[a]
2E:	Reading	Presentation of position 1
3F:	Umm … (twists her nose in doubt)	Presentation of opposition
4M:	Reading workshops and the soirée	Presentation of the position 2
5E:	The subject is reading, actually	Presentation of position 1 by pointing it out as a subject
6F:	It is not. It is developing a reading community	Presentation of opposition to position 1 and reestablishment of position 2
7 M:	Reading community	Mirroring
8F:	Developing a community of readers	Repetition of position taken
9E:	But wasn't it focused on reading?	Questioning position 2 using the assumption that there was a previous agreement on working on the topic: reading marked by the negative past tense "wasn't"
10F:	Yeah, but this topic came from the Secretariat of Education[b]	Presentation of counter argument to position 1 based on the source of authority of the support presented to position 1
11E:	From SME (nodding)	Recognition of position 2 and of support presented
12C:	We would have to ask several questions related to that so they can understand. There is the soirée and eh?	Presentation of example (soiree) that may serve as support for position 2 – "developing a reading community"
13E:	But the soirée is a social activity	Opposition to the example as support for position 2 with definition of the example as part of the means to work with the students, and not as the theme of the year
14F:	It is a social activity that they will do	Attempt to explain the support – interrupted
15C:	Is it a social activity? So we have to pose several questions that would give foundations for the social activities that would be developed	Acceptance of counterargument and attempt to find a common agreement with explanation as support to how they should change from a focus on a task to a focus on the theme
16F:	We could do this: contexts for reading, shared reading activities (writes the task on the planning chart on the computer). And they will have to tell us what they are, what they know	Conclusion, trying to put together the focus on the "reading" and the "contexts for reading"

[a]Italicized items correspond to the argumentative categories analyzed
[b]SME stands for Municipal Secretariat of Education

Appendix 81.2

Excerpt 81.3 Workshop: poetry clothes line – 2010

Initials[a]	Utterance	Analysis/coding
1F:	Who has ever participated in a poetry soirée here?	Question to introduce the theme of the year: developing reading communities through shared reading activities
	(People raised their hands)	
2F:	How did you do it? How did you participate? Was it like this? Was it different? How was it?	Questions to recover participants' previous experience and knowledge about the topic – the senses they had in relation to the social activity performed
3E1:	It was more or less like this.	presentation of position in relation to the similarities
4F:	What did people do?	Question for description
5E1:	The only difference was that it was a music soirée. And each person wanted to sing a song. In the end, everybody hugged and danced	Description with comparison
6E:	So for you the issue of emotion was important, right?	Question for point of view, pointing to the performance enacted by the group
7E1:	It was indeed!	Presentation of point of view
8F:	People hugged one another and were involved	Presentation of support for position presented with description
9E1:	Everybody was involved	Support for position presented
10F:	Has anyone here been involved in this soirée we performed? Has anyone felt...	Question for point of view
11E2:	The moment I entered, my thought was: "Hopefully I'll find a sonnet by Vinicius de Moraes" because I'm in love with him. And I found it! When I found it because I saw Soneto do Amigo (italic) and I'm in love with it, then my wish was to read it aloud. When I saw A Luz dos Olhos Teus, I immediately wanted to sing it. Because it takes you by the same emotion	Support with description and explanation of position taken
12F:	You got caught, right? At that moment you felt like…	Reinforcement of support presented – interrupted
	(all people talking together)	
13F:	And you? Yes, you	Question about point of view and directing the event

(continued)

Excerpt 81.3 (continued)

Initials[a]	Utterance	Analysis/coding
14E3:	I thought it was very nice because we have always desired to be a star, recite poetry and there is no such place for this, because it seems that this is an old thing – soirée – and everyone will feel something strange about it, but I found it nice to have the courage to recite, read or memorize it. It is as if we were really in those old soirees, we recited and everyone was listening. I felt a bit like that	Presentation of a point of view with support based on an analysis of desires and comparison to cultural recovery of soirée
	(all at the same time)	
15E4:	May I speak? I did not know what a soirée was. I went there. And you said we could enjoy it, and maybe not, then I was more comfortable. I thought, "I'll see what it is"	Presentation of feelings toward soiree as introduction to the position taken
	And I began to read. And actually, I was enchanted by it, but I know that this was because I remembered an episode from my preschool days. I'd be the person who would read to all children. Only I could not read well at that time because I could not get the cadence, could not put the letters together faster. So it was a friend of mine who read for the group	Presentation of position taken and support related to comparison to previous experience
16Q:	And you remembered, right?	Question for confirmation
17E4:	So to me at this time was: now I'll read it!	Description of situation as support
	(All cheering and clapping)	
18E:	It was very beautiful. I was very excited and I did not know why. And you read so fluently. You really made it happen!	Presentation of point of view based on the feelings triggered by E4 reports
	(All speaking at the same time)	

[a]Initials of the researchers and E for educators with the number to identify different ones

References

Bakhtin, M. (1934–1935/1998). *Questões de Literatura e de Estética: A teoria do romance* (Trad.: A. F. Bernardini, J. Pereira Junior, A. Góes Junior, H. S. Nazário, H. F. de Andrade). São Paulo: Editora UNESP: HUCITEC.

Bakhtin, M. (1953/2003). *Estética da Criação Verbal* (Trad. Paulo Bezerra). São Paulo: Martins Fontes.

Barbosa, M. C. S. (2006). *Por amor e por força: rotinas na educação infantil*. Porto Alegre: Artmed.

Daniels, H., & Parrila, A. (2004). *Criação e Desenvolvimento de Grupo de Apoio Entre Professores. Tradução: Glória Abdalla e Rodrigo Lopes*. São Paulo: Edições Loyola.

Faria, F. L. M. & Veiga, C. G. (Orgs.). (2000). *500 anos de educação no Brasil*. Belo Horizonte: Autentica.

Freire, P. (1968). *Pedagogia do Oprimido*. Rio de Janeiro: Paz e Terra./Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.

Guerra, M. (2010). Formação de educadores: produzindo conhecimento e possibilitando mudanças sociais na comunidade. Tese (Doutorado em Linguística Aplicada e Estudos da Linguagem) – LAEL. Pontifícia Universidade Católica de São Paulo, São Paulo.

Holzman, L. (2009). *Vygostsky at work and play*. New York: Routledge.
Kishimoto, T. M. (2005). Pedagogia e a formação de professores(as) de Educação Infantil. *Pro-Posições*, *16*(3(48)), Campinas, SP, 181–193, set-dez.
Liberali, F. C. (2009). Creative chain in the process of becoming a totality. *Bakhtiniana: Revista de Estudos do Discurso, 02*, 01–25.
Liberali, F. C., & Shimoura, A. (2011). Aprender Brincando. In: F. C. Liberali, M. G. G. Guerra, & R. H. Schettini (Org.), *Programa Ação Cidadã: Pesquisa e transform(ação) de comunidades* (Vol. 1, 1st ed., pp. 163–199). Fortaleza: Aprender Editora.
Magalhães, M. C. C. (2010). Pesquisa Crítica de Colaboração: uma pesquisa de intervenção no contexto escolar. In: L. Stahlschmidt, P. Silva, & J. J. Moreira Lopes. (Org.), *Diálogos de Pesquisas sobre Crianças e Infâncias* (pp. 20–40). Niterói: Editora da UFF.
Magalhães, M. C. C., & Fidalgo, S. S. (2010). Critical collaborative research: focus on the meaning of collaboration and on mediational tools. *Revista Brasileira de Linguística Aplicada (Impresso), 10*, 773–797.
Vygotsky, L. S. (1930/1978). In M. Cole et al. (Org.), *Mind in society*. Cambridge: Harvard University Press.
Vygotsky, L. S. (1933/1991). El problema de la conciencia. In A. Alvarez & P. del Río (Eds.), *L. S. Vygotski: Obras Escogídas* (Tomo I, pp. 119–132). Madrid: Centro de Publicaciones del MEC.
Vygotsky, L. (1934a/1962). *Thought and language*. Cambridge, MA: MIT Press.
Vygotsky, L.S. (1934b) The problem of the environment. In: R. Van der Veer & J. Valsiner (Orgs.), *The Vygotsky reader* (pp. 338–354). Oxford: Basil Blackwell Ltd.
Vygotsky, L. (1934c). Infancy. In: *The collected works of L. S. Vygotsky* (Vol. 5, pp. 243–260). Cambridge, MA: MIT Press.

Chapter 82
Children Participating and Developing Agency in and Across Various Social Practices

Charlotte Højholt and Dorte Kousholt

Abstract This article addresses how situated studies of children's participation and social interplay can contribute to theory on the development of children. The article focuses on children's personal agency in relation to conducting an everyday life across different social practices. The everyday life of children in Nordic countries constitutes a situation where children live their life across societal institutions (such as the family, kindergarten, school, institutions for children's leisure time) and together with children of the same age. This draws attention to the meaning of child communities in relation to children's personal development. Children's families and peer relations intermingle and make up meanings for each other and for the children's development of agency. This approach gives a certain view on social problems in relation to children's life. In particular, the article will discuss the situated significations of social conflicts around and for children. The empirical background is several research projects observing and interviewing children and their adults in their different developmental settings, such as their family, kindergartens, schools, institutions for children's leisure time and special help arrangements.

Keywords Agency • Children's communities • Theoretical discussions about development • Social practice • Participation • Inclusion • Conflicts • Processes of exclusion

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82.1 Introduction

The aim of this chapter is to elaborate an approach to children's development through situated studies of children's everyday life and theory of social practice. The chapter focuses on children's personal agency in relation to conducting everyday life across different social practices. A central point is to illustrate how children develop ways of conducting their life, not just through adjusting to given conditions but also through arranging conditions together with others, contributing to social practice and taking part in negotiations about different matters in their life. In this way, the possibilities for developing a conduct of life are connected to possibilities for participation and influence in different places.

Through examples from observations of children's everyday life and social interplay, it will be illustrated how situated knowledge about children's life and activities can contribute to knowledge about general challenges in relation to developing as a person in concrete historical contexts. In addition, we will point to how this approach changes the focus from individual categorizations of developmental disturbances to social conflicts and contradictions in societal practices, which in different ways are arranged for the development of children.

The everyday life of children in Nordic countries constitutes a situation where children live their life across societal institutions (such as the family, kindergarten, school, institutions for children's leisure time) and together with children of the same age. This draws attention to the meaning of child communities in relation to children's personal development. Furthermore it illuminates how different adults are connected in a structural distribution of responsibility in relation to children and have different perspectives on the development of children. In the chapter we will focus on social conflicts around and for children and how social conflicts may constitute problematic conditions and form a basis for personal conflicts in relation to a plurality of engagements. This approach gives a certain view on social problems and how the social background of the children seems to have situated meanings in the interplay between their different life contexts.

Following up on this, the aim is to develop analytical concepts to explore children's ordinary life as a background for understanding specific difficulties in relation to development. Therefore, we begin the discussion by touching on theoretical challenges in relation to the concept of development and by giving a short insight into our methodological way of dealing with these challenges. Then a combination of empirical examples and theoretical discussions are presented. To conclude, we recapitulate our perspective on how children develop their participation in relation to concrete developmental challenges and possibilities in and across various social practices.

82.2 Theoretical Challenges to Deal With

In relation to development, the inner connection between concrete personal contributions and societal structural conditions seems to be a theoretical question with several challenges. Developmental psychology has been criticised for being abstract in its study of 'the general child' and for focusing on developing universal models that are used for individual categorisation and differentiation of children (Burman 1994; Haavind 1987, 2011). Among other issues this raises a question about how to explore and analyse social conditions in a situated way.

Researchers within the childhood research tradition have critiqued the tendency in developmental psychology to focus on children primarily as 'becomings' (understanding the child's present situation in the light of future adulthood) and neglecting the structural aspect of childhood (James et al. 1998; Qvortrup et al. 1994). To address this, a scientific challenge seems to be how to involve children as agents with perspectives on their present everyday life. The childhood research tradition has in turn been criticised for overlooking the personal aspect of development or disregarding development (e.g. Hedegaard 2009). To us this points to a theoretical dilemma in relation to involving personal aspects of structured interplay.

Concerning theorising about development, such critiques invoke a challenging dilemma: When we take into consideration the mentioned critique of developmental psychology and leave a universal phase model for development, how can we discuss and evaluate specific developmental conditions? Developmental psychology encounters a need for new ways of building theory, as well as developing concepts that are useful in concrete analysis of developmental processes. Valsiner (1997/1986) points to the problem that our interpretations of empirical observations of children's behaviour can vary randomly depending on our pre-understanding and that the solution is not more empirical results but 'theoretical breakthroughs' (see also Klaue 1989). The ambition in this chapter is to work with theoretical development through empirical analysis of children's everyday life in different institutional practices. This must be done in a concrete way related to particular societal practices, as well as to children's personal ways of taking part in activities in their everyday life.

Children's lives take place in several contexts from early childhood (family, institutional settings, etc.), and their developmental conditions are distributed over several contexts which must be understood in relation to each other. The overall configuration of developmental possibilities and constraints is cross-contextually constituted. Still, attention to the mutual influences among the multiple and diverse social contexts that form children's life is frequently underexposed in studies of children's development (Lewis and Watson-Gegeo 2004; Seymour 2004; Singer 1993). In the approach set out in this chapter, the cross-contextual perspectives draw on a conceptualisation of persons as participants in structures of social practices (Dreier 2008). Knowledge about structural aspects of children's lives is obtained through analysis of situated participation and movements in and through interconnected social practices.

This is in contrast to a figure of development as a question of progressing through developmental crises without landing in developmental disturbances. In such a figure the developmental challenges seem to be to find a balance with the new competences and social demands – and difficulties seem to be conceptualised as risks and threats to a quite individualised process of development.

You could say that developmental psychology has contributed through its traditions more to categorisations of developmental problems than to knowledge about how children develop and live their lives. Thoughts about development have been closely connected to thoughts about deviance from norms or standards, and, and in this way, we are offered tools for differentiating between categories of children and between categories of problems, but not much insight into the concrete situations of development in a child's life. We will discuss how such categorisations make up conditions for the understanding of children's developmental dilemmas and the organisation of developmental support.

Following up on the critique of developmental psychology concerning the top-down or adult-centric approach to development (Thorne 1993), the chapter builds on contributions from recent contextual developmental psychology in relation to studying children's lives across different contexts, with an emphasis on children's perspectives (Andenæs 1997, 2011; Fleer and Hedegaard 2010; Gulbrandsen 1998; Hedegaard et al. 2012; Hviid 2001; Højholt 2006, 2012a; Kousholt 2008, 2011).

These challenges lead to an unfolding of what we will term a decentred perspective[1] on development. This entails understanding and investigating development from the 'ordinary everyday life' and in this way from multiple perspectives in complex social practice. Hence, it follows that we need to analyse children and adults as constituting developmental conditions for each other. 'Conditions' is a key concept in this thinking and points to the way societal matters can be conceptualised as the concrete possibilities, constraints and demands persons deal with in their everyday life and how they experience the meanings of these in different ways (Holzkamp 2013). This turns our methodological focus to participation in a plurality of social practices and the situated interplay between persons.

82.3 Methodological Background

To connect the personal way of taking part in social life (and developing precisely this participation) and the contextual conditions for children's lives, we will anchor a concept of development in a theoretical approach to social practice. In this approach, the historical and conflictual nature of social processes is emphasised (e.g. Axel 2002; Chaiklin et al. 1999; Holland and Lave 2001; Juul Jensen 1987,

[1] Dreier (2003) argues for a *decentred* perspective on therapeutic practice, in the sense that therapy must be understood in terms of the way it is included and can be used in the client's everyday conduct of life. Similarly, decentred in this chapter denotes to explore development from the perspectives of the complex daily lives of children.

1999, 2001; Lave 2008, 2011). What we learn from such an approach is that the basis, as well as the perspective of development, is fundamentally conflictual – not as a disturbance or error. Conflicts are perceived as an inherent part of social practice.

The social arrangements, in which children participate, are characterised by social difference, changes and different standpoints regarding these changes and how to deal with differences, ambiguity and contradictory concerns and considerations. People develop their ways of taking part here through social coordination, negotiations, conflicts and collaboration, and their subjective development is an aspect of participation in social practice (Højholt 2008). This is a theoretical conceptualisation with roots in cultural historical approaches (Daniels and Hedegaard 2011; Holland et al. 1998; Rogoff 2003; Stetsenko 2008) and with a focus on the subjective dimensions of structural interconnected practices (Dreier 2003; Holzkamp 2013; Schraube 2013; Tolman and Maiers 1991).

The everyday life of children is theorised in relation to their participation and engagements in various social practices (Fleer and Hedegaard 2010; Hviid 2001, 2008; Højholt 2006, 2008; Kousholt 2008, 2011). In this chapter, we connect participation to living one's life in different places, having participation as a point of departure as well as a developmental potential. In this sense, 'participation' has a more existential meaning than, for example, in Rogoff et al. 2007, where the authors connect the concept to development of 'cultural repertoires' (from earlier experiences) through participation in everyday routines and practices. In the present understanding, the children develop their own ways of participating and their grasp of various issues and social complexity.

To address how children actively arrange their lives in institutional arrangements across contexts and in relation to a plurality of different demands, possibilities, contradictions, communities and conflicts, we employ the concept of 'conduct of everyday life' (Dreier 2008; Holzkamp 2013; Schraube & Højholt 2016). The concept is meant to connect societal life conditions and personal ways of dealing with these in daily life –children and their parents act every day to live their lives, make plans and priorities, pursue ideas and deal with necessities – in a continual coordination with others.[2]

In relation to the conduct of everyday life, the concept of social self-understanding points to how persons develop their understanding of themselves through changing social conditions and ways of taking part (Dreier 2008; Holzkamp 2013). Changes in relation to self-understanding are connected to changes in positions in social contexts and to how the personal meanings of these contexts change through life. Subjects change their perspectives on their life contexts, and, in relation to that, they change their way of influencing these, or they leave them (as children, e.g. leave kindergarten in order to join new contexts in their life.)

The empirical background for the chapter is different research projects observing and interviewing children in their different developmental settings, such as their

[2] This is not meant as a normative assessment of how persons succeed in handling situations in their life, but as a way to emphasise that they *do* act, handle and deal with conditions of their life.

family, kindergartens, schools, institutions for children's leisure time and special help arrangements. In such contexts professionals have different kinds of responsibilities, tasks and perspectives on the children and their development.

Participating, observing and interviewing both children and adults across children's different life contexts have been a common basis for our research. By observing several participants across contexts, we attempt to generate compound empirical material that makes it possible to analyse social practice from different perspectives and positions and thereby gain an insight into complex social processes and different possibilities for participating (Højholt and Kousholt 2014; Kousholt 2016).

The examples we draw on in the chapter are from a research project with four after-school centres (also described in Højholt 2012b; Kousholt 2012). Danish children from age 6 to 10 continue their day after school together in different types of leisure-time institutions. Most after-school centres are located at the school and are usually quite large institutions (120–200 children and 14–20 professionals), characterised by divisions into different kinds of rooms and outdoor spaces and with a range of offers for activities to join, such as woodwork, needlework, football, computers or music. With local variations, the children are free to move between rooms and activities – but with restrictions such as waiting for one's turn, requiring permission to enter particular rooms, requiring the presence of a grown-up, etc.

This way of structuring the institutional practice usually leaves considerable room for the children to organise activities of their own choice. For this reason, this time of day and this age accentuate a general challenge for the children to develop their ways of arranging their life: They have to decide, choose among activities and relationships, plan their participation in different matters, negotiate and contribute to the conditions of their daily life. They have to develop a personal conduct of life. This specific developmental context has turned our attention to this issue. Children encounter other kinds of developmental challenges in other countries and historical times with other challenges in relation to conducting everyday life. However, the idea is to learn about general connections – such as the connection between personal development and social conditions – through contextual variations (Axel 2002; Juul Jensen 1999).

82.4 Conflictual Connections Between Life Contexts

To illustrate conflictual connections between life contexts and how that constitutes contradictory developmental conditions, we will turn to an example of a boy struggling to be part of children's communities in an after-school centre.

In this particular research project, we followed children that were referred to a special school during class hours, but continued in the after-school centre at the general school. This kind of special help intervention is designed to optimise the children's possibilities for returning to the general school. However, these interventions that are arranged in order to support these children's school lives also create

new challenges and problems. In general, inclusion is a central focus in current educational policy in Denmark, and there is a political awareness of intergenerational transmission of educational and social problems. In the political conflicts about these problems, the responsibility seems to be displaced between the different parties and different contexts.

Paul is one of the boys we met. Through kindergarten class (reception class), there were numerous conflicts between him and the teachers, as well as conflicts between his mother and the school and the after-school centre. Three months into first grade, Paul was referred to a family class at a special school. He spends his school hours here together with one of his parents, since this intervention is also intended to change parental support. In the specific cases, we often meet quite varying perspectives on these interventions: Paul's parents worry about the relationships between Paul and his former classmates and describe how, since kindergarten, it has been difficult for Paul to 'get in contact with the other children in a good way'. Seen from their perspective, Paul's relationship to the other children was improving. The issues that the teachers problematized about Paul's bad language and oppositional behaviour are issues that the parents do not recognise at home. They talk about how Paul had a difficult time in the general class but that he nevertheless regarded himself as having friends and as belonging there. Paul's mother is angry with the professionals; she feels that they insinuate that her way of being a mother is the basis of the problems. Paul's parents are both young and uneducated, and he is, in discussions about the problems, regarded as having a 'weak background'.

The pedagogues (after-school centre professionals) explain that communication with the special school can be difficult. Sometimes small practical matters have enormous importance, such as when one boy was not included on the class telephone list and was then not invited to birthdays. They are concerned about the conflicts with Paul's mother and Paul's situation in school, but they tend not to notice Paul's way of participating in the after-school centre ('he looks like he's occupied', 'We don't see much of him').

Paul is not noticeably very upset, crying or asking for help, but observations of him during his day revealed his struggles and dilemmas in relation to participating and contributing in specific situations in the after-school centre. He actively seeks out the other children and tries to engage in their play. He often succeeds in becoming a participant for a while, although he rarely becomes a central actor, exerting an influence on the progress of the activities, and he repeatedly loses his grip on the social interplay and is left alone. It is not that he is visibly excluded. Rather, it is a question of how he is able to contribute to and influence what is occurring in the children's communities - as the following example will illustrate.

Paul builds together with Thomas and Mark. Paul and Thomas talk about Lego Star Wars and Batman computer games. After some excited chat, Paul proposes 'should we play Batman?' They agree and talk about how to play. Then Mark's father arrives. Mark asks his father if he can play with Thomas at home.

Paul protests: 'but we had agreed to play…' (addressed to Thomas).

Thomas suggests: 'We can play all three of us'. Mark's father look at the three boys crowding around him – he seems a little confused.

The father says: 'I do not have Paul's parents' phone number'. The father suggests, 'you can play tomorrow or another day'.

Paul suggests: 'we can play at my home – I have a remote controlled car of good quality'. Paul says to Thomas (with an imploring voice), 'I would like to play with you, come on!' Thomas and Mark try in vain to persuade Mark's father. Mark leaves with his father and Thomas leaves the room. Paul runs after Thomas, who no longer seems interested in playing. Paul looks at some other boys playing computer games, wanders around a bit and then sits down beside some boys. One boy says: 'I'm visiting Simon today'. Paul says, 'Nobody can come home to me – I don't have anybody who is coming home to me'.

Paul is struggling to join in and participate. He tries to make himself visible and attractive to the other children. He is struggling to make his contributions count. The professionals remark at the time that Paul's strength is 'that he is not shy'. Note that there are several opportunities in the interplay between the children ('we can play all three of us' and 'maybe another day'). Playing together at each other's homes is a significant part of building friendships and connecting different life contexts. Getting someone to come home with you seems important to the children we have observed.

This insight into developmental conditions indicates complexity and social conflict and also illustrates how a boy continually relates to this complexity and to the opportunities to take part as an influential participant, contributing to the organisation of social practice in a way that will generate further possibilities. Is it possible from the illustrated situated interplay to discuss possibilities for personal development?

Conducting an everyday life is connected to participation in a plurality of social contexts and communities, characterised by different demands and possibilities, transitions and changes – changes not just in the different contexts, but also in the composition of them. In relation to this, development becomes a question of developing one's participation in complexity, to take part in different ways and different places and, at the same time, to connect one's participation in different places in such a way that participation in one place will also be meaningful in other places (Højholt 2012a; Kousholt 2011).

The relationship between children's family and school is significant in this regard, and children have different possibilities for making connections between the home and the school (Edwards 2002). We analyse the example above as an instance of how social conflicts between different parties (e.g. about who has the responsibility for what, or about what is important in relation to development) turn into personal conflicts for the children (Højholt 2006). Paul (like many other children when professionals worry about their social background) has difficulties in relation to connecting his participation across family and school and now also between his school life and leisure time, since he is not a stable part of the social coordination among the children. His belonging is at stake and his adults are in conflict about

where he should belong and where the social practice should be changed: is it, for example, a question of another kind of upbringing and parental support or of social possibilities in the professional settings?

To understand the concrete dilemmas for Paul, we also need knowledge from the other children, knowledge about the general challenges of developing in and across these specific societal contexts.

82.5 Children Arranging Communities

Due to the last decades of empirical studies in children's everyday lives, we know that children's interplay has a major significance for their personal processes of learning and development and that children's perspectives are directed towards each other (Frønes 2009; Haavind 2003; Hviid 2008; Kampmann 2005; Kousholt 2011; Rogoff 2003; Schwartz 2007; Stanek 2011). Observations of children in difficulties show their concerns in relation to belonging to social communities and their personal experiences with social conflicts and exclusion (Røn Larsen 2011; Kousholt 2012). Conditions for taking part here are connected to the general premises and dynamics at play in communities among and around the children. But how do children arrange their communities and their personal participation in a plurality of activities and relations? Children's developmental contexts are societally and historically structured, and, at the same time, the children themselves are involved in organising, negotiating and contributing to different activities in their life.

To decide, organise and orientate oneself in social communities is also a developmental task, as it forms the fundamental developmental conditions for the afternoons of children at this age in Denmark. The pedagogues in the institutions for children's leisure time emphasise that the initiative should come from the children themselves – they find it important for the development of the children. The children must learn how to arrange their daily life, how to organise and cooperate, how to resolve conflicts and how to choose and decide what they want to do during their leisure time. The pedagogical tasks in these contexts relate to organising possibilities and support for such processes.

A very striking point when you observe the children's lives in the institutions for children's leisure time is that many different things are at stake at the same time. You observe different activities, groups of children, conversations, conflicts, different kinds of fun and plenty of efforts related to starting up activities, lots of interruptions and activities breaking up. To grown-ups – as for instance researchers – it can be difficult to find your way in this universe: to find the children you know, their activities and places and what is going on among them. The children themselves move in and out of all this in a quite unnoticed way. Their social life is characterised by participants moving around between places, activities and continuous replacement in the constellations of children. Still, the children have to orientate in this social complexity, and in this regard they use each other – asking peers about where to find a friend, about the plans of the adults, about rules and about the organisation

of specific contexts (for examples see Højholt 2001, 2012a; b; Højholt and Kousholt 2014; Stanek 2011).

In this way, development is also about orientating oneself in life and relates to the possibilities for that. The children's processes of orientation are active processes, characterised by taking part in new practices using new potentialities and using them in relation to personal engagements and concerns. The children take part in continuous changes in relation to where, with whom and what they are doing. It might look quite easy or even accidental, but if we want to know something about concrete developmental conditions and movements, we should be able to see how the children themselves coordinate their activities and communities, e.g. how they negotiate their participation and their influence on what is going on. These processes involve common efforts and flexibility (and possibilities for contributing to and influencing social practice).

A lot of the children's negotiations are about who can take part, about where and how to start up common activities and about how to maintain and carry through their plans. The last point is particularly complicated in a context with a large number of children and plenty of changes and different interests. Activities are constantly challenged by interruptions, conflicts and dissolutions. To maintain engagement in the activities they have chosen, as well as being able to vary their engagement, is a developmental perspective in these contexts.

To choose between different social possibilities, to start up new activities and to maintain a game are developmental challenges that simultaneously demand social coordination with others and personal preferences and structures of relevance. The children have to sort out and select in the complexity, and this selection seems to be important for their development of self-understanding. This point both draws on theoretical concepts from the research of conduct of everyday life (Dreier 2008; Holzkamp 2013) as well as elaborates them in relation to processes of development. Especially in their leisure time, the children position themselves as, for example, a person who is in the sewing room, someone who loves computer games or someone who is always with friends – they seem to present themselves through their activities and preferences.

Thus, the personal task of developing personal preferences and priorities is closely connected to participation in social communities (and therefore different due to what is at stake in different societal practices). The children are placed in an institution structured in particular ways and with different possibilities, demands and restrictions at stake. Their developmental challenges are interwoven in social coordination, negotiations and possibilities for creating something together with someone else.

In this process, the children develop personal ways of dealing with the social challenges. This could be to find a close friend to be with, to place themselves strategically in a line, to leave the lunch in time to join the football match with exactly the group of football boys you want to be part of or to start up and organise the kind of activities you prefer. It seems important to the children to combine what they are doing and who they are doing it with. It is a personal challenge to them to find a way into the activities and communities – and to find their own way – to find out what

someone like me should choose to do here and to find out what kind of person I can be here. This connects to what you can become part of, where to belong and to belong together with the friends with whom one can engage in what seems relevant in life.

When these movements and social possibilities seem so fundamental to the children, it is not an isolated question of having fun but is also related to their possibilities for conducting their everyday life and developing as a person with personal preferences, priorities and structures of relevance. It is important to address the social differences in relation to managing these developmental challenges.

The social life in the institutions for children's leisure time has different meanings to different children and to the same child at different times. The examples have illustrated some general challenges in the life of children that we as adults often overlook, and when we do that, we cannot see the general conflictuality as a background for specific dilemmas. As long as it is going in a quite unnoticed way, it is 'just children playing', and when the movements among the children become stuck, we notice it as specific problems related to specific children. When we overlook the social complexity of children's daily life and the ordinary difficulties in relation to organising a child's life, problems appear related to deviant circumstances, often related to an individual child and its background. This means that problems appear in a quite abstract way, formulated in terms of categorizations of threats, risk and deficiencies.

With the insight from these complex social processes and the children's way of developing a conduct of everyday life together, we will return to the dilemmas of Paul.

82.6 'We Can Do Nothing More for Him'

When we consider the transition Paul makes between special school and the after-school centre in the light of how the other children organise their everyday activities across contexts, we obtain important knowledge to help us understand Paul's personal dilemmas. The other children (Paul's former classmates) leave from the school together and share the history of the day. You see children running in small groups and chatting about 'what do you want to do?' or 'I have made plans with Peter…'. During the movement across the schoolyard from school to the after-school centre, the social space is 'rearranged' – from a class community to 'multiple leisure-time communities' – and the children are very active cocreators of this transition. Making plans together – knowing the other children's engagement and plans – is an important aspect of orientating and taking part in and being able to contribute relevantly to children's communities.

Also, during the school day, the children are continuously busy negotiating, conflicting about and arranging what to do and with whom – both during breaks here and now and later in the day. As illustrated, such conflictual processes of arranging

social life across different contexts are general challenges in the everyday lives of the children.

It seems that, in many ways, children like Paul are in between or on the threshold in relation to these processes. This situation must be understood in the light of social policy in Denmark emphasising preventive interventions: When adults worry about children's development, investigations are undertaken of individual developmental disturbances and possible risks and threats (for a parallel see Røn Larsen 2011). This often involves a long wait for a diagnostic report, considerations of various special arrangements and doubts about how long the intervention will last. Are the children going to stay in this class or not? What is the best placement? The children's belonging is at stake – for themselves and also for the adults and for the other children. The other children talk about Paul being 'sent to another school to learn to behave'. Is he someone they can depend on or build a stable relationship with?

Paul's parents are concerned that he will slip out of the class community. Paul's mother says: 'he gets all the boring stuff at school. He misses out on all the fun stuff that they do together in the class, like that theme on trolls'. Because he spends most hours out of the class, he is not participating in activities arranged for creating a good social milieu in the class. The parents felt pressured to accept the family class solution, but since they think Paul has dilemmas in his way of approaching the other children, they want interventions in relation to that.

When we follow these children over time, there seems to be a movement from struggling hard to find a place in the children's communities, towards withdrawing, joining adult-structured activities and turning away from the after-school centre – wanting to stay at home instead. Both the adults and the other children seem to give up along the way, and they end up concluding that Paul does not belong here. And at the end it seems that Paul also thinks so himself. He develops his self-understanding and sense of belonging in relation to his possibilities of participating in and across contexts.

At the end of the school year, the professionals in the after-school centre describe that Paul is increasingly 'slipping out of' the children's communities – that he has 'withdrawn to the wood workshop' and that he often stays at home in the afternoons. The manager states that her experience is that both children and adults have 'given up' on him. 'We can do nothing more for him. He needs a fresh start in a new place'. There seems to be a dynamic of mutual resignation – where the different parties experience restricted influence and give up on each other.

Thus, the meaning of individual children's specific difficulties is produced in a concrete context and cannot be understood separately from the social dynamic in historical structures. Personal difficulties must be understood as related to social conflicts, dilemmas and contradictions in social practices – as for instance conflicts about the concept of learning and the multifarious perspectives on the aim of the school. Awareness and knowledge about social dynamics in the collaboration of the involved adults and in the children's communities are crucial when intervening in children's lives and organising support for children. The meanings and consequences of professionals' intervention are mediated by the social dynamics of children's communities and vice versa.

Nevertheless, research points to the difficulties for parents and professionals seeking to obtain an insight into the complex social dynamics in the children's communities (Højholt 2012a; Stanek 2011). In general, we need knowledge about how conflicts in the children's communities appear from the children's perspectives and how knowledge about these social dynamics could lead to interventions directly in the general school setting.

Instead, cooperation characterised by worries seems to turn into conflicts about responsibility for 'defects' and deviances categorised in relation to concepts about universal developmental processes. Developmental psychology has a part to play in these societal conflicts about what and how children should develop and who is responsible for what. Standards for development have been used to problematize different ways of performing as parents, focusing on threats and risks – and the political preoccupation with overcoming intergenerational transmission of social problems seems to reinforce this.

Observing children's participation in different communities across contexts illustrates that children manage difference and complexity in their everyday life, but the conflicts about the differences may lead to resignation and processes of exclusion. And in relation to this, it is the categorical understandings differentiating between the deviant and the general that appear as threats.

82.7 Children Developing Agency

During their years in the institutions for children's leisure time, the children change their way of taking part here. We characterise these changes with concepts aimed at pointing to development of participation in relation to concrete challenges and possibilities. In this way, the concept of participation can be differentiated into movements between involving oneself and being involved in social communities and their activities, contributing to specific social practices and in this way influencing the same[3].

When you observe children over time, it is striking how they become familiar with a new social practice and develop a kind of 'grip' in relation to what it is possible to do here and how to extend their possibilities here. For most of the children, these changes 'open up more and more doors', in both a figurative and literal sense: They know how to act here, not just in the sense of adjusting to the given procedures, but also in the sense of using the resources here as a means for changing the very same – to open up possibilities through contribution to this life, influencing one's own everyday life. In continuation of these concepts, it could be formulated that the children develop personal agency through increasing their common influence on specific conditions (Holzkamp 2013). In such processes, the children may

[3] A parallel can be found in Haavind 1987, emphasising extended responsibility, reciprocity and extension of motivation and, in Stetsenko 2008, accentuating the concept of contribution and relating it to social change. We have discussed this in Højholt 2011; Højholt, Juhl & Kousholt 2016.

develop a kind of self-understanding in relation to being a person exercising influence through collaboration with others.

In relation to children, the tradition is to focus on what they need to learn in order to adapt and to confuse a child's position, characterised by quite limited conditions for influence, with a determined child subject. With such an approach, we overlook the importance of giving the children experiences of being influential. We will argue for linking development to possibilities to take part in the changes of the social practice of which one is a part (see also Lave 2011). Personal development is not just a question of developing through social communities, but also a question of development of social communities. And in these processes, the personal engagements of the children develop as well. This is a parallel to Hedegaard's elaboration on the concept of motives in a cultural historical approach (e.g. 2012). We will emphasise the situated conflicts in the social practice, the personal conflicts in relation to a plurality of engagements and the dialectical connection between development of engagements in concrete matters and conditions for influencing the same. A central point in relation to this is the possibilities for contributing. Still, the meanings of contributions are mediated through how other participants connect to them and use them for further collective collaboration and common activity, and in relation to this the children are positioned very differently.

82.8 Concluding Remarks

A question was raised in the introduction: If we leave ideas about universal development, will we still be able to evaluate and take a standpoint in relation to developmental conditions? We find that the example illustrates that it is possible to evaluate children's developmental possibilities in a concrete and situated way: Paul's conditions for taking part are problematic. But instead of conflicting about the right developmental perspectives and the right parental upbringing, the relationship between a child and its conditions should be investigated. This includes what the child seems to be occupied with, what the child is trying to develop his or her influence in relation to and what the child tries to manage. These considerations point towards a decentering of our developmental concepts.

Through the examples of the children's coordination, we aimed to illustrate that children are developing their personal conduct of life – and this development has a social and cross-contextual basis. It can be difficult to support children without situated knowledge about their concrete situations and possibilities for dealing with these developmental tasks. Furthermore the example of Paul's dilemmas illustrates how children's developmental processes cannot be understood isolated from social conflicts about them.

Returning to the discussion about abstract developmental concepts, it could be concluded that universal concepts about development seem to displace a concern for children's development and well-being, turning attention towards individual categorisation. But to give up on a concept of development we may lose an opportunity

to explore what seems relevant to the children and their conduct of everyday life. A concept of development could link social possibilities to personal processes and points to a democratic perspective of the ongoing changes of social practice.

Such developmental perspectives point to a pedagogical task in relation to working with the cooperation between the adults involved in children's lives, as well as with the communities of children across contexts. Instead of contributing to the powerlessness and abandonment – Paul gives up on finding friends – we must give the children experiences of contributing to the communities, influencing them and developing influence in relation to their social possibilities. These are concepts connected to investigating the relationship between a person and a person's possibilities, and in this relationship we should work for development.

References

Andenæs, A. (1997). Theories of development from the perspective of the children, their parents and the scientists. *Researching Early Childhood, 3*, 51–73.

Andenæs, A. (2011). Chains of care: Organizing the everyday life of young children attending day care. *Nordic Psychology, 63*(2), 49–67. doi:10.1027/1901-2276/a000032.

Axel, E. (2002). *Regulation as productive tool use. Participatory observation in the control room of a district heating system*. Frederiksberg: Roskilde University Press.

Burman, E. (1994). *Deconstructing developmental psychology*. London: Routledge.

Chaiklin, S., Hedegaard, M., & Jensen, U. J. (1999). *Activity theory and social practice: Cultural-historical approaches*. Aarhus: Aarhus University Press.

Daniels, H., & Hedegaard, M. (Eds.). (2011). *Vygotsky and special needs education – rethinking support for children and schools*. London: Continuum.

Dreier, O. (2003). *Subjectivity and social practice* (2nd ed.). Aarhus: Centre for Health, Humanity, and Culture, University of Aarhus.

Dreier, O. (2008). *Psychotherapy in everyday life*. Cambridge: Cambridge University Press.

Edwards, R. (Ed.). (2002). *Children, home and school. Regulation, autonomy or connection?* London: Routledge/Falmer.

Fleer, M., & Hedegaard, M. (2010). Children's development as participation in everyday practices across different institutions. *Mind, Culture, and Activity, 17*, 149–168.

Frønes, I. (2009). Childhood: Leisure, culture and peers. In J. Qvortrup (Ed.), *The palgrave handbook of childhood studies* (pp. 273–286). Houndmills: Palgrave Macmillan.

Gulbrandsen, L. M. (1998). *I barns dagligliv. En kulturpsykologisk studie av jenter og gutters utvikling* [In the everyday life of the child. A cultural psychological study of girls and boys development]. Oslo: Universitetsforlaget.

Haavind, H. (1987). *Liten og stor: Mødres omsorg og barns utviklingsmuligheter* [Small and big: Mother's care and children's development]. Oslo: Universitetsforlaget.

Haavind, H. (2003). Masculinity by rule-breaking. Cultural contestations in the transitional move from being a child to being a young male. *NORA. Nordic Journal of Feminist and Gender Research, 11*(2), 89–100.

Hedegaard, M. (2009). Children's activity in everyday local settings as foundation for their development. *Mind, Culture and Activity, 16*(1), 64–82.

Hedegaard, M. (2012). Analyzing children's learning and development in everyday settings from a cultural-historical wholeness approach. *Mind, Culture, and Activity, 19*, 127–138.

Hedegaard, M., Aronsson, K., Højholt, C., & Ullvik, O. (Eds.). (2012). *Children, childhood and everyday life – Children's perspectives*. Charlotte: Information Age.

Højholt, C. (2001). *Samarbejde om børns udvikling. Deltagere i social praksis* [Cooperation on children's development. Participants in social practice]. Copenhagen: Nordisk Forlag.

Højholt, C. (2006). Knowledge and professionalism – From the perspectives of children? *Journal of Critical Psychology*, 81–106.

Højholt, C. (2008). Participation in communities – Living and learning across different contexts. *Australian Research in Early Childhood Education, 15*(1), 1–12.

Højholt, C. (2011). Cooperation between professionals in educational psychology – Children's specific problems are connected to general dilemmas in relation to taking part. In H. Daniels & M. Hedegaard (Eds.), *Vygotsky and special needs education – Rethinking support for children and schools* (pp. 67–85). London: Continuum.

Højholt, C. (2012a). Communities of children and learning in school. In M. Hedegaard, K. Aronsson, C. Højholt, & O. Ulvik (Eds.), *Children, childhood and everyday life – Children's perspectives*. Information Age Publishing.

Højholt, C. (2012b). Fritidspædagogers faglighed og børns fritidsliv [Leisure time professionals and children's leisure time]. In P. Hviid & C. Højholt (Red.), *Fritidspædagogik og børneliv* [Leisure time pedagogy and children's everyday lives] (pp. 20–44).Copenhagen: Hans Reitzels Forlag.

Højholt, C., & Kousholt, D. (2014). Participant observation of children's communities: Exploring subjective aspects of social practice. *Qualitative Research in Psychology, 11*, 1–19. doi:10.1080/14780887.2014.908989.

Højholt, C., Juhl, P., & Kousholt, D. (2016). The collectivity of family conduct of life and parental self-understanding. In E. Eriksen Ødegaard & S. Gravis (Red.), *Nordic perspectives on families and wellbeing*. Routledge (Evolving Families).

Holland, D., & Lave, J. (2001). *History in person. Enduring struggles, contentious practice, intimate identities*. Santa Fe: School of American Research Press.

Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.

Holzkamp, K. (2013). Psychology: Social self-understanding on the reasons for action in the conduct of everyday life. In E. Schraube & U. Osterkamp (Eds.), *Psychology from the standpoint of the subject: Selected writings of Klaus Holzkamp* (pp. 233–341). Basingstoke: Palgrave Macmillan.

Hviid, P. (2001). *Børneliv i udvikling. Om børns udvikling af engagementer i deres hverdagsliv i skole og fritidsinstitutioner* [Child life in development]. PhD. thesis, Department of Psychology, University of Copenhagen.

Hviid, K. P. (2008). "Next year we are small, right?": Different times in children's development. *European Journal of Psychology of Education, 23*(2), 183–198.

James, A., Jenks, C., & Prout, A. (1998). *Theorizing childhood*. Cambridge: Polity Press.

Jensen, U.J. (1987). *Practice and progress: a theory for the modern health care system*. Oxford: Blackwell.

Jensen, U.J. (1999). Categories in activity theory: Marx's philosophy just-in-time. In S. Chaiklin, M. Hedegaard, & U. J. Jensen (Eds.), *Activity theory and social practice: Cultural-historical approaches* (pp. 79–99). Aarhus: Aarhus University Press.

Jensen, U. J. (2001). Mellem social Praksis og Skolastisk Fornuft [Between social practice and scholastic rationality]. In J. Myrup (Ed.), *Temaer i nyere fransk filosofi* (pp. 195–218). Aarhus: Philosophia.

Kampmann, J. (2005). Understanding and theorizing modern childhood in Denmark: Tendencies and challenges. In B. Tufte, J. Rasmussen, & L. B. Christensen (Eds.), *Frontrunners or copycats?* (pp. 20–38). Køge: Copenhagen Business School Press.

Klaue, K. (1989). Child development revisited by a dissenter: An interview with Jaan Valsiner. *New Ideas in Psychology, 7*(3), 331–344.

Kousholt, D. (2008). The everyday life of children across early childhood institution and the family. *Australian Research in Early Childhood Education, 15*(1), 13–25.

Kousholt, D. (2011). Researching family through the everyday lives of children across home and day care in Denmark. *Ethos, 39*(1), 98–114.

Kousholt, D. (2012). Børnefællesskaber og udsatte positioner i SFO: Inklusion og fritidspædagogik. [Children's communities and exposed positions in leisure time institutions: Inclusion and leisure time pedagogy]. In P. Hviid & C. Højholt (Eds.), *Fritidspædagogik og børneliv* (pp. 192–214). Copenhagen: Hans Reitzels.

Kousholt, D. (2016). Collaborative research with children – Exploring contradictory conditions of conduct of everyday life. In E. Schraube & C. Højholt (Eds.), *Psychology and the conduct of everyday life*. New York: Routledge.

Lave, J. (2008). Situated learning and changing practice. In A. Amin & J. Roberts (Eds.), *Community, economic creativity, and organization* (pp. 283–296). Oxford: Oxford University Press.

Lave, J. (2011). *Apprenticeship in critical ethnographic practice*. Chicago: Chicago University Press.

Lewis, J. L., & Watson-Gegeo, K. A. (2004). Fictions of childhood: Toward a sociohistorical approach to human development. *Ethos, 32*(1), 3–33.

Qvortrup, J., Bardy, M., Sgritta, G., & Wintersberger, H. (Eds.). (1994). *Childhood matters. social theory, practice and politics*. Aldershot: Avebury Press.

Rogoff, B. (2003). *The cultural nature of development*. Oxford University Press.

Rogoff, B., Moore, L., Najafi, B., Dexter, A., Correa-Chavez, M., & Solis, J. (2007). Children's development of cultural repertoires through participation in everyday routines and practices. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 490–515). New York: The Guilford Press.

Røn Larsen, M. (2011). *Samarbejde og strid om børn i vanskeligheder – organiseringer af specialindsatser i skolen* [Cooperation and conflict about children in difficulties – Organisation of special support in school]. PhD dissertation, Department of Psychology and Educational Studies, Roskilde University.

Schraube, E. (2013). First-person perspective and sociomaterial decentering: Studying technology from the standpoint of the subject. *Subjectivity, 6*(1), 12–32. doi:10.1057/sub.2012.28.

Schraube, E. & Højholt, C. (Eds.) (2016). Psychology and the conduct of everyday life. London: Routledge.

Schwartz, I. (2007). *Børneliv på døgninstitution. Specialpædagogik på tværs af børns livssammenhænge* [Children's lives at a residential institution. Special education across children's life contexts]. PhD Thesis, Department of Philosophy, Education & Religion.

Seymour, S. (2004). Multiple caretaking of infants and young children: An area in critical need of a feminist psychological anthropology. *Ethos, 32*(4), 538–556.

Singer, E. (1993). Shared care for children. *Theory and Psychology, 3*(4), 429–449.

Stanek, A. H. (2011). *Børns fællesskaber og fællesskabernes betydning: analyseret i indskolingen fra børnehave til 1. klasse og SFO*. [Children's communities and the meanings of the communities: Analyzed in the transition from kindergarten to school]. PhD dissertation, Department of Psychology and Educational Studies, Roskilde University.

Stetsenko, A. (2008). From relational ontology to transformative activist stance on development and learning: Expanding Vygotsky's (CHAT) project. *Cultural Studies of Science Education, 3*, 471–491.

Thorne, B. (1993). *Gender play. Girls and boys in school*. Buckingham: Open University Press.

Tolman, C., & Maiers, W. (Eds.). (1991). *Critical psychology: Towards an historical science of the subject*. Cambridge: Cambridge University Press.

Valsiner, J. (1997/1986). *Culture and the development of children's action: A theory of human development* (2nd ed.). New York: Wiley.

Chapter 83
Towards a Posthuman Developmental Psychology of Child, Families and Communities

Erica Burman

Abstract This chapter elaborates a rationale for posthuman approaches to early childhood education and development, albeit with some reservations. It traces how discussions of the posthuman build on critical theory and deconstructionist analyses of the limits of liberal bourgeois humanism. Such analyses have had considerable impact in psychology, since the liberal humanist subject clearly informs – in overt and covert ways – much modern developmental and educational theory and practice. As we shall see, a complicating factor is that – like its predecessor 'poststructuralism', for example – perspectives labelled as 'posthuman' vary and are not necessarily entirely convergent, since they are drawn from different disciplines and fields of practice. There are also considerable continuities and overlaps with previous critical frameworks, as well as newly emerging foci. Nevertheless, feminist, postcolonial and queer engagements with posthuman debates, in particular, provoke relevant re-evaluation of existing models and, beyond this, pose different research questions for early childhood education and development researchers. Taking in turn the key terms, 'child', 'families' and 'communities', that comprise the theme of this section of the book, the chapter indicates how frameworks associated with the posthuman reformulate each of these terms and their relationships with each other and also generate new conceptual and methodological agendas.

Keywords Disciplinary differences • Poststructuralism • Psychologisation • Feminist critiques • Queer theory • Critical disability studies • Ethics • Postfoundational approaches • Intersectionality • Neoliberalism • Power

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This chapter elaborates a rationale for posthuman approaches to early childhood education and development, albeit with some reservations. It traces how discussions of the posthuman build on critical theory and deconstructionist analyses of the limits of liberal bourgeois humanism. Such analyses have had considerable impact in psychology, since the liberal humanist subject clearly informs – in overt and covert ways – much modern developmental and educational theory and practice. As we shall see, a complicating factor is that – like its predecessor 'poststructuralism', for example – perspectives labelled as 'posthuman' vary and are not necessarily entirely convergent, since they are drawn from different disciplines and fields of practice. There are also considerable continuities and overlaps with previous critical frameworks, as well as newly emerging foci. Nevertheless feminist, postcolonial and queer engagements with posthuman debates, in particular, provoke relevant re-evaluation of existing models and, beyond this, pose different research questions for early childhood education and development researchers. Taking in turn the key terms, 'child', 'families' and 'communities', that comprise the theme of this section of the book, the chapter indicates how frameworks associated with the posthuman reformulate each of these terms and their relationships with each other and also generate new conceptual and methodological agendas.

Key figures in childhood studies have recently hailed Vygotskian approaches as the exception to the otherwise problematic status of developmental psychology (in its dominant reception) as wedded to a deficit and individualist model (see, e.g. Thorne 2007). This may well be so, especially in more recent readings of Vygotsky's work that draw attention to his interest in emotions and personality (Gonzalez Rey 2011), and this approach has been taken up in a variety of directions in other chapters in this handbook. Such work challenges the individual-social binary that underlies the individualism of current models, and attention to specific contexts of and for interaction has revised previous understandings that portrayed individual mental activity as prior to and separate from specific cultural and historical environments. Hence, this is one approach to reworking the subject-environment rearticulation.

My focus here is to indicate how posthuman analyses might inform the current disciplinary and ethical challenges we face as theoreticians and practitioners in developmental psychology and education. Situating this within current contexts, it seems we are in sore need of critical resources. Increasing public/policy appeals to particular disciplinary knowledges work alongside changing relationships to the national and international state bodies to politicise psychological and educational knowledges in particularly acute ways. For example, in my national context, Britain, school achievement is increasingly evaluated (in ever-narrower terms) by the state while schools are pressurised into becoming private business-making ventures. The new illusions of individual freedoms/autonomies under neoliberalism threaten to return more power/authority to the already privileged upper middle classes, as inequalities between rich and poor widen ever more, regionally and internationally.

A key ethical challenge we face is surely how to resist the drive towards psychologisation (or the explanation of socio-political issues within exclusively individualist psychological terms) within social and policy discourse, as so often occurs in relation to parent blaming. For example, in early 2012 the main UK academic research

funder, the Economic and Social Research Council, published a briefing on 'education and social mobility' in which it claimed 'The adverse attitudes to education of disadvantaged mothers are one of the most important factors associated with the lower educational attainment of their children…' (ESRC Social Mobility briefings series. http://www.esrc.ac.uk/publications/evidence-briefings/index.aspx page 2). Such claims rearticulate familiar classed and misogynist strategies of blaming the poor for their poverty without even admitting into the domain of explanation how and why disadvantage is communicated via women as mothers (rather than say school practices or other partners or agencies), including crucially how and why they have come to be disadvantaged, and the role of the state in supporting or countering such dynamics. In other words, the abstraction and reification that creeps in so easily around 'children' and 'families' can work to pin societal processes of marginalisation and exclusion onto individuals. These can then be treated as individual problems or responsibilities, much as (in the UK) the new term 'worklessness' has emerged to characterise unemployment as a condition of individuals instead of a structural or political context. In particular, posthuman analyses, allied with the so-called new materialist feminisms, may help to challenge some of the spuriously scientific claims associated with the neuropsychological turn (De Vos 2012, 2014).

83.1 What's Wrong with Humanism?

Humanist conceptions of the psychological subject are closely aligned with the modern Western Enlightenment, and associated models of development are complicit with modernity's exclusions and oppressions. It is now widely accepted that such psychological models are heir to, and in turn reinscribe, the economic and cultural privileges arising from capitalist exploitation and European colonialism – whether in terms of theories of family organisation or cultural practices in child-rearing (Buck Morss 1975; Broughton 1987; Boyden 1990). Theories of early education suffer from similar problems in terms of how their conceptions of development reduce dominant economic developmental models to the individual – whether in terms of starting points (the state from which development takes place), contexts (the states or environments in which development occurs), processes (agents of development) and endpoints (goals, outcomes or achievements). Hence, Cannella and Viruru (2004), for example, see clear parallels between approaches to childhood and colonisation.

At issue is not only that these assumptions enter into sets of professional and policy models but also how they work to classify and regulate modes of professional and popular subjectivities, including those of families and children. The model of the child as unit of development in mainstream psychology is portrayed as singular and abstracted (i.e. it is already presumed to be outside social relations). Portrayal of parental figures quickly resolves into the mother or other singular caregiver as mere representative of, or more often uninterrogated microcosm of, the social/societal relations. Not only is this a reduced way of configuring sociocultural relations, but this then accords disproportionate responsibility to a poorly conceptualised and

contextually situated socio-educational agent. Mothers and other caregivers therefore come in for much negative scrutiny and evaluation in developmental theory, as do teachers when the gaze moves into formal educational arenas, instead of connecting parenting and familial practices with analysis of the wider sociohistorical and cultural institutional practices and constraints that surround them.

Recent social theory has offered critical approaches to children, families and communities in early childhood education. Such critiques are now acquiring a sense of urgency. For if the romantic humanist model of the subject is the bourgeois, culturally masculine (but presumed asexual), Euro-US child, its trajectory of development has recapitulated that of the western modern industrialisation – rational, technical, detached, alienated and abstracted and heading very fast towards destruction, or at best crises of unsustainability. Rather than merely repeating now well-recognised critiques of models of human and individual development (Henriques et al. 1998), as inscribed within dominant approaches to early childhood education and development (MacNaughton 2005; MacNaughton et al. 2007; Hultqvist and Dahlberg 2001), the challenge addressed by this chapter is to consider alternatives to humanist models.

83.2 A Critical Posthumanism

However before moving on to describe posthumanism, I will first address misgivings readers may legitimately be harbouring. Humanist approaches to subjectivity have, after all, been hardly fought for and scarcely (if at all) won. Decentring the human subject from models of development and education poses significant challenges for early childhood education and development, not least because many children (like other subjugated or 'minoritised' groups such as women, colonised peoples and gay men, lesbians and transgendered people) have not yet been accorded subject status. Debates remain focused on the recognition of identities, and corresponding rights-based claims are still high on political agendas.[1] Yet such humanist, rights-based claims can also work to confirm and reify identities that should be considered transient positions (albeit no less legitimate for this, of course). They install a structure of hailing and recognition of identification that – whether humanist or technocratic – presumes modern rationality, along with such limitations as presuming full access to consciousness, and so offering a fixed and closed, rather than relational, model of the subject, rather than one composed of shifting configurations that are intersecting and mutually transformative.

Instead of merely repeating these well-known problems with humanist models, other conceptual and methodological currents are grappling with alternative ways of

[1] Hence whereas Latour (1993) suggested that 'we have never been modern' to topicalise and complicate the limits and reach of modernity, many feminist and postcolonial critics claimed (e.g. Jackson 1992) 'We have never been human', in the sense of oppressed groups not yet being accorded full subject status.

dealing with problems of teleology and abstraction in conceptions of human development and attempting to formulate social subjectivities.[2] Clearly key questions surround the desirability of transcending all aspects of the modern, rather than perhaps reassessing them in the light of diverse modernising processes as they have occurred outside the metropolitan north (Hayami et al. 2003; Chatterjee 1997). Decoupling 'modern' from 'western' (or what is otherwise sometimes called the 'global north') opens up some manoeuvring space, or attention to cultural-historical contexts of practice, from and in which early childhood takes place.

Beyond deconstruction or critical theory (Broughton 1987; Burman and Maclure 2011), contemporary discussions of 'the posthuman', diverse as they are, elaborate ways of destabilising the humanist subject from its privileged place within models of social practice. They draw on the history of science (Haraway 1989), science and technology studies (Latour 1991), sociocultural theory (Newman and Holzman 1993) and actor network theory (Fenwick and Edwards 2012). There are also key contributions from and engagements between feminist, postcolonial and queer theory. Like postcolonial theory, posthuman debates do not presume the historical supercession of humanism (which would then reinstate a progressivist narrative), but rather generate conceptualisations that offer alternative conceptions and even prospects that go beyond the limits of current humanist perspectives. Most particularly, they elaborate practical challenges to the isolationism, as well as the cultural particularity, of prevailing models of human development that masquerade as universal through their inscription in culturally dominant approaches (Boyden 1990).

It should be acknowledged that the resources comprising the broad set of debates informing 'the posthuman' are not only diverse but are in mutual tension. This can make for some difficulties in trying to arrive at a clear sense of what posthumanism is, or rather which posthumanism each is promulgating. Nevertheless, such critical debate works to undermine any pretensions to complete or triumphal analysis. As Braidotti (2013: 90) notes: 'A posthuman notion of the enfleshed and extended relational self keeps the techno-hype in check by a sustainable ethics of transformation. This sober position pleads for resistance to both the fatal attraction of nostalgia and the fantasy of transhumanist and other techno-utopias'.

In the rest of this chapter, I explore what posthumanist critiques bring to reconceptualisations of children, childhood, families and communities and their relations to early childhood education.

[2] In previous work (Burman 2013), rather than merely lament the limits of prevailing approaches, I explored what drives the *desire for* development, that is, to explore the emotional as well as economic investments and subjective attachments that fuel its repetition even amid so many obvious problems. Such a (psychoanalytic) focus usefully disrupts the progressivist linearity of the temporal perspective by which development is typically viewed by looking backwards rather than forwards. But despite its possible use as an intervention, this move too partakes of modernist assumptions even as it disrupts them. This chapter therefore attempts to move the arguments beyond such limitations.

83.3 'Child'

The child functioned both as the anchor for humanist models of subjectivity under modernity and the nostalgic guarantor of the unalienated part of ourselves we have (supposedly) lost. Sentimentalised images of children and childhood populate not only our screens but also our imaginations, aligned with notions of inner, or even authentic, selfhood. Such cultural 'baggage' is unhelpful for many children whose childhoods do not correspond to such idealised images, who correspondingly suffer the stigmatisation and pathologisation of being failing or deficient children and who are the subjects of 'stolen childhoods', as well as for the adults who feel robbed of the childhood they once (might have) had. But the values and meanings accorded to children and childhood have a cultural and political history that has been traced and critiqued (see, e.g. Steedman 1995; Shuttleworth 2010). Steedman shows how ideas emerging across modernising Europe came to be constellated around the child. Ideas from cell theory in biology, alongside ideas that would generate psychoanalysis, inscribed romantic humanism with a sense of embodied history focused on the body and mind of the child, especially – as Steedman highlights – the feminised young child, portrayed as innocent and vulnerable (so articulating and reinscribing the convergence of gendered and childhood ideologies). The past – of culture, society and even the species – became something that was 'turned inside' via the story of the child. Once rendered as an 'internal' matter, the social, political, economic and institutional all fade into insignificance, ushering in domains of explanation and intervention limited by this narrow focus. Hence, the 'child' has long been a key focus for critics of humanism (e.g. Stainton Rogers and Stainton Rogers 1992).

Historical and anthropological research offer vital indications of how understandings, and experiences, of childhood vary according to historical moment and cultural location and even throw into question its categorisations as well as contents. Such work also connects with specific socio-political contests and agendas surrounding childhood and models of learning that accompanied the introduction of compulsory schooling, occurring across Europe in the 1870s. Much work (e.g. Rose 1985) has indicated the complex and contradictory concerns that gave rise to this measure – combining opposition to child exploitation in hazardous working conditions with social order concerns posed by an economically active and politically engaged and dissatisfied sector of the population (Hoyles 1989). The 'schooled child' placed children within an educational field that positioned them as learners rather than knowers, and so delegitimated the socio-political knowledge of working young people (Hendrick 1990). Such issues remain relevant to educational provision for street-connected children to this day (Corcoran 2015). Similarly, Katz (2004) suggests how globalisation restructures forms of childhood and their community and work practices, so connecting questions of neoliberalisation in education (e.g. Fendler 2001) with wider debates on migration and sustainability.

From the posthuman repertoire, other perspectives emerge. While deconstructionist approaches and the textual-linguistic 'turn' shifted the focus from time to

space, history to geography, identity to context and individual to group, the preoccupation within posthuman studies is to explore further the move from a singular, bounded individual to multiple, mobile collective subjectivities. This goes further than Moss and Petrie's (2002) call for a move from children's services to children's spaces, for example (where the focus moves from defining what children 'are' and what they 'need' to attending to and providing socio-educational contexts in which they can act and interact). Taking seriously how subjectivity crosses bodies and minds offers additional approaches to conceptualising and engaging with children. This includes challenging the privilege accorded rationality, and so one key posthuman move has been to attend to and explore affect, as a necessary corollary of embodiment. It also means unhinging the child from the origin point of any development story, singular or general, and instead challenging the temporal hierarchies such models involve, including those that treat what comes earlier as more influential than later experiences or events on particular outcomes. This anti-historicism does not deny history but rather attends to the claims made for such historical continuities or causalities, inviting critical evaluation (Burman 1998, 2017).

As a key example, instead of 'growing up', as we assume children will or should do, queer theory critically interrogates the normalisations inscribed in such trajectories, inviting exploration of alternative pathways such as 'growing sideways' (Stockton 2009). Such perspectives are especially useful to challenge presumed ideas about 'progress' that are read back onto and into child development, but they also bear upon current moves to address some of these criticisms from within developmental psychology such as discussions of 'developmental cascades' (which allow for multiplicity but still privilege earlier over later influences) and of course incite very different approaches to claims focused on neuroscience, brain morphology or physiology.

Humanist models have relied heavily on a presumption of a clearcut demarcation between human and animal (usually premised upon claims to language as a specifically human activity and achievement). Even radical humanist approaches, such as that of Freire (1972), made much of this distinction, and various feminist postcolonial commentators have traced how discourses of European superiority were founded on such demarcations (Seshadri 2012). The young child has long been a source of fascination in this regard, portrayed as bridging nature and culture, with culture figured as the entry into language (see Flegel 2009). But what this presumes is that nature is separated from, and even prior to, culture – an assumption that is increasingly questioned in this (postnatural) world. Man (or human)-made interventions have come to deeply shape apparently natural entities such as climate or landscape, and so 'nature' cannot be divorced from 'culture', nor humankind from animal and other kinds, since we share the same planetary predicament.

Hence, a key feature of posthumanist analyses is that they pressurise the human/non-human relation to attend to entanglements and complexities of human, animal, nature and environment. Indeed 'trans' appears as a ubiquitous term – transnational, transpecies, transversal and of course transgender. While the work done by, within and across 'trans' still demands further explication, it certainly delineates a shift of focus away from dichotomies and polarisations to connections and relations.

Further, as Haraway (2003) notes in both her Companion Species Manifesto and earlier work on the 'onco-mouse' (Haraway 1997) (the genetically engineered mouse created specifically for experimental research), acknowledging such complexity does not imply equal or symmetrical relations but rather mutual relations and dependencies. These unequal interdependencies offer insights for models of mutual engagement and cohabitation, even as humans exercise greater control over animals and territories. An indicative application of posthuman ideas, specifically as formulated by Haraway, to early education is offered by Taylor (2013), who deconstructs the association between child and nature via a critical history of early educationalists' philosophical commitments (she discusses Froebel, Pestalozzi, Montessori), shaping the emphasis on nature work in kindergarten curricula. Just as Strathern (1992) shows how national identities are forged and maintained through particular conceptions of the organisation of nature (whether as gardens or agricultural cultivation or less 'benign' uses) as well as buildings, Taylor highlights how particular gendered and cultural hierarchies are elaborated through this constructed notion of nature. Taylor moves on to offer a series of worked examples of how else human-animal relations might be reconfigured, specifically through reflecting on dilemmas and prefigurative examples arising from classroom and domestic practices.

A further feature of posthuman analysis is that it embraces technology. This is in dramatic contrast to most humanist approaches that decry the machinic as dystopian and destructive of distinctive human characteristics. Here Haraway's earlier (1985) discussion of the cyborg has been a key influence for feminist and postcolonial approaches. Haraway portrays the cyborg as potentially[3] offering a model of subjectivity that is not structured according to the traditional gender binary (male/female), nor tied by history or embodied affective relations (though perhaps even these assumptions will come to be questioned as machines gain sufficient complexity to – seem to – be sentient). The increasing human use of information technologies (for commercial, medical or recreational purposes) has transformed understandings of and horizons for knowing and being, making material ideas of distributed networks of connection that cross bodies and transgress traditional mental/material binaries.

In relation to childhood, such technological developments have radically transformed some of its key tenets. Reproduction can now be technologically assisted, or terminated. The bearing and giving birth to children has not only become medicalised (as feminists have long noted, Martin 2001), but increasingly testing during pregnancy and genetic screening make some foetuses/babies less likely to be born. The abuse of such technologies for the selective termination of girl babies is well documented (Arditti et al. 1989), with far-reaching national and global consequences

[3] Not the question of potential, rather than an intrinsic claim. As Haraway herself often notes, many commentators in citing her 'cyborg manifesto' overlook its subtitle, which qualifies it as 'ironic'. Indeed, Haraway's address at that time was probably primarily to technophobic feminists. Thus, in elaborating a 'socialist-feminist' vision that engages with current material, technological developments, she was countering the then key current of cultural feminism. (Hence the refrain, I'd rather be a cyborg than a goddess.)

that Malouf (1995) attempted to envisage. As well as posing many more ethical-political dilemmas in relation to gender and disability rights, such questions also impose new questions around the relationship between ownership of the body and (women's) labour – as in surrogacy.

Hence, far from only entering into conception and birthing issues, increasingly technologised children and childhoods generate much popular concern and debate (see Lesnik-Oberstein 2008, for analysis of how such technologies reiterate possessive individualist desires for an 'own child' notwithstanding – or perhaps precise because of – their 'assisted' or 'artificial' modes). Some of this concern occurs in relation to children's use of technology, their 'vulnerability' to abuse through the Internet (cyberbullying, grooming or stalking, etc.) and others – reinstating romantic nostalgic themes – that can be seen in the criticisms over children leading increasing sedentary lifestyles and not playing outside, a feature that also arises through increasing child protection considerations, which have helped to produce the segregation of children from other sites of social production in industrialised contexts. Finally, there are hints that children, as a new generation growing up with advanced new technologies as their assumed culture, are taking over as the experts in a way that inspires some fear as well as envy (see also Burman 2011, 2013).

Hence, multiple and ambivalent cultural anxieties are mobilised in reworkings of culture and nature symbolised by children and childhood. The posthuman perspective invites us to go beyond such 'additive' models of, for example, supplementing existing educational practices with new technology (as in 'ICT for schools' initiatives), to envisage more messy and intertwined connections between humans, animals and technology that unsettle some of the perceived constants that have constellated around early childhood education. These constants, or assumptions, are not only focused around notions of gender, or sexuality, for example, but also extend to reconsideration of environments or landscapes of learning and interaction that necessarily transform models of competence, assessment and pedagogy.

83.4 'Families'

Models of the family have long been a site of investigation and critique in developmental psychology and early education. While traditional sociological approaches largely adopted functionalist frameworks, thereby reducing and adapting household practices to economics, psychology has addressed families as the primary arena for the care and upbringing of children – often primarily figured in relation to social policy agendas. Hence, the re-inscription of the binary between the social and the individual is re-enacted not only via disciplinary demarcations but also through legal and social policy distinctions made between what is presumed to be public or private. While Marxist analyses highlighted the family as vital to the state for its reproductive labour – in the sense of maintaining and servicing workers and reproducing new generations of workers – feminists have challenged the gendered division of labour inside and outside the home, including how the reproduction of that division, and

the extension of its accorded status outside the home, is responsible for the low value, and corresponding low pay, accorded care work. This remains the case even where – under neoliberalism – emotional labour is increasingly demanded from all workers. Thus, intersections of longstanding patriarchal relations with the creative and intensifying strategies of capitalism produce specific sites of regulation and evaluation of household positions and in which psychological expertise has increasingly been drawn upon as arbiter.

Critiques of discourses of the family are of course longstanding (see Poster 1978). These emphasised how the rise of the bourgeois nuclear family naturalised the gendered division of labour and the role of the state in policing and normalising family functioning, including naturalising the emotional and physical labour of women. Black feminists also challenged the restricted model of the family addressed by social theory as well as representations of the family as only oppressive, citing how it can also protect against the insults of structural and institutional racism (e.g. Carby 1987). These limitations in conceptualisations of the family have far-reaching consequences. Feminist postcolonial analyses have highlighted how the rise of the ideology of the nuclear family, in the wake of the emerging impacts of Darwinian ideas, provided not only the model for but also a rationale for colonialism. Women and children under the rule of the husband/father constituted a structure of naturalised inequality ('hierarchy within unity') that was applied outside the family, in particular to colonial contexts, to render them as less developed or immature, and so confirm the 'underdevelopment' of those peoples upon whom rule was then sanctioned to be imposed. As McClintock (1995: 45) noted:

> Projecting the family image onto national and imperial progress enabled what was often murderously violent change to be legitimized as the progressive unfolding of natural decree. Imperial intervention could thus be configured as a linear, nonrevolutionary progression that naturally contained hierarchy within unity: paternal fathers ruling benignly over immature children.

Hence, critical and feminist psychologists have challenged the positions and identities produced for parents and children (and the disproportionate emphasis on mothers) via familialist discourses (Arendell 2000; Phoenix and Woollett 1991), just as their sociological counterparts documented diverse varieties of family and household practices that transgress and transcend the models populating textbooks (Gittins 1985). Childhood offers a key link between material and so-called immaterial labour as structured within a classed conception of the family. As Lesnik-Oberstein (1998: 7) put it: 'the very idea of childhood itself is crucially implicated in the structures of feeling that define the bourgeois nuclear family, and which prioritise emotions as a structuring and motivating force for both public and private life in contemporary capitalism'. These 'structures of feeling' (Williams 1977) have been both presumed (naturalised) and then evaluated (assessed) by psychological theories and practices that precisely demonstrate the ideological and mutable character of the public-private binary.

Typologies of parenting styles elaborated within psychology (as authoritarian, permissive or authoritative, e.g. Baumrind 1971) hark back to post-World War II discussions of building democratic societies (informed by Adorno et al.'s 1950

model of 'the authoritarian personality' as produced through family, though interestingly specifically father-son relations). Such models inscribed schooling and so-called progressive or child-centred education, although the gaps in interpretation and practice have been widely documented (see, e.g. Sharp and Green 1975; Walkerdine 1984 and for a recent analysis outside the global north, Sriprakash 2012). Despite being published nearly 25 years ago, Walkerdine and Lucey's (1989) analysis of how child-centred educational approaches are applied to mothers' negotiations with their children, importing the pedagogical imperative from school to home, remains increasingly relevant – including the affective intensifications noted by Lesnik-Oberstein (1998), and the drive towards instrumentalisation and optimisation of individual human capacities highlighted by Foucauldian analyses (e.g. Rose 1989, 1990). Everyday marketing now routinely mobilises developmental psychological discourse to incite a maximisation of development opportunities for children, simultaneously confirming appropriate maternal identities (see, e.g. Burman 2012, 2013). As state cutbacks in health and welfare provision gather pace, amid neoliberal policies that use conditions of recession and 'austerity' to further the promotion of marketisation and globalisation, measures are being introduced to 'activate' and 'responsibilise' parents and children, with the 'burden' of caring increasingly located within a restrictively defined family household and activation entering into the very earliest schooling (Ailwood 2008).

It should be clear that it is important not to overstate the distinction between posthuman and other critical approaches. In relation to critiques of familial models in psychology, there is a large and longstanding body of critical research that has both documented diversity of family forms and analysed the consequences of failing to represent these within psychological and social theories and policies. Of these, perhaps Phoenix's (1987) discussion of the ways young Black mothers feature in psychological accounts only as problematic is particularly noteworthy. The dynamic of normalised absence/pathologised presence she identified, that is, of only being represented when stigmatised and disappearing from attention when non-problematic, has been taken up more widely to address general dynamics of the ways gender and culturally minoritised positions intersect (see, e.g. Burman and Chantler 2005). Intersectionality theory is perhaps one of the key crossover frameworks between feminist (particularly Black feminist) and posthuman analyses (Phoenix and Prattynama 2006; Cho et al. 2013).

The emergence of cultural psychology has also brought attention to anthropological research documenting varieties of family and kinship systems across and within cultures. A first step was to attend to cultural differences in norms of caregiving practices produced through different family and household organisations, such as joint families (e.g. Kurtz 1992). But this move ran the risk of reinstalling particular static, reified conceptions in the name of cultural authenticity. More recent work has engaged with the changing structure and functioning of families and households as they struggle to cope with, and indeed often creatively adapt to, changing economic conditions that distribute caring and familial responsibilities across great distances, often transnationally. Familial forms can then be understood alongside the political and economic forces that shaped them, but also in relation to how changes

in the structuring of labour have produced a 'global care chain' (Hochschild 2000) such that poor women from poor countries are paid by richer women in rich countries to care for their children, while the poorer women's children are cared for by grandparents or other – often female – family members.

Moreover, just as intranational and transnational labour migration become increasingly normalised, this has transformed understandings of family as well as labour relations, showing their mutual constitution. A further set of analyses has documented how economic pressure shapes even the most intimate and earliest caregiving activities. Gottlieb's (2014) account from the Cote D'Ivoire of Beng practices of feeding and washing babies suggests how activities that could be understood as violent intrusions work in the service of maintaining their mothers' agricultural labouring capacities. This puts into a rather different context debates circulating from the global north about breastfeeding and its class structuring (Newson and Newson 1973) – despite and amid claims that 'breast is best'. In terms of the intensification of labour for survival in contexts of accelerating global poverty inequalities, Nieuwenhuys (2007) has coined the term the 'global womb' to describe the 'hidden' work of women and (both boy and girl) children as the last resource being mobilised by and in response to capitalist superexploitation. A more familiar example in the global north – which also pertains to the global south – is how, contrary to prevailing images of the family in which children are cared for rather than providing care (surely a massively false opposition), many children across the world are carers for their families, either through parental disability, dislocation or death (Widmer et al. 2013). Thus, gendered and generational positions are mediated by class and economic privilege, and the boundaries around family forms and functioning are shown to be increasingly permeable according to the whims and appetite of capitalism.

While such cultural analyses have certainly destabilised prevailing understandings of both children and their parents, as well as how and where they live, perhaps queer theory has done the most to challenge models of the family. This goes beyond earlier work (e.g. Tasker 2004; Tasker and Golombok 1997) warding off the pathologisation of gay men and lesbians as parents by documenting how their children can be as happy and well adjusted as children growing up with parents in a heterosexual relationship. Useful as this was, as Anderssen (2001) pointed out, it maintains the prevailing orientation around a heteronormative model by focusing on how gay and lesbian families can be 'as good as' heterosexual ones. Beyond this kind of compensatory approach (which maintains heterosexual privilege), other challenges have emerged. In particular, within the posthuman frame, Edelman's (2004) book *No Future* takes issue with the ways the child is (under prevailing conditions of conception and reproduction) the distinctive and definitive outcome of a heterosexual coupling. He critiques the way the child is figured culturally as a significant guarantor of heterosexuality around which not only is the heteronormative family constellated but, linked to and through this, wider institutional and structural practices are confirmed. Edelman develops this analysis to indicate far-reaching connections between the figure of the child as signifier of continuity and futurity and wider societal notions of teleology. Hence, national, international and even planetary progress fig-

ure as driven by and supporting heteronormativity. Edelman's analysis may be limited by insufficient attention to the specifically gendered discourses around parenting roles and indeed parenthood (see Lesnik-Oberstein 2010; Caselli 2010). Nevertheless, his analysis highlights interpretive vistas opened up by highlighting the ways family forms implicate, and are implicated within, restrictive and coercive discourses of (hetero)sexed/gender relations.

If queer theory has questioned what is presumed to be natural and critiques the child as the site of heteronormative social reproduction, developments in reproductive technology prompt further posthuman and postnatural analyses (including precisely those that have been used by gay and lesbian parents – such as donor insemination, surrogacy and in vitro fertilisation). Taking developments in reproductive technologies as a starting point, Strathern's (1992) influential book *After Nature* provides a rather different set of reflections and resources that inform posthuman debates. Indeed, she and Haraway write in a cycle of mutual influence, so that in this early text, she draws on Haraway's (1985) 'cyborg manifesto'. Strathern traces the transformation of the notion of 'kin' from its earlier anthropological use to describe cultural networks and hierarchies to become – after and via interpretations of Darwinian evolutionary theory – something that is increasingly treated as a matter of biological, rather than social, relationship. On a methodological and analytical note, Strathern specifies her claims as relating to the retrospective accounting procedures of British anthropologists of the mid-twentieth century. Such qualifications turn out to have significance, not only in relation to the particular contributions of British anthropologists to theories of kinship but also precisely in relation to the question of (smaller) family size that, it has been claimed, gave rise to the earlier emergence of and value accorded notions of individuality in England. Unlike Macfarlane (1983), whose work she draws upon, rather than treating this as part of a progressivist narrative, Strathern leaves open the question of historical facticity to read such accounts (in Foucauldian terms) as histories of the present, that is, as relating to preoccupations of the contemporary moment – somewhat playfully leaving open whether she sees these as explanatory factors for, or rather as symptoms of, these. A key argument running through this rich and allusive text is that the postevolutionary discursive shift from social to biological kinship paradoxically evacuates the notion of 'kin' of its social dimensions. Not only does the individual emerge stripped of its social constitution, but notions of nature come to be understood as outside the social in a way that ultimately de-socialises the individual itself.

Strathern offers an account of the separation of nature from the social that constitutes the preconditions for the genetic developmentalism that Edelman problematises, with all its heteronormative and other (class, cultural, differently abled, gendered) exclusions. Moreover, her analysis addresses the relevance of such notions within the rising culture of individualism and individualisation that formed the cultural-temporal backcloth to her analysis – Thatcherite Britain of the 1980s – to provide an analysis that is strikingly prescient of the current twenty-first century posthuman discussions. In relation to families, as she also notes, the postevolutionary discourse that privileges biological notions is now combining with an economic climate of cutbacks to welfare support such that people are increasingly expected to

look for and find support from their families – however defined, but with an agenda of de-responsibilising the state and wider social relations in favour of smaller, local, 'personal' networks of support and care. And so we see how mutual citations and presumptions work to confirm existing social conditions and oppressions, but also how posthuman critiques can unravel these and show different possibilities.

Finally, discussions of the posthuman not only critique prevailing exclusionary and restrictive definitions but, taking up the reworking (or queering) of human-animal and technology relations, also suggest how other sets of relationships could be acknowledged and mobilised. This invites a redrawing of kinship relations not only across non-biologically connected individuals and groups but also across species. It is no accident that stories of savage children and wolf boys became sources of cultural fascination from the mid-nineteenth century (see Chen 2012; Seshadri 2012). A key text here is Haraway's (2003) 'Companion species manifesto', a highly influential successor to her 1985 'Cyborg Manifesto', which takes the practice of dog training to illuminate complexities, mutual and reciprocal (but not equal) relations between humankind and animalkind. She addresses the pleasures, frustrations and jointly agentic productions of such interactions in a way that starts from, but goes way beyond, conventional humanist anthropomorphic and possessive notions of 'pets' or animal companions. This is not merely an account of how 'pets are family members too' – although such may also be true. From this close study emerge broader issues of human-animal connectedness and responsibility. Haraway and others (such as Braidotti 2013, who takes this up via a Deleuzian framework) elaborate this analysis to envisage a sense and set of commonworlds that critique prevailing capitalist and humanist models of ownership and superiority in favour of a shared common destiny. Thus, from the detail of the pedagogical (and so social technological) patterning of activity with her dog, a different framework for relating across prevailing definitions of family emerges – not 'the family' of 'man' or even 'humankind' but of shared animal living in an increasingly pressurised ecological context that urgently requires human reparative attention.

83.5 'Communities'

Conventionally, 'communities' are much less discoursed in developmental psychology than are notions of 'child' and 'family' (and so it is particularly commendable they figure that within this volume). Arguably, the reason for this arises precisely through the ways the term 'families' has functioned as the proxy for the social in developmental psychology to the detriment of indicating its social, structural and cultural determinants. Interestingly, community psychology is not often connected to developmental psychology discussions. This is a significant omission since the radical community social psychologies of Latin America, for example, offer profoundly different models for social-political practice (Montero 2002). In my own (UK, European) context, there is much celebration of the notion of 'community' (usually discoursed as singular), which is typically formulated in relation to nostalgic regrets

over its (supposed) demise. By this account, the 'loss of a sense of community' is associated with the rise of individualism and corresponding egotism and lack of sense of shared cohabitation and responsibility. In this regard, Strathern's account of how the rise of the individual occludes the conditions for its own existence, that is, the social, is particularly relevant to claims of the disappearance of 'community':

> Individuality signals choice: it would also seem that it is up to the individual whether to adhere to convention. Choice becomes conventional, and conventions are for choosing. It then becomes redundant to externalise other domains, or even think of social relationships as an object of or context for people's communication with one another. This explains why the active citizen can be relied upon to behave responsibly in her or himself; why the New Right can talk in the same breath of the duties of the citizen and the freedom of the individual without any intervening image of a community. (Strathern 1992: 15)

Having supposedly disappeared, politicians attempt to reinvent 'community', although this now occurs within specific political parameters of neoliberalism elaborated with an agenda to devolve responsibility for provision and support from the state to civil society. Indeed, the key feature of the British Conservative electoral platform leading up to its 2010 victory (to form a coalition government) was its call for a 'Big Society' as a means to regenerate social engagement. Indicators of this were seen in recent tropes of British policy eliding dynamics of social deprivation with family functioning, such as 'Broken Britain', 'Feral underclass' (in the wake of the 2011 riots) and 'Lost generation' (in relation to escalating youth unemployment and vistas of downward mobility even amongst graduates). But as various commentators have pointed out, and as is strikingly reminiscent of Strathern's analysis, it would seem that this Society (Big or not) has – precisely through such policies – been so emptied of its contents that there is little left inside. Rather, it is an empty society, without complex large institutions (and cities), composed of active but flexible subjects in supposedly small, friendly, local associations (Raban 2010). 'Communities' by this account, then, are supposed to be benign, supportive and culturally homogeneous – a far cry from the complex, multi-ethnic contiguities of most cities.

As a state-level correlate of the ways child, families and communities are engaged with, it is worth noting that in the current UK administration, Children and Families are dealt with in one Ministry, while Communities are in another. What this highlights is how the term 'communities' (in the plural) in a UK political context currently designates minoritised communities in a manner reminiscent of the ways 'ethnicity' is often discussed as an attribute only of minority ethnic groups. This discourse not only maintains a dynamic of 'othering' but also occludes the relational process by which this is produced (by the majority ethnic group). Moreover, the term's political career has moved from a focus on 'community relations', that is, with social order and disorder especially in relation to policing and social stigmatisation (also largely associated with minority communities), to now being allied with social and community 'cohesion' (or security) agendas. This securitisation discourse links local with national and transnational concerns, such that it is preoccupied with identifying 'vulnerable' individuals deemed at risk of exploitation (e.g. by radical islamisation) in order to prevent terrorism. (See Mclaughlin 2012; Furedi 2008 for analyses of how the discourse of vulnerability both mobilises and is sup-

ported by those surrounding children and families.) Hence, 'communities' is far from being an innocent term.

Furthermore, prevailing discussions of 'communities' tend towards a static emphasis and incite an abstraction and reification of practice (that makes reference to 'culture' all the more problematic). Antiracist feminist analyses (e.g. Gupta 2003; Yuval-Davis 1998; Anthias 2008) have long critiqued the image of minority cultural communities as stable, homogeneous and benign, showing how they are divided by class, gender, age and sometimes religious differences. Both critiquing and going beyond the arguments offered by queer theory, they have also challenged the ways women have been seen to represent cultural identification, via their association with the bearing and caring of children, as designating general heterosexed and gendered dynamics that is disproportionately associated with minority communities. Thus far from being separated from community and societal relations, gendered roles and positions, including the evaluation and regulation of women's behaviour, are articulated through and in relation to discourses of both cultural-religious and national belonging.[4] Beyond these discussions, even in that now rather outdated understanding of 'community' (as a geographically delineated neighbourhood), indicative studies suggest that – contrary to many people's preconceptions – matters of cultural diversity or homogeneity are largely a function of class position, rather than ethnicity, in the sense that working class communities have always been much more culturally diverse and mixed than middle class ones as a reflection of the intersection between racialisation and economic position. Acknowledging such mutually constitutive and intersecting relationships is vital for the elaboration of better theories and practices around children and families – whether from minoritised or majoritised contexts – as various studies domestic abuse provision for minoritised women and children have highlighted (Burman et al. 2004).

So, for many, 'community' (or 'communities') is so imbued with ideological components that other terms are preferable. Indeed, in addition to its implicitly racialised character, one key matter overlooked by discussions of 'community' is class. Currently inside academic debate as well as outside, there is much discussion about 'new social movements' that are creating (or re-creating) networks and relationships that are not structured according to age or gender hierarchies (and so challenge or trouble the adult-child binary) and that do not correspond to traditional forms of political organisation. While 'community' retains some territorial connotations of rural nostalgia or humanist belonging that command posthumanist suspicion, it remains to be seen whether or how 'social movements' will replace 'communities'. Certainly it is a better substitution than another candidate, the 'social enterprise', that has arisen through the permeation of neoliberalism into social and community mobilisation now used to designate self-organised support and campaigning groups.

[4] Examples abound, but a key one would be the way debates over Muslim women wearing the hijab or even nikab come to stand in for wider discussions about national identity. So much of the debate fails to consider why such arguments are being played out over what women wear, so precisely both trivialising women's own struggles and reiterating the elision between women and cultural representation.

83.6 Endings or Beginnings?

It would be counter to posthuman analysis to arrive at any firm conclusions, but three threads of argument can be drawn together that indicate lines of inquiry relevant for reconceptualisation of (the relations between) children, families and communities in psychology and early education. In particular, such moves may facilitate recent calls to build connections with other disciplines, especially articulated from 'the new social studies of childhood' which historically has (understandably) been critical of traditional developmental psychological and educational theories (Thorne 2007; Alanen 2010).

First, posthuman analyses are neither utopian nor dystopian. What this means is that, while informed by a critical impulse, there are also clear ethical-political commitments guiding posthuman discussions. Precisely as a result of the criticisms of progress and teleology, however, they are not fixed on a specific future vision or ideal, for this could install easy recuperations. After all, notwithstanding the creative and transgressive work underway, the project to attend to and reconfigure animal-human relations is not immune from familialist and colonialist (re)constructions. It is important to remember how the early child-saving movement in Britain employed religiously sanctioned patriarchal models through analogy with Christian imagery of the Holy Family. While the earliest animal protection society in the world, the Royal Society for the Protection of Cruelty to Animals (RSPCA), was formed in Britain 50 years before its child protection movement, this too had its class and cultural exclusionary features which – as Gandhi (2006) notes – were also played out through its differences from the Vegetarian Society (founded in Manchester in 1847). In her history of the National Society for the Prevention of Cruelty to Children (NSPCC), Flegel (2009) suggests that such familialism played a role within the tensions, and subsequent parting of the ways, between the NSPCC and its supportive predecessor, the RSPCA, quoting articles in The Child's Guardian (an NSPCC publication) in 1887 where ' … The choice of these parents to care for animals before their children is a sign of their savagery, of their failure to respect and protect the sanctified space of the home' (p. 63). Both historically and currently, significant political and analytical opportunities were overlooked in failing to attend to gender, generational and cross-species intersections, with significant consequences: Flegel (2009: 72) suggests ' … by severing the child from the animal, the NSPCC failed to recognise the ways in which narratives of child-animal suffering might help to illuminate problems of power, cruelty and domination'.

Secondly, analytically and methodologically, there is a focus on specificity, particularity and contingency (rather than generalisation, standardisation and universality). Earlier I discussed how Strathern (1992) framed her arguments in terms of the mid-twentieth century Englishness. This was a specific intervention in a particular disciplinary set of debates (in English anthropology), yet it also acts as an exemplar for a mode of analysis and argumentation that elaborates new criteria for coherence and engaged scholarship, challenging scientism and mere adaptationist notions of 'application'. Indeed, the French political theorist Badiou (2012: 2) has precisely argued for a specific understanding of ethically informed practice, such

that ethics … ‘should be referred back to particular situations. Rather than reduce it to an aspect of pity for victims, it should become the enduring maxim of singular processes.’ Similarly, in her Companion Species Manifesto, Haraway (2003) argues that kinship claims are forged through a material history of joint and relational activity, rather than abstract a priori commitments. They are ‘ … made possible by the concrescence of prehensions of many actual occasions. Companion species rest on contingent foundations’ (p. 5). Hence, from specific analysis of dogtraining, she arrives at a position that ‘the origin of rights is in committed relationship, not in separate and pre-existing category identities’ (p. 53).

A third feature arises as an effect of the second: the attention to affect as both topic and analytic resources. The affective turn – in its both negative and positive versions (Clough with Halley 2007) – has been central to many methodological innovations and interventions in educational and social research. Its impact has been felt less within developmental psychological research, although the rise of psychosocial studies is now starting to have some impact here (Britzman 2011). Beyond static rationalist models of reflexivity, the affective turn promises to support politically engaged and innovative research that attends to the apparently minor or insignificant, the fleeting and the non or the less rational in research relations and accounting practices (Burman 2015). Further, attending to affect as a relational effect of multiple and complex interactions helps to ward off the individualisation and privatisation of models of the detached and isolated researcher to foster rigorous and engaged practice (Ahmed 2004; Luke and Gore 1992; Leathwood and Hey 2009; Hey and Leathwood 2009).

Such critical perspectives also have implications for understandings of children’s rights and their sometimes apparently tense relations with culturally inflected discourses of childhood – for both presume an abstracted domain of elaboration and application. Instead of treating rights as western-framed cultural universals that overlook other cultural practices, Reynolds et al. (2006) characterise ‘children’s rights as social practices that emerge from the encounter between everyday experiences and the body of knowledge on which practical decision-making is based’ (p. 297). Further lessons for childhood researchers include attending to the dangers of overstating what our research does. As Gallacher and Gallagher (2009) highlight, what we might better aim to do is to be more modest and limited in our claims, to enjoy and celebrate ‘immature’ or limited research that helps slow down the societal over-readiness to apply and ‘roll out’ or ‘scale up’ such claims, in particular in instrumentalising early childhood development and education.

References

Adorno, T., Fraenkel-Brunswick, H., Levinson, D., & Sanford, R. (1950). *The authoritarian personality*. New York: Harper Row/Norton.

Ahmed, S. (2004). *The cultural politics of emotion*. Edinburgh: Edinburgh University Press.

Ailwood, J. (2008). Learning or earning in the "Smart State". *Childhood: A Global Journal of Child Research, 15*(4), 535–551.

Alanen, L. (2010). Critical childhood studies? *Childhood, 18*(2), 147–150.

Anderssen, N. (2001). A critical look at psychological research on the children of lesbian or gay parents. *International Journal of Critical Psychology, 1*(3), 173–181.

Anthias, F. (2008). Thinking through the lens of translocational positionality: An intersectionality frame for understanding identity and belonging. *Translocations: Migrations and social change*. http://www.dcu.ie/imrstr/volume_4_issue_1/Vol_4_Issue_1_Floya_Anthias.pdf. Accessed 20 Aug 11.

Arditti, R., Duelli Klein, R., & Minden, S. (Eds.). (1989). *Test-tube women: What future for motherhood?* London: Pandora Press.

Arendell, T. (2000). Conceiving and investigating motherhood: The decade's scholarship. *Journal of Marriage and Family, 62*(4), 1192–1207.

Badiou, A. (2012). *Ethics: An essay on the understanding of evil*. London: Verso.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology, 4*(1p2), 1–103.

Boyden, J. (1990). Childhood and the policymakers: A comparative perspective on the globalization of childhood. In A. James & A. Prout (Eds.), *Constructing and reconstructing childhood* (pp. 184–215). Lewes: Falmer Press.

Braidotti, R. (2013). *The posthuman*. Cambridge: Polity.

Britzman, D. (2011). *Freud and education*. New York: Routledge.

Broughton, J. (Ed.). (1987). *Critical theories of psychological development*. New York: Plenum.

Buck-Morss, S. (1975). Socio-economic bias in Piaget's theory and its implications for cross-culture studies. *Human Development, 18*(1–2), 35–49.

Burman, E. (1998). The child, the woman and the cyborg: (Im)possibilities of a feminist developmental psychology. In C. Griffin, K. Henwood, & A. Phoenix (Eds.), *Standpoints and differences: Feminist perspectives on psychology* (pp. 210–232). London: Sage.

Burman, E. (2011). Gender and childhood in neoliberal times: Contemporary tropes of the boy-child in psychological culture. In K. Lesnik-Oberstein (Ed.), *Children in culture, revisited: Further approaches to childhood* (2nd ed., pp. 18–34). Basingstoke: Palgrave Macmillan.

Burman, E. (2012). Deconstructing neoliberal childhood': Towards a feminist antipsychological approach. *Childhood: A Global Journal of Child Research, 19*(4), 423–438.

Burman, E. (2013). Conceptual resources for questioning child as educator. *Studies in Philosophy and Education, 32*, 1. doi:10.1007/s11217-012-9353-0.

Burman, E. (2015). Educational intimacies: Writing bodily relations in early childhood and education. In A. B. Reinertsen & A. M. Otterstad (Eds.), *Metodefestival og Øyeblikksrealisme* [Method-celebration/party and moments of realism]. Bergen: Fagbokforlaget.

Burman, E. (2017). *Deconstructing developmental psychology* (3rd ed.). London: Routledge.

Burman, E., & Chantler, K. (2005). Domestic violence and minoritisation: Legal and policy barriers facing minoritised women leaving violent relationships. *International Journal of Law and Psychiatry, 28*(1), 59–74.

Burman, E., & Maclure, M. (2011). Deconstruction as a method of research: Stories from the field. In B. Somekh & C. Lewin (Eds.), *Theory and methods in the social sciences* (2nd ed., pp. 286–294). London: Sage.

Burman, E., Smailes, S., & Chantler, K. (2004). "Culture" as a barrier to domestic violence services for minoritised women. *Critical Social Policy, 24*(3), 358–384.

Cannella, G., & Viruru, R. (2004). *Childhood and postcolonization*. New York: Routledge Falmer.

Carby, H. (1987). Black feminism and the boundaries of sisterhood. In M. Arnot & G. Weiner (Eds.), *Gender and the politics of schooling* (pp. 64–75). Hutchinson: London.

Caselli, D. (2010). Kindergarten theory: Childhood, affect, critical thought. *Feminist Theory, 11*(3), 241–254.

Chatterjee, P. (1997). *Our modernity (No. 1)*. Rotterdam: Sephis.

Chen, M. (2012). *Animacies: Biopolitics, racial mattering and queer affect*. Durham: Duke University Press.

Cho, M., Crenshaw, K., & McCall, L. (Eds.). (2013). (Special issue) Intersectionality: Theorising power, empowering theory. *Signs. 38*, 4.

Clough, P. with Halley, J. (Eds). 2007. *The affective turn: Theorizing the social*. Durham: Duke

Corcoran, S. (2015). Disabling streets or disabling education? Challenging a deficit model of street-connectedness. *Disability & the Global South, 2*(2), 613–619.

De Vos, J. (2012). *Psychologisation in times of globalization*. London: Palgrave.

De Vos, J. (2014). *Psychologization and the subject of late modernity*. London: Palgrave.

Edelman, L. (2004). *No future: Queer theory and the death drive*. Durham: Duke University Press.

Fendler, F. (2001). Educating flexible souls: The construction of subjectivity through developmentality and interaction. In K. Hultqvist & G. Dahlberg (Eds.), *Governing the child in the new millennium* (pp. 119–142). New York: Routledge Falmer.

Fenwick, T., & Edwards, R. (Eds.). (2012). *Researching education through actor-network theory*. Chichester: Wiley.

Flegel, M. (2009). *Conceptualizing cruelty to children in nineteenth-century England: Literature, representation and the NSPCC*. London: Ashgate.

Freire, P. (1972). *Pedagogy of the oppressed*. Harmondsworth: Penguin.

Furedi, F. (2008). Vulnerability: Analytical concept or rhetorical idiom? In J. Satterthwaite, M. Watts, & H. Piper (Eds.), *Talking truth: Confronting power* (pp. 35–50). Stoke on Trent: Trentham Books.

Gallacher, L., & Gallagher, M. (2009). Methodological immaturity in childhood research? Thinking through "participatory methods". *Childhood: A Global Journal of Child Research, 15*(4), 499–516.

Gandhi, L. (2006). *Affective communities: Anticolonial thought, fin-de -siècle radicalism and the politics of friendship*. Durham: Duke University Press.

Gittins, D. (1985). *The family in question*. London: Macmillan.

González Rey, F. (2011). A re-examination of defining moments in Vygotsky's work and their implications for his continuing legacy. *Mind, Culture, and Activity, 18*, 257–275.

Gottlieb, A. (2014). First acts of small violence: Reflections on feeding and enemas in west Africa. In K. Wells, E. Burman, H. Montgomery, & A. Watson (Eds.), *Childhood, youth and violence in global contexts*. London: Palgrave.

Gupta, R. (Ed.). (2003). *From homemakers to jailbreakers: Southall black sisters*. London: Zed Books.

Haraway, D. (1985). A manifesto for cyborgs: Science, technology and social feminism in the 1980s'. *Sociology Review, 15*, 65–107.

Haraway, D. (1989). *Primate visions: Gender, race and nature in the world of modern science*. New York: Routledge.

Haraway, D. (1997). Modest_Witness@Second_Millennium.FemaleMan_Meets_Oncomouse. New York: Routledge.

Haraway, D. (2003). *The companion species manifesto: Dogs, people and significant otherness*. Chicago: Prickly Paradigm Press.

Hayami, Y., Tanabe, A., & Tokita-Tanabe, Y. (Eds.). (2003). *Gender and modernity: Perspectives from Asia and the Pacific*. Melbourne: Kyoto University Press.

Hendrick, H. (1990). Constructions and reconstructions of British childhood: An interpretive survey, 1800 to the present day. In A. James & A. Prout (Eds.), *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood* (pp. 35–59). Basingstoke: Falmer Press.

Henriques, J., Hollway, W., Urwin, C., Venn, C., & Walkerdine, V. (1998). *Changing the subject: Psychology, social regulation and subjectivity*. London: Methuen.

Hey, V., & Leathwood, C. (2009). Passionate attachments: Higher education, policy, knowledge, emotion and social justice. *Higher Education Policy, 22*, 101–118.

Hochschild, A. R. (2000). Global care chains and emotional surplus value. In W. Hutton & A. Giddens (Eds.), *On the edge: Living with global capitalism* (pp. 130–146). London: Jonathan Cape.
Hoyles, M. (1989). *The politics of childhood*. London: Journeyman.
Hultqvist, K., & Dahlberg, G. (Eds.). (2001). *Governing the child in the New Millenium* (pp. 119–142). New York: Routledge Falmer.
Jackson, S. (1992). The amazing deconstructing woman. *Trouble & Strife, 25*, 25–35.
Katz, C. (2004). *Growing up global: Economic restructuring and children's everyday lives*. Minneapolis: University of Minnesota Press.
Kurtz, S. (1992). *All the mothers are one*. New York: Academic.
Latour, B. (1991). Technology is society made durable. In J. Law (Ed.), *A sociology of monsters: Essays on power, technology and domination* (pp. 103–131). London: Routledge.
Latour, B. (1993). *We have never been modern*. Hove: HarvesterWheatsheaf.
Leathwood, C., & Hey, V. (2009). Gender/ed discourses and emotional sub-texts: Theorising emotion in UK higher education. *Teaching in Higher Education, 14*(4), 429–440.
Lesnik-Oberstein, K. (1998). *'Introduction', children in culture: Approaches to childhood*. New York: Macmillan.
Lesnik-Oberstein, K. (2008). *On having an own child: Reproductive technologies and the cultural construction of childhood*. London: Karnac.
Lesnik-Oberstein, K. (2010). Childhood, queer theory, and feminism. *Feminist Theory, 11*(3), 309–321.
Luke, C., & Gore, J. (Eds.). (1992). *Feminisms and critical pedagogy*. London: Psychology Press.
Macfarlane, A. (1983, May) Man and the natural world. *London Review of Books*, *5*, 9. Accessed via alan.macfarlane.com (090913).
MacNaughten, G. (2005). *Doing foucault in early childhood education*. London: Routledge Falmer.
MacNaughton, G., Smith, K., & Davis, K. (2007). Researching with children. *Early Childhood Qualitative Research*, 167–184.
Malouf, A. (1995). *The first century after Beatrice*. London: George Braziller.
Martin, E. (2001). *The woman in the body*. New York: Beacon Press.
McClintock, A. (1995). *Imperial leather: 'Race', gender and sexuality in the colonial contest*. London: Routledge.
Mclaughlin, K. (2012). *Surviving identity: Vulnerability and the psychology of recognition*. London: Routledge.
Montero, M. (2002). On the construction of reality and truth. Towards an epistemology of community social psychology. *American Journal of Community Psychology, 30*(4), 571–584.
Moss, P., & Petrie, P. (2002). *From children's services to children's spaces*. London: Routledge Falmer.
Newman, F., & Holzman, L. (1993). *Lev Vygotsky: Revolutionary scientist*. London: Routledge.
Newson, J., & Newson, E. (1973). Cultural aspects of child-rearing in the English-speaking world. In M. Richards (Ed.), *The integration of the child into a social world* (pp. 53–82). Cambridge: Cambridge University Press.
Nieuwenhuys, O. (2007). Embedding the global womb: Global child labour and the new policy agenda. *Children's Geographies, 5*(1–2), 149–163.
Phoenix, A. (1987). Theories of gender and black families. In G. Weiner & M. Arnot (Eds.), *Gender under scrutiny* (pp. 57–69). London: Hutchinson.
Phoenix, A., & Prattynama, P. (2006). Intersectionality. *European Journal of Women's Studies, 13*(3), 187–192.
Phoenix, A., & Woollett, A. (Eds.). (1991). *Motherhood: Social construction, politics and psychology*. London: Sage.
Poster, M. (1978). *Critical theory of the family*. London: Pluto Press.
Raban, J. (2010). Cameron's crank: Review of red tory. *London Review of Books, 32*, 8 .www.lrb.co.uk/v32/n08.jonathan-raban/camerons-crank/print

Reynolds, P., Nieuwenhuys, O., & Hanson, K. (2006). Refractions of children's rights in development practice: A view from anthropology-introduction. *Childhood: A Global Journal of Child Research, 13*(3), 291–302.
Rose, N. (1985). *The psychological complex: Psychology, politics and society in England 1869–1939*. London: Routledge.
Rose, N. (1989). *Inventing ourselves*. London: Routledge.
Rose, N. (1990). *Governing the soul*. London: Routledge.
Seshadri, K. (2012). *HumAnimal: Race, law, language*. Minneapolis: University of Minneapolis Press.
Sharp, R., & Green, A. (1975). *Education and social control*. London: Routledge & Kegan Paul.
Shuttleworth, S. (2010). *The mind of the child: Child development in literature, science and medicine, 1840–1900*. Oxford: Oxford University Press.
Sriprakash, A. (2012). *Pedagogies for development: The politics and practice of child-centred education in India*. Dordrecht: Springer.
Stainton Rogers, W., & Stainton Rogers, W. (1992). *Stories of childhood*. Hemel Hempstead: Harvester Wheatsheaf.
Steedman, C. (1995). *Strange dislocations: Childhood and the idea of human interiority 1780–193*. London: Virago.
Stockton, K. B. (2009). *The Queer child: Or growing sideways in the twentieth century*. Durham: Duke University Press.
Strathern, M. (1992). *After nature: English kinship in the late twentieth century*. Cambridge: Cambridge University Press.
Tasker, F. (2004). Lesbian parenting: Experiencing pride and prejudice. *Psychology of Women Section Review, 6*(1), 22–28.
Tasker, F., & Golombok, S. (1997). *Growing up in a lesbian family: Effects on child development*. New York: Guildford.
Taylor, A. (2013). *Reconfiguring the natures of childhood*. London: Routledge.
Thorne, B. (2007). Editorial: Crafting the interdisciplinary field of childhood studies. *Childhood, 14*, 147–152.
Walkerdine, V. (1984). Developmental psychology and the child-centred pedagogy. In J. Henriques, W. Hollway, C. Urwin, C. Venn, & V. Walkerdine, *Changing the subject: Psychology, social regulation and subjectivity* (pp. 153–202). London: Methuen.
Walkerdine, V., & Lucey, H. (1989). *Democracy in the Kitchen: Regulating mothers and socialising daughters*. London: Virago.
Widmer, E. D., Kempf, N., Sapin, M., & Galli-Carminati, G. (2013). Family beyond parents? An exploration of family configurations and psychological adjustment in young adults with intellectual disabilities. *Research in Developmental Disabilities, 34*(1), 207–217.
Williams, R. (1977). *Marxism and literature* (Vol. 1). Oxford: Oxford University Press.
Yuval Davis, N. (1998). *Gender and nation*. London: Sage.