International Perspectives on
Early Childhood Education and Development 42

Linda Mahony
Sharynne McLeod
Andi Salamon
Jenny Dwyer *Editors*

Early Childhood Voices: Children, Families, Professionals

Springer

International Perspectives on Early Childhood Education and Development

Volume 42

Early childhood education in many countries has been built upon a strong tradition of a materially rich and active play-based pedagogy and environment. Yet what has become visible within the profession, is essentially a Western view of childhood preschool education and school education.

It is timely that a series of books be published which present a broader view of early childhood education. This series seeks to provide an international perspective on early childhood education. In particular, the books published in this series will:

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- Explore policy imperatives which shape and have shaped how early childhood education is enacted across countries
- Examine how early childhood education is researched locally and globally
- Examine the theoretical informants driving pedagogy and practice, and seek to find alternative perspectives from those that dominate many Western heritage countries
- Critique assessment practices and consider a broader set of ways of measuring children's learning
- Examine concept formation from within the context of country-specific pedagogy and learning outcomes

The series will cover theoretical works, evidence-based pedagogical research, and international research studies. The series will also cover a broad range of countries, including poor majority countries. Classical areas of interest, such as play, the images of childhood, and family studies will also be examined. However the focus will be critical and international (not Western-centric).

Please contact Astrid Noordermeer at Astrid.Noordermeer@springer.com to submit a book proposal for the series.

Linda Mahony • Sharynne McLeod
Andi Salamon • Jenny Dwyer
Editors

Early Childhood Voices: Children, Families, Professionals

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Editors
Linda Mahony
School of Education and Tertiary Access
University of the Sunshine Coast
Sippy Downs, QLD, Australia

Sharynne McLeod
School of Education
Charles Sturt University
Bathurst, NSW, Australia

Andi Salamon
Faculty of Education
University of Canberra
Bruce, ACT, Australia

Jenny Dwyer
School of Education
Charles Sturt University
Bathurst, NSW, Australia

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Foreword

This book is a remarkable achievement. It draws together scholars from an array of disciplines, from across the world, to interrogate what it means to elicit and engage meaningfully with the many languages of very young children. Steeped in a commitment to children's rights, each chapter is also mapped against the United Nation's Sustainable Development Goals (SDGs) (United Nations, 2015). These Goals *'recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth—all while tackling climate change and working to preserve our oceans and forests'* (United Nations, 2015).

It is a testament to the richness and breadth of this edited collection that it traverses multiple dimensions of children's experiences on the planet, including home and family, the early childhood setting, friendship, the experience and aftermath of climate change impacts, and the disruption of the pandemic. It asks us to consider how we can address gender inequalities by actively engaging young girls in the early childhood setting in STEM. It asks us to consider how the mathematical graphics of young children are a form of children's expression. Many of the chapters provoke us to be better at redressing the inequalities and/or disadvantages children might face.

A theme that runs throughout the book is the central role of communication. As Kemmis and Salamon remind us, the practice of communication not only creates a pathway for children to participate in the decisions that affect them (United Nations, 1989, Article 3), but it is also integral to our understanding and construction of the world. Through thoughtful and research-informed contributions, the book's authors cause us to reflect upon how we, as adults, might consciously tune in and recognise children's many languages, including the embodied social and emotional language (Salamon) that accompanies or precedes verbal language. A number of chapters offer specific models or tools that we can draw upon to better obtain children's insights and perspectives. The framework for children's participation proposed by Ward and Lundy, for example, not only creates the conditions which invite and validate children's perspectives but also recognises that adults may need to play an additional role in providing children access to information that enables them to form a view.

As language plays such a central role in communication, other chapters specifically address issues concerning children's speech and language including interventions for children's language acquisition. Some of these contributions illuminate the multilingual worlds that children inhabit and the multilingualism that many children practice and are adept in. Children's right to maintain their home language is highlighted. These chapters are written with a consciousness of the trap of cultural specificity and how this can colour or limit our capacity as adult 'experts' to closely listen to children and, if required, provide appropriate support for speech development.

The rich insights to be gained from these collective offerings underscore both universality and particularity. Through these writings we can see where a shared experience such as the pandemic gave rise to unique and creative responses to reaching children and their families so that children could continue their educations (United Nations, 1989, Article 29), while also bringing into sharp relief the inequalities that exist within and between nations that the SDGs exhort us to address.

It is incumbent upon adults to uphold children's rights and to design and implement strategies that strive to attain the SDGs. Professionals who work with young children need to consciously seek ways to activate children's rights backed by, as Downey et al. remind us, leadership that ensures ethical practices towards children. In doing so, we not only respect the right of the individual child, but we also work towards the collective good of all children.

In closing, I would like to acknowledge to all the authors that I felt honoured to be invited to write the foreword for this book, and I am deeply appreciative of its content.

Head and Dean, Education and Professional Studies
Griffith University
Nathan, QLD, Australia

Frances Press

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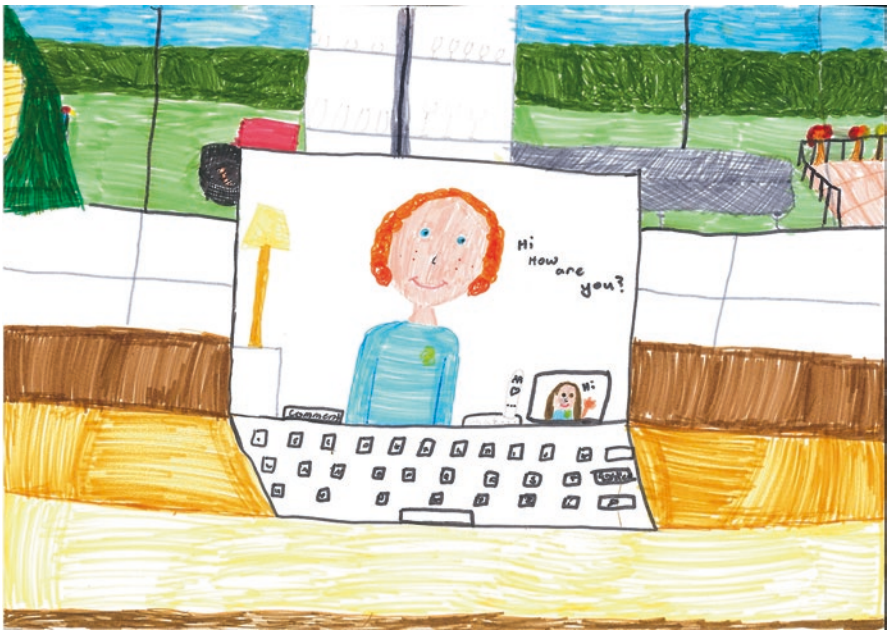
United Nations. (2015). *Sustainable development: The 17 goals*. https://sdgs.un.org/goals

Preface



> It's a new way of talking now. It's just how we do it now. (Elsie Hey-Cunningham, aged 9 from Australia)

We are proud to be the editors of this revolutionary interdisciplinary book that gives voice to young children titled: Early Childhood Voices: Children, Families, Professionals. The chapters present research to promote social justice and improve the lives of children, their families, and professionals who work with them.

The following words capture the processes undertaken to write and edit this book: collaborative—interdisciplinary—international—online

The image drawn by Elsie (above) is an accurate representation of the online comradery and collaboration involved in compiling this book. The four editors were in different cities across Australia. The 18 chapters were written by 46 authors from 12 countries; specifically, Australia, Bosnia and Herzegovina, Brazil, Canada, Iceland, Jamaica, Rwanda, South Africa, the United Kingdom (Northern Ireland, Scotland), and Vietnam. All the authors have focused on young children; however, their disciplinary backgrounds are diverse, including early childhood education and care, education, law, human rights, speech-language pathology, occupational therapy, psychology, social work, linguistics, interpreting, and philosophy. The insightful reviewers added more disciplinary backgrounds.

Many of the chapters include the voices of children, families, and professionals. Sometimes their voices have been transcribed and presented as quotes. Other times their voices have been presented "regardless of frontiers" (United Nations, 1989, Article 13) and include photographs, drawings, and images. Therefore, this book has been prepared through respectful listening to diverse perspectives.

Each chapter author was tasked with aligning their work with the Convention on the Rights of the Child (United Nations, 1989) and the Sustainable Development Goals (United Nations, 2015), the United Nations' "blueprint for peace and prosperity for people and the planet," and Chap. 1 summarises the SDGs addressed in each chapter. Consequently, the messages contained within this book promote the importance of children, the importance of early childhood, the importance of listening to the voices of young children, and the importance of people who support and embrace children—their families, professionals, and communities.

This book was conceived during the COVID-19 pandemic restrictions in 2020 during the Early Childhood Voices Conference (ECV2020). ECV2020 was hosted to share research that could not be presented at national and international conferences because they had been cancelled due to travel restrictions. ECV2020 was successful beyond all expectations. It included eight keynote presentations (with nine invited speakers) and 89 oral presentations. There were 2847 people registered to attend ECV2020 from 70 countries, and during the week of the conference, there were 9806 views of the conference web pages with the top 10 countries being Australia, the United States, the UK, New Zealand, Canada, Malaysia, Iceland, Finland, Norway, and the Netherlands. The richness and diversity of the presentations and the online commentary from attendees via social media, emails, and other conversations led our editorial team to consider capturing learning from some of the presentations within a book. We are grateful to ARC Laureate Professor Marilyn Fleer for her encouragement and support leading to gaining a contract with Springer to publish this book within the series titled: International Perspectives on Early Childhood Education and Development. More details about the Early Childhood Voices Conferences and the Charles Sturt University Early Childhood Interdisciplinary Research Group can be found in Chap. 18 of this volume and http://csu.edu.au; https://earlychildhoodresearch.csu.domains/

We hope that readers from across the world are inspired by the international interdisciplinary collaborative efforts of the chapter authors to promote the importance of early childhood voices.

Sippy Downs, QLD, Australia — Linda Mahony

Bathurst, NSW, Australia — Sharynne McLeod

Bruce, ACT, Australia — Andi Salamon

Bathurst, NSW, Australia — Jenny Dwyer
June 2023

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United Nations. (2015). *Sustainable development: The 17 goals*. https://sdgs.un.org/goals

Acknowledgements

This book is possible due to the commitment of the authors who work unrelentingly to create a better life for young children, their families, and professionals. We value their work in the realisation of this book.

We acknowledge the voices and perspectives of a vast range of people who listen to children's voices across multiple disciplines internationally, highlighting the practical application of the Sustainable Development Goals (United Nations, 2015) in the context of the Convention on the Rights of the Child (United Nations, 1989).

We acknowledge the peer reviewers who generously gave their time and shared their expert knowledge in reviewing the chapters: Nadia Breese, Mandy Cooke, Michael Curtin, Jessamy Davies, Lysa Dealtry, Josephine Deguara, Jenny Dwyer, Angela Fenton, Alma Fleet, Leanne Gibbs, Carolyn Gregoric, Suzanne C. Hopf, Huong Le, Linda Mahony, Laura McFarland, Sharynne McLeod, Elizabeth Murray, Andi Salamon, Maryanne Theobald, Natalie Thompson, Carmel Ward, Karla N. Washington, Linda Willis, and Sandi Wong.

We acknowledge the expert editing advice of Mark Filmer.

Linda Mahony welcomed her beautiful granddaughter Molly during the production of this book, which is the reason why this book is important.

Sharynne McLeod thanks David, Brendon, and Jessica for their unfailing support and encouragement and the many children who inspire her.

Andi Salamon acknowledges and thanks all the children, families, and colleagues who have helped her better understand other voices in professional early years practice and life.

Jenny Dwyer acknowledges the diverse international voices within her world, particularly the *hundred languages* of Lucía, Rose, Amelie, Isabella, and Julian.

Thank you all for helping us listen to the voices of young children, families, and professionals to promote social justice and improve their lives.

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Editors and Contributors

About the Editors

Linda Mahony, EdD, is a senior lecturer in professional experience at the University of the Sunshine Coast, Australia. She has over 30 years' experience in early years education with 20 years as a classroom teacher of young children. This has given her insight into the lived experiences of teachers and their important work with young children and their families. Linda's research has a social justice and equity perspective and focuses on the nexus between early childhood or school and family to explore teachers' pedagogical practices for promoting social and emotional well-being and learning for young children experiencing parental separation and divorce, and partnerships with family and community so that these young children can break through the barriers to their well-being and learning.

Sharynne McLeod, PhD, is a speech-language pathologist and distinguished professor of speech and language acquisition at Charles Sturt University, Australia. She is a Fellow of the Academy of the Social Sciences in Australia and the Royal Society of New South Wales, was an Australian Research Council Future Fellow, and has received Honours of the American Speech-Language-Hearing Association and Life Membership of Speech Pathology Australia. Her research primarily focuses on listening to children and supporting children's communication, speech, and multilingualism. She has advocated for communication rights at the United Nations and the World Health Organization. The Australian Newspaper named her Australia's Research Field Leader in Audiology, Speech and Language Pathology (2018, 2019, 2020, 2022) and Best in the World based on the "quality, volume and impact" of research in the field (2019, 2023).

Andi Salamon, PhD, is an early childhood teacher and senior lecturer who taught education studies at Charles Sturt University during the writing of this book. She has co-edited a book as part of the Routledge Thinking about Pedagogy in Early Childhood Education series focusing on multiple identities in early childhood. This understanding of the multiplicity of early childhood identities helps inform a deeper understanding of the multiplicity of early childhood voices, as do over 20 years' experience as a teacher, director, leader, and researcher in the field. Her doctoral study became the springboard to her 2019 Jean Denton Memorial Scholarship research project, where Andi continued to advocate for infants' rights and quality early years experiences. She brings her passion to uphold children's optimal learning into practice with pre-service teachers.

Jenny Dwyer is an early childhood teacher with over 30 years' experience working in a wide range of early childhood contexts. She has worked as a lecturer in early childhood at Charles Sturt University for over 10 years and investigates young children's mathematics play and learning. Her focus is recognising and valuing the importance of the rights of the child, who, from birth, is capable of learning and communicating through multiple languages. Jenny's interest extends to children's ability to use languages and mental imagery to develop abstract thinking and symbolic thought as expressed through imaginary play and their use of drawn symbols and signs as the foundation for understanding the abstract nature of mathematics. Jenny's research examines the socio-cultural influences on children's mathematical signs and symbols within their play, known as mathematical graphicacy, which helps develop abstract thinking and symbolic thought viewed as being necessary for learning mathematic notation in later years.

Contributors

Tamara Pribišev Beleslin University of Banja Luka, Banja Luka, Bosnia and Herzegovina

Nomfundo Peaceful Buthelezi University of Cape Town, Cape Town, South Africa

Kathryn Crowe Charles Sturt University, Bathurst, NSW, Australia
University of Iceland, Reykjavík, NSW, Iceland

Tamara Cumming Macquarie University, Sydney, NSW, Australia

Michael Curtin Charles Sturt University, Albury, NSW, Australia

Lysa Dealtry Charles Sturt University, Albury, NSW, Australia

Belinda Downey Charles Sturt University, Bathurst, NSW, Australia

Jenny Dwyer Charles Sturt University, Bathurst, NSW, Australia

Sarah Eagland Royal Far West, Sydney, NSW, Australia

Angela Fenton Charles Sturt University, Albury, NSW, Australia

Marilyn Fleer Monash University, Melbourne, VIC, Australia

Carolyn Gregoric Charles Sturt University, Bathurst, NSW, Australia

Hannah Hale University of Stirling, Stirling, Scotland, UK

Nicole Husselmann University of Cape Town, Cape Town, South Africa

Rachel Wright Karem Indiana University, Bloomington, IN, USA

Stephen Kemmis Charles Sturt University, Wagga Wagga, NSW, Australia

Will Letts Charles Sturt University, Bathurst, NSW, Australia

Fernanda Liberali Pontifical Catholic University of São Paulo, São Paulo, Brazil

Babalwa Ludidi University of Cape Town, Cape Town, South Africa

Laura Lundy Queen's University Belfast, Belfast, UK

Corrine Macaluso Butler Educational Service Centre, Hamilton, OH, USA

Amy MacDonald Charles Sturt University, Albury, NSW, Australia

Muriel MacKenzie Stirling Council, Stirling, Scotland, UK

Linda Mahony University of the Sunshine Coast, Sippy Downs, QLD, Australia

Olebeng Mahura Charles Sturt University, Albury, NSW, Australia

Sue March Monash University, Melbourne, VIC, Australia

Kate Margetson Charles Sturt University, Bathurst, NSW, Australia

Elspeth McCartney University of Stirling, Stirling, Scotland, UK

Jane McCormack Australian Catholic University, North Sydney, NSW, Australia

Laura McFarland Melbourne Graduate School of Education, The University of Melbourne, Melbourne, VIC, Australia

Sharynne McLeod Charles Sturt University, Bathurst, NSW, Australia

Mikateko Ndhambi University of Cape Town, Cape Town, South Africa

Tracey Parnell Charles Sturt University, Albury, NSW, Australia

Sanja M. Partalo University of Banja Luka, Banja Luka, Bosnia and Herzegovina

Michelle Pascoe University of Cape Town, Cape Town, South Africa

Ben Phạm Charles Sturt University, Bathurst, NSW, Australia
Hanoi National University of Education, Hanoi, Vietnam

Prabhat Rai Monash University, Melbourne, VIC, Australia

Andi Salamon Charles Sturt University, Bathurst, NSW, Australia

Emilia Cipriano Sanches Pontifical Catholic University of São Paulo, São Paulo, Brazil

Cecilia Schwartz Springfield City School District, Springfield, OH, USA

Shukla Sikder Charles Sturt University, Bathurst, NSW, Australia

Anne Suryani Monash University, Melbourne, VIC, Australia

Sandra Cavaletti Toquetão Pontifical Catholic University of São Paulo, São Paulo, Brazil

Van H. Tran Charles Sturt University, Bathurst, NSW, Australia

Sarah Verdon Charles Sturt University, Albury, NSW, Australia

Carmel Ward Queen's University Belfast, Belfast, UK

Karla N. Washington Department of Speech-Language Pathology, University of Toronto, Toronto, ON, Canada
Department of Communication Sciences and Disorders, University of Cincinnati, Cincinnati, OH, USA

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Part I
Listening to Children

Chapter 1
Why the Voices of Young Children Matter

Linda Mahony, Sharynne McLeod, Andi Salamon, and Jenny Dwyer

Abstract Over 30 years have passed since the introduction of the Convention on the Rights of the Child (CRC) (United Nations, 1989). However, there remains a paucity of evidence-based literature informing professionals who work with our youngest children. Young children are the people of today who form the foundation of our future society and are active participants and subjects with their own agency. This introductory chapter provides philosophical and theoretical perspectives underpinning the consideration of early childhood voices, drawing on the CRC (United Nations, 1989) and the Sustainable Development Goals (SDGs) (United Nations, 2015). Together, these frameworks provide a shared vision for equity, peace, and justice for all while integrating environmental, economic, and social dimensions of sustainability. This chapter explores ways of perceiving the concepts of listening and children's voices to transform practice so that children's lives are improved and to ensure no one is left behind. Children's voices are viewed holistically and are evident within complex and constantly changing landscapes. This introductory chapter aims to highlight the importance of listening to our youngest children. It also prefaces subsequent chapters that focus on how professionals work to promote children's voice and uphold children's rights in the context of the SDGs with a view to improve the lives of young children, their families, and professionals who work with them.

L. Mahony (✉)
University of the Sunshine Coast, Sippy Downs, QLD, Australia
e-mail: lmahony@usc.edu.au

S. McLeod · A. Salamon · J. Dwyer
Charles Sturt University, Bathurst, NSW, Australia
e-mail: smcleod@csu.edu.au; andi.salamon@canberra.edu.au; jedwyer@csu.edu.au

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Keywords Children's voices · Convention on the Rights of the Child · Sustainable Development Goals · Early childhood · Social justice · Advocacy

Introduction

Young children are the foundation of our future society. The importance of listening to children and young people has received considerable attention. However, little has been written about listening to our youngest children (birth to eight years) and the perspectives of their families and the professionals who work with them. This book explores theoretical and practical issues of listening to children, families, and professionals who work with young children to promote social justice and improve their lives. Listening is explored across multiple disciplines internationally and highlights the practical application of the SDGs in the context of the CRC.

Early Childhood Voices: Children, Families, Professionals is a revolutionary book that explores innovations, theories, and partnerships to improve the lives of young children (birth to eight years), their families, and professionals who work with them. This international multidisciplinary book draws on the voices of children, families, early childhood educators, speech-language pathologists, psychologists, and multidisciplinary teams from countries as diverse as Australia, Bosnia and Herzegovina, Brazil, Canada, Iceland, the United Kingdom (Northern Ireland and Scotland), South Africa, Rwanda, Jamaica, and Vietnam.

This chapter begins by providing philosophical and theoretical perspectives underpinning the consideration of early childhood voices, drawing on the CRC (United Nations, 1989) and the SDGs (United Nations, 2015). Together, these frameworks provide a shared vision for equity, peace, and justice for all while integrating environmental, economic, and social dimensions of sustainability. We then explore how and why practitioners listen to young children and how this informs practice. Finally, an overview of subsequent chapters is provided. Subsequent chapters highlight how the CRC and SDGs are enacted and brought to life from multidisciplinary perspectives across the world. This edited book captures the multidisciplinary perspectives of early childhood educators, speech-language pathologists, and multidisciplinary teams from 12 countries. Topics addressed include giving children a voice, methods for listening to and documenting young children's perspectives, and listening to and working in partnership with families, educators, and professionals, all working to improve the lives of children and their families. Chapters address wellness, well-being, and development of young children and their families across multiple dimensions, including physical, social, emotional, intellectual, spiritual, and environmental. The chapters in this edited book are outcomes focused and provide tangible evidence-based actions for educators, speech-language pathologists, and other professionals to enact in their work with young children and their families with an overarching goal to improve their lives and ensure no one is left behind.

The History and Purpose of the CRC and SDGs

Almost 2.4 billion of the world's population is under 18 years of age with 656 million of these being children under five (UNICEF, 2023). The world's total population is eight billion (8,045,311,447.5), so children represent more than a quarter of the world's population. At times, people describe children as the future of our world; however, they are integral to the world today, as eloquently described below:

> Children are not the people of tomorrow, but are people of today. They have a right to be taken seriously, and to be treated with tenderness and respect. They should be allowed to grow into whoever they were meant to be—the unknown person inside each of them is our hope for the future (Korczak, 1929, p. 7 cited in Hammarberg, 2009).

This statement was written by Janusz Korczak, who has been described by the Commissioner for Human Rights, Council of Europe as "our teacher on the rights of the child" (Hammarberg, 2009, p. 5) and who influenced subsequent work of the United Nations.

The CRC (United Nations, 1989) is the most significant and binding international document protecting the rights of children. It was adopted by the United Nations in 1989 after a process of development that began a decade earlier during the International Year of the Child. The CRC contains 54 Articles, and States Parties are required to send reports to the Committee on the Rights of the Child to document steps that they are undertaking to "put the Convention into effect and on progress in the enjoyment of children's rights in their territories" (United Nations, 2023). There are four general principles enshrined in the CRC (United Nations, 2023): non-discrimination (Article 2); best interests of the child (Article 3); the right to life, survival, and development (Article 6); and the views of the child (Article 12).

This book is titled *Early Childhood Voices: Children, Families, Professionals* and draws inspiration from the fourth general principle, the views of the child, which is clearly articulated in Articles 12 and 13 as well as in the Preamble and other articles of the CRC (United Nations, 1989):

Article 12

1. States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.
2. For this purpose, the child shall in particular be provided the opportunity to be heard in any judicial and administrative proceedings affecting the child, either directly, or through a representative or an appropriate body, in a manner consistent with the procedural rules of national law.

Article 13

1. The child shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice.

2. The exercise of this right may be subject to certain restrictions, but these shall only be such as are provided by law and are necessary:
   (a) For respect of the rights or reputations of others; or.
   (b) For the protection of national security or of public order (ordre public), or of public health or morals.

We have chosen to quote these articles in full at the beginning of this book to enable readers to interpret the learning from the book's chapters in the context of the imperative of the United Nations to listen to the world's children.

In addition to the CRC (United Nations, 1989), the SDGs (United Nations, 2015) are a recent initiative of the United Nations to influence people and the planet. The 17 SDGs are designed as a "shared blueprint for peace and prosperity for people and the planet, now and into the future" (United Nations, 2015) and are underpinned by five principles, or 5Ps: "people, planet, prosperity, peace, partnership" (Sustainable Capacity International Institute, 2015–2020). Within this book, authors have been invited to indicate which SDGs are influential in their work. The key SDGs addressed in this volume are good health and well-being (SDG 3), quality education (SDG 4), gender equality (SDG 5), decent work and economic growth (SDG 8), reduced inequalities (SDG 10), and partnerships for the goals (SDG 17); however, almost every SDG has been addressed (see Table 1.1).

Table 1.1 Sustainable Development Goals addressed in each of the 18 book chapters

Chapter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SDG 1	■														■			
SDG 2	■																	
SDG 3	■		■	■	■				■	■	■	■	■	■	■			■
SDG 4	■		■	■	■	■	■	■	■	■	■	■	■		■	■		■
SDG 5	■				■										■			
SDG 6	■																	
SDG 7	■																	
SDG 8	■														■	■		■
SDG 9	■																	
SDG 10	■			■					■	■	■	■			■		■	■
SDG 11	■																	
SDG 12	■																	
SDG 13	■													■				
SDG 14	■				■													
SDG 15	■				■													
SDG 16	■	■	■	■			■			■								
SDG 17	■									■								■

Listening to Young Children to Inform Practice

As citizens of the world, young children have the same right to be heard as citizens of all ages. This perspective is in line with Articles 12 and 13 of the CRC (United Nations, 1989); however, it is often at direct odds with the diverse and divergent views and historical viewpoints, as well as practitioners' capacities and knowledge in how to enact this. Earlier traditions have suggested that children should be seen and not heard (Mirk, circa 1450/ Cambridge Dictionary, 2023). Even though this is a historical conception, threads of its impact on society remain 500 years later, and the question of listening to children in authentic and critical ways is an ongoing challenge. Young children are aware when they have not been heard or their voice given value to be acted upon. Article 12 of the CRC (United Nations, 1989) makes it clear that human rights apply to young children as well as adults and children should be seen and heard through their diverse agentic and expressive modes of communication.

Honouring the voices of young children can only occur when they are valued, noticed, and listened to; however, the everyday (significant) voices of young children are frequently missed. This means that what matters to young children is also missed when professionals do not attend to their messages and ideas. Within education, listening has historically been a word associated with children listening to adults for learning purposes. The premise here is that young children will learn important things adults think matter for them to know. This viewpoint has, however, led to many adults not knowing what really matters to children and the development of a one-way communication channel, from adult to the child. However, children's emerging ideas and knowledge are instrumental in understanding what is noteworthy in their lives.

Listening to the voices of children is a central feature of the educational project of Reggio Emilia and informs respectful and reciprocal practices in working with young children (Rinaldi, 2001) in pedagogical early years' contexts. The *pedagogy of listening* has been formed by the Reggio Emilia approach. For these practitioners and pedagogists, listening is more than a linear transmission model; it is a way to co-create shared meanings between adults and children and to search for new meanings, imagined or real. This means changing our views of young children and suspending our judgements and perspectives of them (Curtis, 2017). Accordingly, listening to young children's voices becomes a metaphor for guiding adults' actions and for professionals to fulfil their responsibilities to honour children's voices through open, reflective, and critical practice. They can do so by using all their senses to closely observe the child's being and ways of communicating, and interpret their observations tentatively, to make conclusions about what the child *may* be thinking. Critical connections and lines of communication are made when there is a shared space between children and adults.

When practitioners listen to young children, it gives the young child visibility and helps to make apparent the infinite ways children can express their ideas and thoughts. Malaguzzi (2022) refers to this as the *hundred languages of children*, a

metaphor for the multiplicity and potential of children to communicate with others and express what matters from infancy. The hundred languages embrace and extend the words expressed in Article 13 of the CRC "either orally, in writing or in print, in the form of art, or through any other media of the child's choice" (United Nations, 1989). Recognising this multiplicity, adults can develop new knowledge and skills rather than relying on taken-for-granted assumptions or preconceived notions of children. It is vital for adults to find out who children are and find new ways to connect and communicate with them. Early in life, children show adults that they do have a voice that can lead, guide, and help adults to understand what matters to them. Often these voices are *spoken* in symbolic and expressive ways. Children will often move from one *language* to another to find the best way to express what matters to them and to communicate this to participating adults. It means being sensitive to the different patterns of children's communication and the ways they use a range of languages to express what matters to them in their desire to establish a connection to their world. It also means giving children opportunities and various tools to learn different ways to communicate what matters to them. In doing so, they enable young children to be better understood.

The notion that listening to children's voice is more than hearing what children say and is about adults understanding the implications of Article 12 in practice is supported by Lundy (2007). The Lundy model states that understanding the implications of Article 12 is more than just good practice; it is a legally binding obligation (Lundy, 2007). For Article 12 to be fully implemented, professionals working with young children must not only acknowledge the voice of the child and their "right to express a view" (Lundy, 2007, p. 935) but include them in decisions that impact their lives and honour their "right to have the view given due weight" (Lundy, 2007, p. 931). That is, practitioners take seriously the child's voice in all matters affecting them, and subsequently for this to inform their practices when making decisions and working with young children. Though this can be challenging at times, giving value to the messages young children give us and working toward understanding them is central to developing trusting and respectful relationships with children, critically examining the truths we hold about them, and finding out new truths *with* them.

Listening to young children's voices in authentic ways is challenging within any single disciplinary or international context (Roulstone & McLeod, 2011). As represented in this book, various professionals work with very young children in early years' contexts, and the alignment of philosophical and professional differences presents interdisciplinary challenges in relation to how children's voices are or are not heard, understood, and acted on (Press et al., 2012). Professionals from different disciplines, such as early childhood education, child and family health, psychology, speech-language pathology, and occupational therapy, reflect the holistic nature of child development. Interdisciplinary professionals ideally work together in collaborative efforts to uphold young children's rights to quality early years' experiences. To do so, however, they must "make explicit implicit constructions of children" and question how they are positioned within each disciplinary discourse (Press et al., 2012, p. 34). They can do this through the critical reflective practices outlined above

so children's voices are not "easily subsumed by the intentions of the adults around them" (Press et al., 2012, p. 26).

Listening to Children Requires an Ethical Approach

As researchers and authors, there are clear guidelines for an ethical approach to research. These are central to research undertaken with professionals and families involving young children. These ethical considerations include:

- Protecting participants from harm, including physical, emotional, and intellectual harm.
- Ensuring protection of vulnerable people when researching challenging and sensitive issues.
- Gaining consent to undertake the research. Ensuring that the researcher/s has/have ethical approval from the relevant institution or organisation.
- Participants having the right to withdraw from the study at any time without penalty.
- Ensuring confidentiality of research data.

However, when researching with young children, and listening to their voices to reveal their perspectives, other ethical considerations need to be considered. Rinaldi (2001) states that researching young children is an important responsibility if we are to better understand their voice and perspectives. The following ethical considerations are central to the chapters of this book. First and foremost is a child's right to dignity and respect in all forms of research and communication channels. Shier (2010) states that this is often misunderstood with a tendency for researchers to include children's voices without believing in the value of it. A shared research approach between children and adults must include a reverent and equitable approach to young children's voices, and this informs our interactions with and listening to young children. An ethical approach includes the children's assent or dissent to participate in the research process (Huser et al., 2022; Merrick, 2011). It is critical that adults are aware of the different ways to respect children's choices for their assenting or dissenting and the importance of immediacy and continuing assent or dissent. This includes understanding the potential power imbalances between adults and children (Hunleth, 2011), as well as the often-hidden coercion for children to participate and the importance of silence (Lewis, 2011). It is important that children are not placed in a vulnerable situation, or their play encounters compromised when the research is carried out. This also includes consent from the children's parents for their children's voice to be included in the research process. Another important ethical consideration is the interpretive perspective of the researcher. As Delpit (2013) reminds us, we must suspend our judgements of young children, as "we do not really see through our eyes or hear through our ears, but through our beliefs. To put our beliefs on hold is to cease to exist as ourselves for a moment" (p. 55). This demands an acceptance of difference and uncertainty when

researching young children's points of view; however, it will give greater accuracy of children's voices.

This book aims to support professionals to position young children as capable and competent of expressing their views on matters affecting them, help them listen to young children's *hundred languages*, and better use their own to advocate for young children and their families in broader social contexts. It does so by presenting a range of interdisciplinary early childhood voices to help transform practices and fulfil the obligations in Articles 12 and 13 of the CRC (United Nations, 1989).

Listening to Early Childhood Voices Throughout This Book

The 18 chapters of this book are organised into four sections that richly explore *Early Childhood Voices: Children, Families, Professionals*. In the first part, *Listening to Children*, this introductory chapter offers an explanation why the voices of young children matter. Following this introduction, in Chap. 2, Ward and Lundy (2024) apply the Lundy model (Lundy, 2007) that conceptualises the provision for capturing young children's voice through four interrelated elements; space, voice, audience, and influence; in the African context. They discuss the relational and emotional elements of creating space, the practical ways of seeing and listening to young children's voices, the importance of active listening, and the need for adults to be open to children's views. They reflect on the opportunities and barriers to implementing Article 12 of the CRC (United Nations, 1989) for young children and highlight the implications for early childhood practices. They stress that Article 12 is not optional – it is the right of the child and not the gift of adults.

The next section explores *Listening to Children in their Daily Context*. The authors of the next two chapters use the theory of practice architectures to explore a practice perspective for observing and understanding young children and the theoretical and practical issues of listening to and honouring the languages and lives of very young children. In Chap. 3, Kemmis and Salamon (2024) use the theory of practice architectures to explore the inextricable link between language with children's learning, living, belonging, being, and becoming. They discuss the double purpose of education as helping people to live well in a world worth living in and consider how honouring and creating spaces for young children to belong contributes to upholding their rights for being. In Chap. 4, Salamon (2024) presents research about infants' powerful and evocative actions and interactions, conceived of as emotional capital practices, and argues that better understanding infants' emotional capital practices can help reconcile misinterpretations of infants with the observable practices.

Learning STEM (science, technology, engineering, and mathematics) concepts through play is the focus of the next two chapters. In Chap. 5, Suryani, March, Fleer, and Rai (2024) discuss the findings from a large-scale national study aimed to test Conceptual PlayWorld, an innovative, evidence-based model of learning STEM concepts through play. Within Conceptual PlayWorlds, adults and children together

construct an imaginary world based on a story and solve highly engaging STEM problems that arise. With its focus on closing the gap for girls in STEM and mentoring a largely female early childhood workforce and research field (SDG 5), this evidence-based innovative programmatic study provides a better understanding of how educators, parents, and policymakers can support future generations to pursue science-related careers and address the shortages of STEM qualified professionals. Chapter 6 continues with the STEM theme. Dwyer, MacDonald, and Sikder (2024) discuss children's everyday play encounters as opportunities for children to share their voices about what matters in their lives. They focus on children's mathematical graphics as representing their visual voice as they explore their mathematical thinking and communicate their thinking.

In Chap. 7, Pribišev Beleslin and Partalo (2024) draw on three studies to create a methodological and thematic mosaic of research with different designs to listen to young children to identify how friendships can be nurtured among children to develop a sense of belonging and being and respect for others. They showed that children's and educators' voices about friendship present the basis for a pedagogical approach and curriculum strategies to sustainability that promotes respect for others and partnership from an early age.

The next two chapters report on tools to engage children in research and to listen to them in creative ways. In Chap. 8, Dealtry and McFarland (2024) draw on a study that developed and implemented a holistic self-report tool that aimed to enable children's active participation in research which focused on children's experiences of hearing and listening at pre-school. They demonstrate that there are multiple opportunities for listening to young children through innovative tools such as their self-report tool. In Chap. 9, Washington, Wright Karem, Macaluso, Schwartz, and McLeod (2024) listened to children in ways that went beyond the verbal exchange. They used the Sound Effects Study Drawing Protocol (McCormack et al., 2022) to observe young children and explore their drawings, listening, and talking, responding to, and comparing how Jamaican children portray their talking experiences in Jamaican Creole and Jamaican English. They found drawing empowered children to express their perspectives, emotions, and attitudes.

The next three chapters focus on language learning of children from linguistically diverse backgrounds. Many young children from immigrant families risk losing their home language, especially when nearing school entry. Maintaining a home language brings cognitive, academic, economic, and social advantages as well as promoting family connection and perception of cultural identity. In Chap. 10, Tran, McLeod, Verdon, Margetson, and Phạm (2024) explore the opportunity for young Vietnamese children to maintain their home language. In Chap. 11, Pascoe, Ndhambi, Mahura, Buthelezi, Husselmann, and Ludidi (2024) discuss their findings from listening to children, families, and professionals to document children's early acquisition of South African languages to understand the perspectives, experiences, needs, and challenges in a complex environment of linguistic diversity, social inequality, and poverty. In Chap. 12, McLeod, Crowe, and McCormack (2024) draw on three large-scale reviews of children's consonant and intelligibility development across more than 30 languages that encompass data from thousands of children

worldwide to understand the children's acquisition of speech. By understanding children's developmental trajectory, parents, educators, and health professionals can advocate for and make timely referrals to communication specialists (e.g. speech-language pathologists) who can support the development of communication, improve the participation of children, and reduce inequalities, including the impact of communication difficulties on literacy, numeracy, socialisation, behaviour, and inclusion.

In the third section, authors explore *Listening to Children During Challenging Times*. They examine the practices of early childhood educators and professionals who work with young children during challenging times including traumatic life events. In Chap. 13, Mahony and Fenton (2024) use a Strengths Approach to explore how early childhood educators listen to young children experiencing two challenging events: parental separation and divorce, and child abuse. This study highlights the need for educators and other professionals to recognise how children communicate about sensitive topics and the myriad ways to give young children a voice to ensure the CRC and SDGs are enacted. In Chap. 14, Eagland, Curtin, and Parnell (2024) report on a program to promote the resilience of young children in response to extreme weather events in Australia. This program directly seeks responses from young children, which have previously been overlooked. This chapter describes the Royal Far West Bushfire Recovery Program and its delivery and evaluation and provides a practical example of the application of SDG 3 of good health and well-being for all. In Chap. 15, Hale, McCartney, and MacKenzie (2024) show how practitioners in the Peep Learning Together program (Peep) in Scotland listened to the needs of parents and families during the COVID-19 pandemic when the program was moved online rather than being delivered face-to-face. They identified challenges regarding relationship building and choosing suitable resources and issues of recruitment and attendance of families. They also identified benefits of online delivery that accommodated for some parents' work patterns, and some parents felt more comfortable interacting online. The COVID-19 pandemic enabled them to move towards blended approaches and new models for working with young children and their families.

In the fourth section, authors explore *Professionals Learning from Listening to Children.* In Chap. 16, Downey, Letts, and McLeod (2024) explore the enablers and constraints related to the retention of early childhood educators by examining leadership styles and how they can influence organisational cultures, educational practices, and educators' responses within early childhood services. They identified sustainable approaches to leadership that supported the well-being of children, families, and staff included practices of social justice, well-being, equity, and inclusion. In Chap. 17, Liberali, Cipriano Sanches, and Cavaletti Toquetão (2024) use a multimodal approach to understand different perspectives of childhood and invoke ways of fighting the unfair conditions of children's lives. They conducted a focus group with four- to six-year-old children at a public pre-school in an impoverished area of São Paulo, Brazil, before and during the COVID-19 pandemic. They found practices necessitated by the COVID-19 pandemic were contrary to what was highlighted in the CRC and created further inequalities for impoverished children and families.

Finally, in Chap. 18, McLeod, Gregoric, Cumming, and Downey (2024) detail the establishment of the Early Childhood Voices Conference during the COVID-19 pandemic in 2020 (ECV2020) and again in 2022 (ECV2022) to bring together interdisciplinary professionals who work with children. The values underpinning the conference were (a) children first; (b) interdisciplinary, international, and accessible participation; and (c) purposeful research mentoring. This chapter describes the organisation, lessons learned, and future possibilities for early childhood researchers' and professionals' voices to be heard internationally. This book, *Early Childhood Voices: Children, Families, Professionals*, comprises the expanded papers originally presented at ECV2020.

Taken together, the 18 chapters show how listening to young children and the perspectives of their families and the professionals who work with them can promote social justice and improve their lives. This book allows us to listen to the voices of our youngest children, their families, and practitioners from across the globe and from varied disciplines but who are all striving to improve the lives of young children. As we read the chapters in this book, we hear of the challenges of practitioners to uphold the CRC and SDGs, but we also read about the innovation, problem-solving, and practical application of the SDGs in the context of the CRC so that young children, the people of today who form the foundation of our future society, can live their best lives.

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Linda Mahony, EdD, is a senior lecturer in professional experience at the University of the Sunshine Coast, Australia. Linda has over 30 years' experience in early years education with 20 years as a classroom teacher of young children. This has given her insight into the lived experiences of teachers and their important work with young children and their families. Linda's research has a social justice and equity perspective and focuses on the nexus between early childhood or school and family to explore teachers' pedagogical practices for promoting social and emotional well-being and learning for young children experiencing parental separation and divorce and partnerships with family and community so that these young children can break through the barriers to their well-being and learning.

Sharynne McLeod, PhD, is a speech-language pathologist and distinguished professor of speech and language acquisition at Charles Sturt University, Australia. She is a Fellow of the Academy of the Social Sciences in Australia, and the Royal Society of New South Wales, was an Australian Research Council Future Fellow, and has received Honors of the American Speech-Language-Hearing Association and Life Membership of Speech Pathology Australia. Her research primarily focuses on listening to children and supporting children's communication, speech, and multilingualism. She has advocated for communication rights at the United Nations and the World Health Organization. *The Australian* newspaper named her Australia's Research Field Leader in

Audiology, Speech and Language Pathology (2018, 2019, 2020, 2022) and Best in the World based on the "quality, volume and impact" of research in the field (2019, 2023).

Andi Salamon, PhD, is an early childhood teacher and senior lecturer who taught education studies at Charles Sturt University during the writing of this book. She has co-edited a book as part of the Routledge Thinking about Pedagogy in Early Childhood Education series focusing on multiple identities in early childhood. This understanding of the multiplicity of early childhood identities helps inform a deeper understanding of the multiplicity of early childhood voices, as do over 20 years' experience as a teacher, director, leader, and researcher in the field. Her doctoral study became the springboard to her 2019 Jean Denton Memorial Scholarship research project, where Andi continued to advocate for infants' rights and quality early years' experiences. She brings her passion to uphold children's optimal learning into practice with pre-service teachers.

Jenny Dwyer is an Australian early childhood teacher with over 30 years' experience working in a wide range of early childhood contexts. She has worked as a lecturer in early childhood at Charles Sturt University for over 10 years and continues to work as a sessional academic while completing her studies. Currently Jenny is completing her PhD investigating young children's mathematics play and learning. Her focus is recognising and valuing the importance of the rights of the child, who, from birth, is capable of learning and communicating through multiple languages. Jenny's interest extends to children's ability to use languages and mental imagery to develop abstract thinking and symbolic thought as expressed through imaginary play and their use of drawn symbols and signs, as the foundation for understanding the abstract nature of mathematics. Jenny's research examines the socio-cultural influences on children's mathematical signs and symbols within their play, known as mathematical graphicacy, which helps develop abstract thinking and symbolic thought viewed as being necessary for learning mathematic notation in later years.

Chapter 2
Space, Voice, Audience, and Influence: The Lundy Model and Early Childhood

Carmel Ward and Laura Lundy

Abstract Listening to children's views is not just a model of good pedagogical practice but a legally binding obligation enshrined in the Convention on the Rights of the Child (CRC) (United Nations, 1989). In 2007, as a response to concerns that mantras focused on children's "voices" do not fully capture the breadth of Article 12, Laura Lundy proposed a model for conceptualising the provision through four interrelated elements: space, voice, audience, and influence. Drawing on practical expertise in early childhood education and research in Rwanda, this chapter revisits these four core concepts, reflecting on the opportunities and barriers to implementing Article 12 for young children and highlighting implications for early childhood practices. Four interrelated issues are discussed: firstly, the relational and emotional elements of creating space; secondly, the practical ways of seeing and listening to young children's voices; thirdly, the importance of active listening as a responsibility of the audience; and finally, the need for adults to be open to children's views as a prerequisite to the concept of influence. By addressing these issues, this chapter also offers provocations for applying Sustainable Development Goal 16.7 of involving children in participatory decision-making processes, in early childhood contexts.

Keywords Children's human rights · Voice · Listening · Responsive · Decision-making

Introduction

Children's human rights in the Convention on the Rights of the Child (United Nations, 1989) are afforded to all children, including the very youngest. Those rights include one of the most innovative of all – the child's right to express their views and have

C. Ward (✉) · L. Lundy
Queen's University Belfast, Belfast, UK
e-mail: cward99@qub.ac.uk; l.lundy@qub.ac.uk

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them given due weight in Article 12(1) of the CRC. The right is considered so significant both as a right in itself and as a means of realising all of children's other human rights that it was identified, from the outset, as one of the four general principles of the Convention (Hanson & Lundy, 2018). The Committee on the Rights of the Child (the Committee) has said that for children in the early years (whom it has classified as those under the age of 8): "This right reinforces the status of the young child as an active participant in the promotion, protection and monitoring of their rights…" (United Nations, 2006, para. 14). The legal human rights position is abundantly clear: all children, including young children, who are capable of forming a view, have a right to express their views and have them given due weight.

In practice, however, across the world, young children do not enjoy the right at all or fully. The Committee has observed that:

> In many countries and regions, traditional beliefs have emphasised young children's need for training and socialisation. They have been regarded as undeveloped, lacking even basic capacities for understanding, communicating and making choices. They have been powerless within their families, and often voiceless and invisible within society. (United Nations, 2006, para 14)

These challenges are exacerbated by fears of participation rights as a threat to the freedoms and responsibilities of parents and professionals who traditionally hold positions of power (Alderson et al., 2005). For instance, although "African" child development practices portray children as active participants in family and community life, as well as agents of their own interest-led learning, children may not be recognised as influential in decision-making processes (Nsamenang, 2004).

In this chapter, we look at how young children's right to have their views taken seriously might be better understood and implemented in practice. To do this, we employ a well-known and used conceptualisation of Article 12 of the CRC (the Lundy model) that was developed by one of the authors (Lundy, a legal academic) and, in this chapter, is revisited drawing on the research and practical expertise in early childhood education, with a particular focus on African contexts, of the other author (Ward). The research study from which Ward's (2023) reflections are drawn received approval from Queen's University Belfast (reference number 012_2021) and the Rwandan National Ethics Committee (No. 901/RNEC/2020). Children's informed consent was requested at the beginning of the study and revisited throughout the research process. Children's dissent or withdrawal was recognised, through interpretations of their verbal and non-verbal or embodied expressions, and always respected. Furthermore, postcolonial paradigmatic assumptions (Chilisa & Kawulich, 2012) and a Children's Rights-Based Approach for research (Lundy & McEvoy, 2012) underpinned ethical considerations to realise participants' rights and disrupt inherent power privileges in research with children and in Rwanda.

The chapter begins by explaining what the Lundy model is before reflecting on what its four core concepts mean and how they might best be implemented in early childhood. We conclude by reflecting on the opportunities and barriers to implementing Article 12 for young children.

The Lundy Model and Early Childhood

In 2007, drawing on data from a study commissioned by the Northern Ireland Commissioner for Children and Young People (Kilkelly et al., 2004), Lundy problematised the use of abbreviations such as the "voice of the child" as a way of capturing the full extent of Article 12 and argued that such abbreviations could undermine the implementation of the obligation (Lundy, 2007). Reading Article 12 in the context of other key CRC rights (such as Articles 2, 3, 6, 13, and 19), she suggested a "legally sound but user-friendly understanding of the obligation based on four core concepts: space, voice, audience, influence" (Lundy, 2007) (see Fig. 2.1). Interestingly, the data used to inform the Lundy model did not include any from children under the age of 8. Despite that, the model has been used and applied frequently in the context of early childhood. In this chapter, we have taken the opportunity to combine our mutual interests and respective expertise to reflect and elaborate on what these concepts mean in the context of early childhood.

Space

Space refers to the child's opportunity to express their views. Given that Article 12 requires this to be assured to the child, the space must be actively created. It is not enough to wait until the child communicates, although that too will demand a

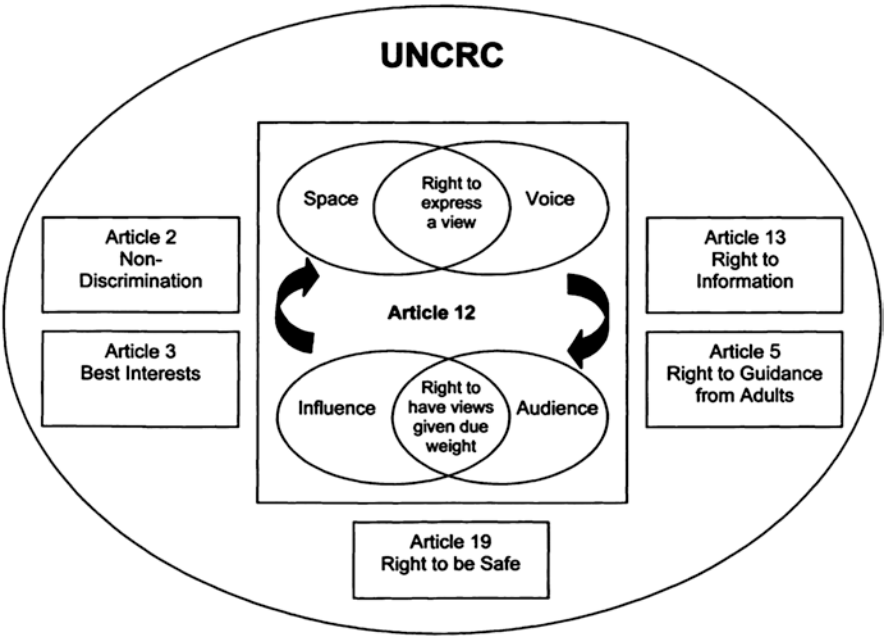

Fig. 2.1 The Lundy Model: Conceptualising Article 12 (2007)

response (Lundy, 2007). In early childhood settings, as elsewhere, it is important to create a culture of respect and listening. The Committee has said, "Young children are acutely sensitive to their surroundings and very rapidly acquire understanding of the people, places and routines in their lives, along with awareness of their own unique identity" (UN, 2006). This aligns with the strong emphasis on the role of relational and socio-cultural environments within early childhood contexts and points to the potential for optimal participation in this field. Children's developing sense of personal identity during infancy and early childhood is intertwined with the collective identity of their kinship networks and influenced by the social and cultural environment (Nsamenang, 2004). The significance of social, cultural, and relational spaces for young children is evident in international approaches to early childhood education through principles such as enabling (UK) or empowering (New Zealand) environments, and the Reggio Approach (Italy), which refers to the environment as the *third teacher* (Department for Education, 2021; Ministry of Education, 2017; Rinaldi, 2006). Reading Article 12 with Article 19 of the CRC (the obligation to ensure the child is protected from all forms of harm), it is important that this is a safe space – one where the child will not fear rebuke or reprisal (Lundy, 2007). Adults, therefore, need to consider the relational and emotional elements that constitute a space where children feel safe to express their views. This requires fostering consistent, respectful, and trusting relationships through adults intentionally conveying warmth and respect towards children (Thomas, 2012). The critical role of emotionally attuned and responsive relationships is well-established in early years practice and is particularly important here, given children's capacities to express their views through emotions (Ward, 2023). Adults positioned in early years' spaces will be familiar with the intensity and temporality of how babies and young children express their emotions, including distress and anger as well as love (Elfer, 2006). Rather than teaching children to regulate or manage their feelings, the emotional dimension of space is concerned with supporting children to express their feelings safely, trusting that dedicated adults (parents/carers or professionals) are consistently available to support them.

Finally, the space must be an inclusive space open to all children (Lundy, 2007). One of the most misunderstood dimensions of Article 12 in the context of early childhood is that the right to express views is conditional upon age and maturity. This is a common misreading that works to exclude younger children. Rather, the right is afforded to every child capable of forming a view – mature or not (Lundy, 2007). Age and maturity are confined to the second part of Article 12 and determine the weight to be given to the views – this is addressed under the concepts of Audience and Influence in the Lundy model. This is reinforced by Article 2 of the CRC, another cross-cutting provision that prohibits discrimination in the enjoyment of all rights in the CRC, including Article 12 itself. There are certain groups of children who are disproportionately excluded from decision-making on matters affecting them individually and/or collectively, including, for example, children of migrant and refugee backgrounds (Pascal & Bertram, 2009). Babies and pre-verbal or non-verbal children are frequently overlooked as many adults continue to underestimate

or restrict children's capacities to express their views or exercise choices, which disadvantages or excludes children (Alderson et al., 2005; Tisdall, 2018).

In early childhood, assumptions about children's capacities and resultant hierarchies are always at play despite the Committee's stipulation that being capable of forming views should not be seen as a limitation of article 12. Rather than seeing capacity as situated within the child or determined by a fixed series of age-related achievements, it is helpful to understand how children's capacities become visible through relationships with others and the environment (Murray, 2019; Pascal & Bertram, 2009). Accepting this perspective means adults can trust that all children can express their views, but they must create spaces that make children's views visible. Spaces that allow a slow, fluid process of interactions between adults and children individually, in pairs or in small groups can help (Ward, 2023). Several studies on methodological and pedagogical practices illustrate how environmental elements, cultural practices, and child-centred processes can contribute to ensuring inclusive space for seldom-heard children (e.g. Harcourt et al., 2011). In summary, an inclusive space in early childhood would be one where adults build consistent, emotionally attuned, responsive relationships with children in familiar surroundings.

Voice

Article 12 requires that children are able to express their views freely on any matter affecting them. The latter is not limited to their rights (Lundy, 2018) but also the issues that matter to them, which, in the case of young children, often concern their families; friendships; physical, social or emotional needs; routines; and interests. One of the most effective ways to find out what matters to any child, including young children, is to ask them. Where this is not possible (e.g. with a non-verbal child), observation should tell a tale, enabling the adult to identify the matters affecting the child.

Enabling children to express their views freely requires adults to adopt a child-centred attitude, listening to young children and respecting their dignity and individual points of view. It also requires adults to show patience and creativity by adapting their expectations to a young child's interests, methods of meaning-making, and preferred ways of communicating (see Ward, 2023). Article 12 must be read alongside Article 13 of the CRC, which gives children the right to impart information in a medium of their choice (Lundy, 2007; McLeod, 2006). The Committee has observed that younger children "make choices and communicate their feelings, ideas and wishes in numerous ways, long before they are able to communicate through the conventions of spoken or written language" (United Nations, 2006, para. 11). Children's right to express themselves in diverse ways correlates with the Reggio Approach *hundred languages* metaphor, which recognises the multiplicity of possibilities for how children communicate thoughts about their lives (Rinaldi, 2006). Observation is an important method for noticing multi-modalities of

communication (physical actions, expressions, sounds, or silences) and including children who might otherwise be represented as having no voice (Clark & Moss, 2011; Wall et al., 2019). Recognising emotions as another dimension of children's views affords an additional avenue for children to express views freely (Ward, 2023). Listening to children through observations in everyday encounters enables adults to notice nuanced dimensions of voice and children to raise the things that matter to them rather than issues determined by adults.

Research methods and pedagogies based upon children's preferred methods of communication have been established as one way of supporting children to express their views in different ways (Lundy & McEvoy, 2012). There is a tendency, however, in discourses surrounding participation to present the process as requiring complex methods or unattainable degrees of perfection (Lundy, 2018). Participation in early childhood can seem imperfect or messy, yet familiar approaches such as building on children's interests, using objects and visuals, or offering choices provide ways to overcome the practical challenges of supporting children's non-verbal participation in everyday spaces and planned projects (Ward, 2023).

The Lundy model emphasises that children may need support to form a view and that Article 5 of the CRC (adults' right and duty to advise and guide the child in realising their rights) plays a key role here. Support to form a view, particularly about new ideas or issues, could include capacity-building activities and access to child-friendly information. Again, the common practice of observation in early years complements this aspect of children's participation by enhancing adults' understanding of what support children might need to form and express their views.

Audience

The second part of Article 12 requires children's views to be given due weight. This requires them to be heard and that requires a listener – an audience. Lundy (2007) emphasises that this audience must have the power to effect change in response to the child's views – a duty-bearer who takes on the role of the dedicated listener. In young children's lives, this will most likely be within the family and early childhood provision. Notably, this correlates with the principles of the *key person* role in early years' practice and curricula (e.g. the UK and Australia). The Committee has said that "States parties should take all appropriate measures to promote the active involvement of parents, professionals and responsible authorities in the creation of opportunities for young children to progressively exercise their rights within their everyday activities in all relevant settings…" (United Nations, 2006, para x).

Viewing participation as an ongoing process rather than always discrete activities is particularly relevant and achievable in early childhood contexts. Being present in everyday encounters means that parents/carers and professionals occupy a privileged position as the audience for young children. This position places a responsibility on adults to engage in active listening with children if Article 12 is to be realised. Although the concepts of participation and listening are distinctly

different, reflecting on the interplay between Rinaldi's (2006) influential pedagogy of listening and the element of audience is purposeful for early childhood practice. A pedagogy of listening is defined as an active process that involves welcoming and "recognising the value of the other's point of view" (Rinaldi, 2006, p. 65). Listening to how children feel or what they think to give due weight to their feelings and thoughts requires active rather than passive or restrictive listening to avoid trying to "fit what we hear into what we already know" (Davies, 2014, p. 1). Understanding listening as situated within relational spaces and responsive relationships can contribute to embedding the element of audience into practice. Being ready to listen to children is demonstrated by consistently acknowledging and responding to children's thoughts or feelings about everyday incidents or issues through respectful, sensitive, and, at times, empathetic interactions. Active listening conveys to children that they matter and their views and feelings are being taken seriously. In contrast, when adults do not actively seek and listen to children's views, they convey that they do not value the child or their ideas (Murray, 2019).

Inevitably, listening to and trying to understand children's views and feelings expressed verbally or non-verbally involves interpretation. This poses ethical challenges for adults. Being present in encounters with children means that interpretations of children's multi-modal expressions are always relationally subjective rather than objectively detached (Davies, 2014). Therefore, adults must reflect on their personal subjectivities and seek a balance between interpretations that are based on their expertise in children's lives and children's expertise in their own lives. This requires the "indispensable quality" of humility; without humility it is not possible to listen with respect or openness (Freire, 1998, p. 208). Building on this idea, adults who are responsible for guaranteeing children's right of audience must be ready to actively listen to children's views with humility.

Influence

Influence is the holy grail of child participation. It is the point where the *due* must be placed in *due weight*. The challenge, of course, is that this is made conditional upon age and maturity – a small clause that potentially opens a big door to the dismissal of the views of those who are younger or less mature. That is, of course, outside the letter and spirit of Article 12, and the Committee has stressed that: "Children's levels of understanding are not uniformly linked to their biological age. Research has shown that information, experience, environment, social and cultural expectations, and levels of support all contribute to the development of a child's capacities to form a view" (United Nations, 2009, para. 29).

The implementation challenges are many but often increased when children are young, and attitudes and expectations do not align with the obligation. The images that adults hold of children (e.g., capable or incapable) have a powerful effect on whether children's views are seriously considered and acted upon. In practice, the element of influence provokes adults to reflect on how they are personally involved

in acting on children's views and being open to children influencing change or decision-making. It is helpful, therefore, to explore three features of influence that are particularly relevant in early childhood contexts: being open to influence; supporting children's agency; and acknowledging asymmetrical power relations.

Being Open to Influence All children as rights-holders can influence decisions, but only when adults are open to acting on children's ideas (Freeman, 2007). Again, this correlates with a pedagogy of listening because it requires adults to be open to change (Rinaldi, 2006). Challenges arise, however, when adults' ideas, expectations, or agendas take priority or close the doors to children's participation. Constraints such as regulative systems and organisational structures, which determine priorities or shape inflexible routines and limit time, can prevent adults from being truly open to seemingly small or insignificant changes (e.g., Te One, 2011). Giving children's views due weight in decision-making processes places a responsibility on adults to being open to and acting on children's ideas, choices, wishes, and feelings that affect their lives (Woodhead, 2006; Ward, 2023). Practical examples include noticing and attending to children's ideas through child-centred practices, such as interest-led planning, or being willing to change routines, in the moment or in policy, in response to children's physical, social, and emotional entitlements.

Supporting Children's Interdependent Agency Children's agency is a fundamental component and corollary of children's participatory rights, and it is now well-established that even the youngest children can exercise different forms of agency that influence relationships or decisions (Alderson et al., 2005). Like capacity, children's agency is situated in and unfolds through interdependent relationships and interactions with their family and community (Abebe, 2019). Ultimately, it is adults who control the social structures, cultural contexts, and relational processes which either limit or support children's agency by constraining or expanding the range of choices and possibilities available. Therefore, adults positioned in practice-based roles can intentionally create opportunities for children to exercise agency, and by doing so, children can influence relational decision-making processes that affect their everyday experiences. One approach that can be used to do this is illustrated in the Everyday Spaces Checklist (see Fig. 2.2).

Acknowledging Asymmetrical Power Relations Power sharing between adults and children is considered by many as a prerequisite for the realisation of participation rights (Freeman, 2007), and much has been written about balancing power dynamics in relation to early childhood. Rather than seeking symmetrical power relationships between adults and children from birth to 3, Palaiologou (2020) argues for the acknowledgement of an inevitable imbalance which demands ethical relationships where adults are "responsive and emotionally attuned" (p. 481). Recognising children as human beings with both rights and emotions assumes that their views, including their feelings, are taken seriously, responded to, and given due weight in decisions that affect them (Lansdown, 2011). Reflecting on asymmetrical power relations and responsive relationships unsettles misrepresentations

Fig. 2.2 Hub na nÓg: Everyday Spaces Checklist (2021)

of children as incapable of influencing decisions by shifting the focus towards adults' capacities to being open and responsive to children's influence.

Finally, in the Lundy model, significant emphasis has also been placed on the role of feedback as a strategy for delivering influence. Lundy identified the point at which feedback is given as the critical juncture in any participatory encounter and one where the duty-bearer must demonstrate accountability, arguing that such feedback should be fast, full, child-friendly, and followed up (Lundy, 2018). The use of photographs and processes of documentation such as *Lived Stories* is an increasingly familiar form of feedback in early childhood research and practice (McNair et al., 2021). However, there are also many opportunities to deliver feedback through responsive interactions between adults and children in everyday, momentary encounters, for instance, by attending to children's emotions, adapting routines such as nappy changing or snack times, and contemplating together on children's choices. Child-friendly feedback can involve talk but might also require visible or embodied actions.

Conclusion

Participation in decision-making in early childhood presents something of a paradox. On the one hand, the informal, child-centred contexts in which children experience their human rights – family home, day-care, etc. – provide an enabling environment in which it should be not just possible but inevitable that there is sufficient time and interest and professional impetus to seek children's views and take them seriously. This contrasts with formal education where ethos and practice, and indeed relationships, can be adversely impacted by imposed curricula or external accreditation (Lundy & Brown, 2020). On the other hand, research is clear that societal expectations and understanding about all children, but especially young children, deem them incompetent as meaning-makers in their own lives with the result that their views are either not sought at all or not taken seriously. This chapter sounds a note of optimism, however, since research and practice in this area have flourished since the Lundy model was developed in 2007 – to the extent that the creativity that marks early childhood research and practice informs child participation more generally. For example, work by trailblazers, such as Clark and Moss, shows what is possible more generally and indeed for older children. The next step is to convince all that this is not just legally required (which, of course, it is) but logically useful. In this regard, Article 12 has been described as a barometer for children's rights more generally: in contexts where children's views are sought and taken seriously, we are less likely to observe breaches of their other human rights (Lundy, 2018). In fact, the Committee has specifically warned that "States parties must be aware of the potential negative consequences of an inconsiderate practice of this right, particularly in cases involving very young children, or in instances where the child has been a victim of a criminal offence" (United Nations, 2009).

Participation in early childhood contexts is complex, yet there are many empirical examples of early years practice and research where the challenges of listening to young children's views are addressed. This sometimes includes humbly accepting imperfect interpretations of children's voices and imbalanced power relationships. Notwithstanding these imperfections, this chapter points to the parallels between established early childhood practice and the elements of space, voice, audience, and influence. Reflecting on existing early years expertise alongside the Lundy model illustrates children's right to participation as situated and relational. This brings to light adults' responsibilities to establish emotionally safe environments; assure opportunities for children to express views in multiple ways; actively listen to children; and be open and responsive to their ideas, experiences, and feelings. Rather than being seen as extra work for professionals, viewing the components of Article 12 in this way can make participation achievable and potentially deeply embedded in early childhood practice. Article 12 is not optional – it is the right of the child and not the gift of adults (Lundy, 2007). It needs no other justification in early childhood or elsewhere. That said, research and practice confirm Pascal and Bertram's (2009, p. 255) suggestion that "Seeing and hearing children express their interests and priorities can provide unexpected insights into their capabilities".

Article 12 and the Lundy model provide an impetus and a framework that can contribute to ensuring that young children are seen as competent meaning-makers with an entitlement to shape their own lives. Once adults attempt this, even the most critical can have a change of heart and mind and become the strongest proponents for child participation (Lundy, 2018).

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Carmel Ward is a qualified teacher and experienced leader in early childhood education. She holds a master's in early childhood studies and recently achieved her doctorate in education with Queen's University, Belfast, Northern Ireland, UK. Situated in Rwanda, her research focused on children's human rights education in early childhood and involving young children as co-influencers.

Laura Lundy is co-director of the Centre for Children's Rights, professor of children's rights at Queen's University, Belfast, Northern Ireland, UK and professor of law at University College Cork, Ireland. She is Joint Editor-in-Chief of the International Journal of Children's Rights and a qualified barrister at law. Her expertise is in international children's rights with a focus on implementing the Convention on the Rights of the Child (CRC) in law, education, and children's right to participate in decision-making.

Part II
Listening to Children in Their Daily Context

Chapter 3
Language and Life: Going into Space

Stephen Kemmis and Andi Salamon

Abstract As "objects" of study, babies, toddlers, and young children have historically been thought of as creatures dissociated from the worlds they live in, as if they were not inextricably woven into the worlds they (and we) inhabit, as if they were not both products and producers of their worlds. Addressing this perceived dissociation is at the heart of many rights of young children. Arguably, overcoming the impact of this alleged divide between our youngest citizens and the worlds they live in is also at the heart of sustainable, impactful, and meaningful early childhood education. Drawing on Australia's early childhood learning framework principles of *belonging*, *being,* and *becoming*, this chapter explores how a practice perspective may help to study very young children as living parts of their worlds and ours, as living denizens of the community of life on the planet. In doing so, it explores babies' and toddlers' language learning and theoretical and practical issues of listening to and honouring the languages and lives of very young children in spaces we share with them.

Keywords Children's language · Language games · Hundred languages · Practice perspective

S. Kemmis
Charles Sturt University, Wagga Wagga, NSW, Australia
e-mail: stephen@stephenkemmis.com

A. Salamon (✉)
Charles Sturt University, Bathurst, NSW, Australia
e-mail: andi.salamon@canberra.edu.au

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The child.
is made of one hundred.
The child has.
a hundred languages.
a hundred hands.
a hundred thoughts.
a hundred ways of thinking.
of playing, of speaking.
A hundred always a hundred…
(From Malaguzzi, 1996, *The Hundred Languages of Children*)

Introduction: *Belonging*, *Being*, and *Becoming* in the World, in Language

Malaguzzi's (2022) *Hundred Languages of Children* represents the multiplicity of human expression and personal and shared languages that gradually become the many voices we encounter in society and education. From an early childhood education (ECE) perspective, the poem reflects a rights-based pedagogical philosophy that frames how we engage with society's youngest participants as active, living parts of their worlds and ours. This rights-based lens acknowledges all children have a voice and, so, implies responsibilities for adults: to listen to the hundred languages of children, to honour them in the present, and to help them develop for their individual, and our collective, future. Children's multiple languages are prefigured by the worlds into which they are born and to which they always already belong. Fundamental tenets of Australia's *Early Years Learning Framework* (EYLF) (Australian Government Department of Education (AGDE), 2022) include honouring children's *belonging* to, and their present *being* within, existing families, cultures, and communities, as the grounds on which – and from which – children *become*. *Belonging* "acknowledges children's interdependence with others and the basis of relationships in defining identities" (AGDE, 2022, p. 6) by modelling which languages are spoken, which languages are valued, and, so, which languages are taken on. It is the meaning children make within this *belonging* that underpins their childhood as "a time to be, to seek and make meaning of the world" (AGDE, 2022, p. 6). *Being* is about children knowing themselves in the present as individuals and in relation to others. Through their hundred languages, children come to know themselves as the ones who say and do things and connect with others. Through the everydayness of their *being* (with and without others), they *become* new selves.

In young children, *becoming* happens through rapid and significant changes in identities, understandings, skills, and capacities as they learn and grow to be active and full participants in their families, communities, and society (AGDE, 2022). Since children in the earliest years are among the most vulnerable in society, with the least social and physical power, they face many challenges as they grow towards full, active, and authentic participation in society. Most (but not all) have adults who

help them to participate in this *becoming*, by affording them opportunities and interpersonal and material spaces in which to grow. For the youngest children, "living a rights-based life" means having a voice, speaking their own languages, and being understood. To accomplish these things, they frequently rely on adults to strive to ensure that their rights are realised and fulfilled (Salamon & Palaiologou, 2022). The Convention on the Rights of the Child (CRC) (United Nations, 1989) "links children's rights to a legal duty to make the voice of the child visible" (Tures, 2022, p. 86): a legal duty of adults and organisations to uphold *all* children's right to have their opinions taken into account (Article 12); to receive and share information, as long as the information is not damaging to them or others (Article 13); and to be looked after properly by people who respect their religion, culture, and language (Article 20) (United Nations, 1989). The articles of the CRC also assign adults the responsibility to acknowledge their own power in interpreting young children's languages, to understand children's languages as essential parts of their *being*, and to support children's *becoming* full participants in the community of life on the planet.

This chapter is not a conventional scientific report. It is a contemplative essay that aims to stimulate discussion about very young children and their languages. It starts by outlining Wittgenstein's (1958) notion of *language games* as a way to understand meaning and meaning making. This view is the basis from which we will argue that young children develop in shared intersubjective spaces constituted in the three dimensions of semantic space, physical space-time, and social space. We use the theory of practice architectures (Kemmis et al., 2014) to explore intersubjective space as the space in which children develop. We thus consider language through a practice lens as inextricably linked with children's learning, living, belonging, being, and becoming through their *practising*: what, in this chapter, we describe as a kind of *going into space*: that is, the intersubjective space in which children belong and be and become in the world. Along the way, we present (with their own and their parents' consent[1]) observations of babies and toddlers, mostly author Stephen's observations of grandchildren Zadie and Stella (Kemmis, 2019, pp. 7–19, makes some similar observations). We conclude by discussing the double purpose of education as helping people to live well in a world worth living in and consider how honouring and creating spaces for young children to *belong* contributes to upholding their rights for *being*. We also invite educators to join them in their *becoming* – in particular, their becoming peaceful and prosperous individual and collective stewards of the planet who can help to fulfil the Sustainable Development Goals (SDGs) (United Nations, 2015).

[1] Assent of baby Zadie was obtained by Stephen through tuning into her embodied responses to his presence, a natural and regular presence to her. Consent from Stella is noted with Fig. 3.1.

Language Games: Learning Language Not Just to Name Things but to Do Things

Other chapters in this volume directly address children's speech and linguistics. In this chapter, we take a somewhat different view of language in life – life as lived in *practices*. Our point of departure is the theory of language articulated by Ludwig Wittgenstein (1958) in the *Philosophical Investigations*. Wittgenstein begins the *Investigations* with a critique of a theory of language he attributes to Augustine (354–430 AD) – the theory that learning a language is principally a matter of learning to connect names with things. Wittgenstein shows that this theory is mistaken, partly because it is unclear how a language learner can know what attribute of a thing or an event a new word is meant to connect with. If I point at a dog and say "dog", perhaps a toddler can learn the meaning of the word, but how does the toddler learn the word "fur" or "black" if I point at the dog again? Wittgenstein offers a different theory of how words come to mean: we learn their meanings by using them, perhaps mimicking, and perhaps experimentally, to see whether our interlocutors appear to understand what we are saying; if not, we try again, struggling towards shared understanding. He says (1958, p. 11) that we learn new words by participating in *language games* in which we explore how to use words appropriately until we "know how to go on" (1958, pp. 58, 72) in thinking and talking about something – as in knowing how to go on in a series like 1, 3, 4, 7, 11, 18, 29[2]…. When *we know how to go on*, we understand. Kemmis and Edwards-Groves (2018, pp. 118–119) call this the "orienting function of language". A language is not only a list of words that point at features of the world, mastered by learning ostensive definitions (that is a dog); rather, language is a sea we learn to swim in by *using* it – by trying to use language appropriately in the talk and texts we encounter. Language orients us and helps us navigate our way in the world.

Swimming in Seas of Language

When we see babies and toddlers learning to speak, we do indeed see carers and educators patiently pointing to objects and repeating their names (Daddy. Daddy.), as if following Augustine's theory of language learning; as if they believed they could pass the gift of language to children piece by piece, word by word. But it was part of Wittgenstein's genius to shift our gaze from words and their *referents* to words and their *use(s)*: we use language not just to *name* the world, but to *do things* in it. In fact, we use language for many purposes. When he introduces the concept of language games, Wittgenstein (1958) asks us to consider a variety of different kinds of uses of language, like giving and obeying orders, describing things, reporting events, forming hypotheses, play-acting, making jokes, solving problems

[2] After 1 and 3, every number in the series is the sum of the two previous numbers.

in practical arithmetic, translating from one language to another, and "asking, thanking, cursing, greeting, praying" (p. 12). In these different situations, not only do we use different words, but we use words differently. Learning any language is learning to do *that*: to use words appropriately for a purpose in a situation which involves *communicating* with someone, even when they are not immediately present. Young children bring their hundred languages into prefigured seas of *shared* languages, as participants in cultures and places and communities – in linguistic communities that are also communities of practices.

Every language spoken in a living linguistic community is a vast sea of possibilities for meaning. A person learning a language enters that sea and makes their way in it by swimming, whether the sea is English, Suomi, Bahasa Indonesia, or Yolngu Matha; whether the sea is family dinner conversation, directions to the baby change room, or the specialist discourses of French cuisine. Some views of language learning fix their gaze on the individuals who are mastering a language, becoming confident users of its vocabulary and grammar. They construe the learning in terms of knowledge the learner acquires. Wittgenstein's view of language enlarges our frame of reference beyond the learner's knowledge, to encompass their *practice* – their practice in a vivid world that becomes real, perceptible, expressible, and comprehensible through language. Making this shift enables us to see language learning as learning to *mean*, to *communicate*, and to *do* things in the material world and to *relate* to others in a shared social world.

Seen from this perspective, language is dynamic, not static. *Mean-ing* is something we do *inside other practices*, including in talk, conversation, discussion, debate, and argument, while we're doing other things. People sometimes speak of *making* meaning, like producing an object or pulling a rabbit from a hat, but meaning is something people *do* when they are communicating with someone about something in the world, for example, when they describe things, report events, make jokes, and greet people (Wittgenstein, 1958). When we use language (speaking, listening, reading, writing), we are always in motion, in practice, in the world. Language makes the boundaries of our bodies permeable, so we can pass out of our skins into a shared world. Through the windows of shared *semantic* worlds, we learn how to go on in shared *material* worlds and shared *social* worlds. Philosopher Jürgen Habermas (2003, pp. 10–11) says:

> As historical and social beings we find ourselves always already in a linguistically structured lifeworld. In the forms of communication through which we reach an understanding with one another about something in the world and about ourselves, we encounter a transcending power. Language is not a kind of private property. No one possesses exclusive rights over the communicative practices we must intersubjectively share. … The *logos* of language embodies the power of the intersubjective which precedes and grounds the subjectivity of speakers.

The transcending power of language not only allows us to make and find sense in the material world and in the social world we share with others; it also allows us to make sense of ourselves.

Going into Space: Learning to Navigate in Intersubjective Space

The theory of practice architectures (Kemmis et al., 2014; Kemmis, 2022) is a version of practice theory, that is, a version of theories that aim to understand social life as it unfolds dynamically in human, social practices, rather than seeing human activity simply as the intentional actions or behaviour of individuals. It stresses that we encounter one another always and only in *practices*. Our practices unfold in three-dimensional *intersubjective spaces*: in semantic space, physical space-time, and social space – all made real in some *place*. As baby Zadie learns to navigate the world, for example, she is learning to navigate her way in both the material world of objects and a social world of connections with the people around her. As she does so, she is making sense of her world through language, and while some people might think of this sense-making simply as a "mental" phenomenon, it is also a material and social phenomenon. Zadie is discovering relationships in which things and people around her are (or are not) meaningful for her. She is drawn into seas of language, held afloat by parents, siblings, family friends, and early childhood educators. As she begins to make her own way in this sea, she learns to orient appropriately to others and the world and finds herself lifted by tides and carried in currents of language. She finds herself floating, swimming, and diving in a world filled to its brim with meaning.

Stella's Picture

In January 2014, four-and-a-half-year-old Stella made the picture shown in Fig. 3.1 (presented here with her parents' and now-thirteen-year-old Stella's permission) for her grandparents.

Stella's practice in making the picture can be used to illustrate the three-dimensionality of the intersubjective space she shares – and we share – with others in the world.

In Semantic Space: Meaning Stella's artwork leaves traces of various kinds of meanings (sayings) that guided her artmaking, both in the conduct of the practice (using textas, the whiteboard, and the easel) and in the things she represents in the artwork (flowers, bugs, love-hearts). Perhaps the two pink and two blue flowers reference her grandmother Rozzie and grandfather DeeDee who are in the room with her. In the top left corner of the picture, she explicitly names herself and her sister (Lui); at the bottom, she names the people for whom the picture is made (Rozzie and DeeDee). The artwork is an explicit communication with this audience about something Stella seems to love (the garden); she especially seems to love working in the garden with Rozzie.

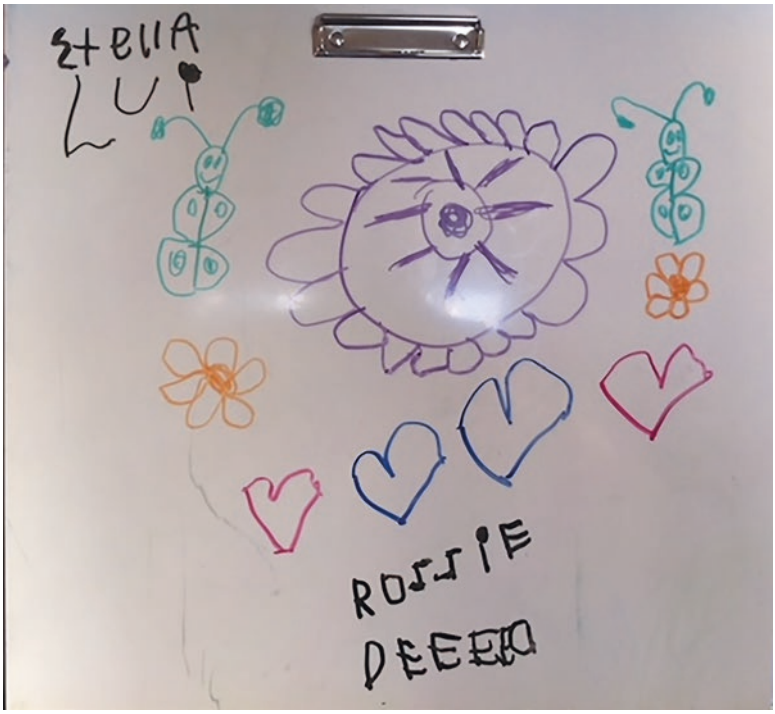

Fig. 3.1 Stella's picture

In Physical Space-Time: Materiality and Temporality Stella stands in front of the whiteboard as she works and carefully chooses and uses textas of different colours to make her marks on the whiteboard. Making the picture takes time and effort and careful (embodied) hand-eye coordination. As Stella works, Rozzie and DeeDee are in the room, as is little sister Lui (aged two-and-a-half).

In Social Space: Sociality As noted, Stella made this artwork for a particular audience: a grandmother and grandfather. Its making and its content reveal Stella's love for these figures in her life. The picture is also a gift: the pictures of flowers and bugs are one part of it; the love-hearts are another, an explicit signal about what the audience is to understand from the picture. It is also significant that Stella includes Lui's name in the picture; Lui was in the room, also making marks and drawing, but she didn't work on Stella's picture. Stella includes her sister's name anyway, perhaps recognising that she was part of the goings-on in the room when the artwork was produced.

Stella's art practice (and visual language) unfolds simultaneously in these three dimensions, in what Theodore Schatzki (2010, pp. 38, 40) calls "the timespace of human activity" that "consists in acting towards ends departing from what motivates

at arrays of places and paths anchored at entities". Stella's practice binds together meaning, materiality, and sociality; it simultaneously produces (or renews) a communication, a material artwork (marks on the whiteboard), and social relationships.

Her work on the picture unfurls in the timespace of *her* human activity in a space where she belongs, but hers is just one thread among many that interweave in the shared space and time of the house. The house encompasses a range of distributed meanings, materialities, and socialities, as the adults and children act and interact. It is a practice landscape in which multiple activity timespaces unfold contemporaneously in intersubjective space; Stella's activity timespace is just one thread in the warp and weft of life in the house, where, as the EYLF suggests, Stella is simultaneously *belonging*, *being*, and *becoming* (AGDE, 2022).

Language and Practice, Knowing in Practice

To see language through the lens of *practice* is to locate language in the world, as part of our living-being-practising in the world, our belonging-being-becoming in the world.

Focusing too closely on the *acquisition* of language or knowledge by individual learners may push into the background, and into the future, what knowledge and knowing are *for*. Kemmis et al. (2014, p. 58) say "all of what is conventionally called 'knowledge' arises from, recalls, anticipates, and returns to its use in practices". Likewise, Kemmis and Edwards-Groves (2018, p. 120) say "What we learn arises from, represents, recalls, anticipates, and returns to its use in practice". As many (e.g. Freire, 1970) have said, knowledge is not a possession; it is "wild"; it inhabits the innumerable realms of human social practice, and it is expressed in hundreds of languages.

From an ontological perspective, when young children learn, they are learning to navigate a three-dimensional world of meaning, things, and social relationships; they are learning to *be* in the world as participants in conversations; in embodied, material activities; and in webs of social relationships. They do not learn language separately from those other things. Their knowing-being is expressed in their *practising*, and their development is observable in the evolution and differentiation of their practising over time. Through their *being*, their practising, they participate in the *happening* of the world – a world to which they *belong*, of which they are a living part (being is dynamic, not static; a static person has ceased to be), and which they shape as part of their *becoming*.

By focusing attention on people's *practising*, practice theories allow observers of very young children to explore, for example, how babies' and toddlers' practising engages them in worlds made intelligible in language, made real in materiality and temporality, and made human in social relationships of solidarity and power.

Language Before Language

Each month, baby Zadie inhabits a bigger world, and engages with it in more complex ways that reveal her growing autonomous capacities for action and interaction, verbally, physically, and socially. This is what practice theorists are interested in: seeing this marvellous differentiation and discernment in the way people inhabit their worlds – spaces we share.

For example, Stephen recently wrote this about granddaughter Zadie:

> In a three-minute video of fourteen-month-old Zadie tottering in and out of the room where Mother Alice sits, Zadie is carrying on a recognisable 'conversation' with Alice. Zadie babbles for a few seconds then stops for her mother to speak then starts again when Alice stops. Yes, Zadie is learning turn-taking, but what she is expressing – enacting – is *connection*: 'You're there and I'm here'. And: 'We are *in touch* – connected – via these noises we are making'. And it seems evident from her tone and her perseverance in the activity that Zadie finds being in this conversation warmly satisfying. It is not fanciful to see the conversation as an enactment of love, for both daughter and mother. Alongside that connectedness, Zadie has also begun to master the *orienting* function of language. She points at things, often things she wants. She learns to say 'Da' when she points – perhaps a version of 'that' – and the 'da' is timed so the stress falls precisely when her arm reaches its fullest extension, pointing to a thing she wants her interlocutor to attend to.

Until now, we have focused largely on the orienting function of verbal language seen through the window of Wittgenstein's (1958) *language games*. But babies' language starts long before the words that compose the languages adult human beings speak around the world. It is not only new words that babies learn by participating in language games that shape their *becoming* by *being* with and *belonging* with important others in seas of verbal language. Before they become skilled interlocutors in the shared languages of the linguistic communities around them, infants swim in seas of meaning-filled, culturally bound, embodied *primordial* languages. Babies' languaging begins with cries, gestures, head-turning to find the source of a familiar voice, signs, pre-linguistic vocalisations and echoing, and deliberate signals of many kinds. This languaging demonstrates unequivocally not only that babies communicate but also that they *intend* to communicate. From early in life, they internalise the reciprocal nature of their languaging through vocal, gestural, and other forms of call and response with others. As they do so, they develop expectations that help them learn how to go on as intentional, purposeful, and active participants in the contingent relationships they have helped establish (Salamon et al., 2017).

Language and speech don't only orient adults in the world; they also orient babies from the first few weeks and months of their lives. Before birth, foetuses hear familiar voices and probably register emotional states through the different kinds of sounds they hear in those voices. Newborn babies cry when hungry and, for many but not all, see that their distressed cries bring people who will feed them. From their first days, most babies are aware that different voices are attached to different people of varying importance to their well-being and comfort. They turn towards the voices of key figures in their lives. As they develop, they vocalise in different ways

to different people; they have pre-linguistic conversations with familiar people, taking turns and leaving space for the other to speak. These sophisticated, embodied practices reflect some of their hundred languages that build on and are mediated by holistic developmental *being*, grown in the intersubjective spaces in which they *belong*, and tied inherently to their *becoming* as they are beckoned into proximate worlds they have not yet entered.

These developments can be read as steppingstones in a kind of learning-to-be-in-the-world that begins from an innate consciousness of sociality – a baby's consciousness of being part of a social world. From the beginning, baby Zadie is a world *participant*, not just a world spectator. She is not an isolated individual who must find the others with whom she inhabits the world; from the beginning, her *being* is in the presence of others with whom she *belongs*. William James (1890) remarked that "The baby, assailed by eyes, ears, nose, skin, and entrails at once, feels it all as one great blooming, buzzing confusion", so, from the beginning, she is *in* and *of* that world, not isolated from it. Surely, for her, feeling alone is unimaginable; she does not and never did inhabit the world *alone*. From the beginning, she is reciprocally connected with others and the world. Without this archaic presupposition, she could not subsequently differentiate herself from others and the world. In some sense, she knows from the beginning that she is part of us, even as she comes to discover who we and she are, and as she gradually finds her own place in the world of things, and gravity, and pleasure, and pain. Relationality is hard-wired into the very fibre of her being; as she comes to develop *a sense of being*, she is finding herself as a subject and an object of her own thought, always in a *relational* sense – of being *this* in relation to *that*, and that, and that… To *become* a subject, she must differentiate herself from what is *not* her, things that are not her, that are *objects*. In time, she will also become the reflexive object of her own thought as a subject. But we should not forget that, from the beginning, she cannot *be* without *belonging* and, as she develops in her ways of being – that is, in her *becoming* – her ways of belonging change and develop too.

If, from the beginning, Zadie experiences connectedness and relationality, especially her connectedness with the other beings who feed and comfort her, then, among the first things she discovers about the world is the importance of communication: not communication of the kind that the 1950s' information theorists thought of as the transmission of a pre-formed message (information) from a sender to a receiver, but, rather, communication as an act of connection. Communicating announces and enacts connection – the baby's connection, through multiple languages, with the people around her. Embodied infant communication thus opens a window through which researchers, educators, and carers can gain deeper insights into babies' lived experiences, wants, and needs (Salamon, 2017). While we might concede that learning language is, in part, a process of mastering a system of signs and rules (of the kind Wittgenstein attributed to Augustine), we should equally hold that seeing communicating as connecting puts language and its pre-linguistic precursors into a context of language *use* – the way Wittgenstein saw it in the *Investigations*.

This picture of babies, toddlers, or children using vocalisations and language to *connect* with others in their worlds invokes the sociality and relationality of language even before it is the kind of language Wittgenstein wrote about. Vocalising and using language *presuppose* connectedness with interlocutors.

Conclusion: Living Well in a World Worth Living in for All

The observations of children presented in this chapter emerged from home settings, interpreted tentatively (to respect the children's right to their own meaning) by a fond grandparent under the supervision of a staunch early childhood professional. Drawing on our conclusions of those observations, we presented an argument for seeing language *in* life – in *use* in life. We have attempted, as Wittgenstein did, to dispel the notion that language is *only* a system of signs and symbols and the notion that learning a language is a matter of mastering how names are attached to their referents. Instead, we have attempted to convey a view of how languages are tokens in play, in acts of communication, orienting people who move in relation to one another in living worlds of practice. We have offered a view of the youngest children not as *spectators* of life but as *participants* in life. From their participant perspective, they cannot do other than *presuppose* the webs of connections of which they are already part. From their very beginnings, babies and toddlers are co-participants in social life; from birth, they are the bearers of human rights. They have rights to a voice, to speak, and to associate, for example, to be heard and included, and to have their own space. They are participants in the present and future of the world they inhabit. They have intergenerational rights to a world at least as livable as the world enjoyed by their predecessor generations. Upholding these rights, however, is only made possible by adults who understand their inherent power in representing and advocating for young children's voices.

ECE professionals study very young children, child development and language development, with the knowledge that from before birth they are connected to family, community, culture, and place, and their earliest development and learning take place within these embodied relationships (AGDE, 2022). Lave and Packer (2008, p. 44) called learning a process of "ontological transformation" – transformation of someone's being through their becoming; Kemmis (2021) described it as "a constant adaptation of our practising" (p. 288) and "coming to practise differently" (p. 289). In everyday life, most people recognise that from the beginning, babies and young children are interdependent with others, and that, therefore, adults have responsibilities to create safe, secure, and nurturing spaces for their *belonging*, to better understand their *being*, and to support their *becoming*. ECE environments are among the widening worlds babies and young children inhabit and explore, and their emerging understandings of those worlds are revealed through their expanding capacities for using hundreds of languages, acting in time and space, and relating to others and the world around them. In these worlds, they are not passive; they are always *agentic* (Stetsenko, 2017), already creating their worlds in shared

intersubjective spaces and places. Often, however, adults hold decisive power over those spaces and places, in ways that value some languages over others. It is incumbent on adults to uphold young children's rights to their own languages, their own voices, in matters affecting them by critically reflecting on the powerful role we play as mediators in their learning-living-belonging-being-becoming in shared semantic, material, and relational spaces. Educators' relational and interactional styles, for example, act as powerful influences on practice with infants and thus on infants' practices (Salamon & Harrison, 2015). These remnants of our own intergenerational inheritance are revealed through our interpretations of their actions and interactions, which we do in our own meaning-filled, culturally bound multiple languages, as much embedded and embodied in us as baby Zadie's languages are in her. As adults, we are thus among the conditions that both enable and constrain very young children's practices, including their languages and voices, and we must reflect critically about the many ways in which our sayings, our doings, and our relatings enable and constrain their belonging, being, and becoming.

Ultimately, as professionals, we study very young children and their worlds so they (and we) can live well in a world worth living in for all – a world that honours, engages with, and responds to the hundreds of languages of which their worlds are constituted, and in which children themselves can actively use their languages to shape ongoing conversations. This is why we educate rising generations: so they can live well in a world worth living in (Reimer et al., 2023). By doing so, we can better meet the Sustainable Development Goals (SDGs) and help children *belong* in inclusive and equitable quality ECE settings (SDG 4) and promote healthy lives and *well-being* for all children of all ages (SDG 3), who will create peaceful, just, and inclusive institutions and societies (SDG 16) (United Nations, 2015). The world is made up of seas of hundreds of languages. We uphold our professional responsibilities and help children learn languages by going into space with them and participating in language games that can help them learn how to go on well, in worlds worth living in.

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Stephen Kemmis is a professor emeritus of Federation University and Charles Sturt University, Australia. He studies the nature and change of practices, principally in education, through the lens of the theory of practice architectures. He is co-founder of the Pedagogy, Education and Praxis international research network, which includes researchers from Australia, Finland, the Netherlands, New Zealand, Norway, Sweden, Colombia, and the Caribbean. He has held university appointments in Australia, the USA, and the UK and has been a visiting scholar at various universities internationally.

Andi Salamon was a senior lecturer in early childhood development, pedagogy, and practice in the School of Education at Charles Sturt University, Australia during the writing of this chapter. Using the theory of practice architectures, her research focuses on infant cognitive, social, and emotional development and how these come together in holistic communicative practices. Andi incorporates her research into her teaching to help advocate for and transform infant pedagogy and uphold infants' rights to quality early childhood education. She keeps children and families at the front of her mind in her work and encourages pre-service teachers to do the same.

Chapter 4
Infant Emotional Capital Practices as Voice in Research and Pedagogy

Andi Salamon

Abstract Infants' sophisticated social capacities from birth lay foundations for evocative emotional communication in the first year of life. Their capacities, however, are often underestimated and undervalued. This can leave infants "lost in translation" with their right to quality pedagogy, and their participation in it, compromised. This chapter presents research (The research presented in this chapter was conducted with the support of funding from the Jean Denton Memorial Scholarship in early childhood education. It will be referred to from now on as the research, the study, or the project) about infants' powerful emotional communication, actions, and interactions, conceived of as emotional capital practices. It argues that better understanding infants' emotional capital practices can help reconcile misinterpretation of very young children by focusing on their observable practices. The project documented infants' emotional capital practices and engaged educators in critical reflective practice about them. The ethnographic research was conducted in an early years' learning setting in regional Australia and generated data from photographic and video footage, field notes, and participatory group meetings. The project used the theory of practice architectures to code infants' practices with educators and then drew on developmental literature to further analyse data. Findings include that infant emotional capital practices consisted of *bundles* of evocative *sayings*, *doings*, and *relatings,* focused around both positive and negative emotional expressions, and the purposeful recreation of everyday social and emotional behaviour and communication.

Keywords Infant voices · Emotional capital · Holistic infant development · Infant practices · Participatory research · Early childhood education

A. Salamon (✉)
Charles Sturt University, Bathurst, NSW, Australia
e-mail: andi.salamon@canberra.edu.au

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Introduction

> This chapter regards babies as real human beings. Every child is a different individual. Their thoughts and feelings and developing capacities form part of their humanity and 'inherent dignity.' These entitle each baby to 'the equal and inalienable rights of all members of the human family' (United Nations, 1989). Academic analysis of babies can increase our understanding of humanity, of human rights at any age, and the human agency of rights-bearers. We take babies to be people aged up to about 12 to 15 months. (Alderson & Yoshida, 2019, p. 29)

Infants have a range of holistic developmental capacities from birth that lay foundations for embodied and sophisticated emotional communication in their first year of life. These capacities, however, are frequently underestimated and undervalued in both social and educational contexts (ZERO TO THREE, 2016). As a result, infants' social and emotional communications can often be missed and/or misunderstood. In addition to this, and among other things, the highly emotional nature of infant communication in shared settings, and adult responses to it, can confound possibilities to view infants as the social and emotional experts they are. Even in high quality early childhood education (ECE) settings, babies[1] are often considered less capable of negotiating social and emotional experiences than they are cognitive and physical ones (Salamon & Harrison, 2015). The subsequent impact on societies' youngest citizens is that infants are often "lost in translation". If educators don't understand that infants' evocative communication is central to their social and emotional expertise or misunderstand those communications, missed educational opportunities in ECE abound. This can result in lower levels of quality ECE for and with infants, which is directly at odds with Article 29 of the Convention on the Rights of the Child (CRC) that states "Parties agree that the education of the child shall be directed to … The development of the child's personality, talents and mental and physical abilities to their fullest potential" (United Nations, 1989).

Infants also have a right to express their own views in matters affecting them (United Nations, 1989, Article 12); however, honouring their participation rights to be active contributing members of their community with their own voice is difficult. This is because infant voices are made up of holistic vocal, embodied, and nonverbal communications, rather than verbal communications which are the most understood and valued in society. To navigate these communicative differences, some work must be done to create spaces where "other" voices are heard, understood, and acted on. A rights- and respect-based methodological attitude of ethical symmetry in research, for example, acknowledges the similarities of babies as human participants while honouring and working with their differences as "other" (Salamon, 2015). In Salamon's study, babies were invited to participate in the research. The intention was to work "with babies' unique strengths of clear, active, and responsive physical expression" (Salamon, 2015, p. 1023) and observe infants' responses to

[1] Babies will be used interchangeably with infants from hereon. Following Alderson and Yoshida (2019), babies are considered children aged up to 12–15 months.

laminated pictures of themselves taken during data generation as a springboard for the next steps in the research. To honour and work with these differences in ECE, it is crucial that educators (a) understand the unique cognitive, social, and emotional developmental characteristics that come together in infants' sophisticated embodied communication and then (b) create communicative spaces for babies to naturally participate in, use their voices, and contribute to their worlds.

Like Alderson and Yoshida (2019), this chapter regards babies as real, whole, rights-bearing humans with a capacity for clear, direct, and honest communication in the first year of life. It also extends consideration of "the democratic underpinnings of participatory research" (Salamon, 2015, p. 1023) with babies and educators by presenting their ethically symmetrical participation in research. Following Kemmis and Salamon (2024) who conceptualised infants as having "language before language", the research presented in this chapter investigated the embodied social and emotional languages infants speak before they use more easily understood verbal languages. The project extends theorisation of emotional capital in naturalistic early years settings and subsequent alignment of emotional capital with infant practices (Salamon, 2017; Salamon et al., 2017). It used a practice theory approach (Nicolini, 2012) to document infant emotional capital practices as everyday embodied, social, and emotional communications (*sayings*), actions (*doings*) and interactions (*relatings*) that can be observed and responded to. Responses from adults are central to holistic infant development and help grow their cognitive and language capacities which contribute to positive social and emotional outcomes and fulfil Articles 28 and 29 of the CRC (United Nations, 1989). The chapter aims to help educators understand and respond to holistic embodied infant voices in pedagogical contexts by making babies' emotional capital practices clearer. In doing so educators can act for and with infants to uphold their rights to quality learning experiences in ECE settings.

Setting the Scene

Understanding Emotional Capital

Capital is a measure of wealth and involves individuals or organisations accumulating and holding assets which are then used as a resource to produce more assets (Hargrave et al., 2022). According to French sociologist Pierre Bourdieu, this capital (the assets) can take various forms including economic, cultural, social, and symbolic. Symbolic capital is grounded in the production of different kinds of power, accumulating (as assets) over time and potentially "producing profits" (Bourdieu, 1986, p. 241) for the actors involved. The idea of emotional capital thus extends this notion of symbolic capital by considering emotions as assets that can also be accumulated, circulated, and exchanged (Nowotny, 1981). Infants accumulate understandings of the everyday actions and reactions of (and interactions with) others

from birth that centre around their physiological and emotional needs. These needs (and eventually wants) are communicated by babies through a range of embodied nonverbal behaviours, including facial expressions, crying, smiling, and laughing. These actions elicit powerful reactions from adults in community and ECE settings which potentially produce profits for both sets of actors involved. Both children and educators can thus be considered as possessing and using emotional understandings, and communication of them, as resources in ECE that have accumulated over time and are exchanged in relationships together.

Altogether then emotional capital can be considered as the accumulated, circulated, and exchanged emotional assets used to manage one's own and others' feelings. The concept of emotional capital has been used in research of community settings, for example, investigating mothers' emotional involvement in their children's schooling (Gillies, 2006). The idea of emotional capital has also been taken up in business and leadership, believed to be constituted of competencies including, but not limited to, self-esteem, self-regulation, relational agility, and optimism (Whitener, 2019). Emotional capital has been used in ECE to describe a "repertoire of emotional resources" that educators draw on to successfully navigate the emotional intensity of their work in early learning settings (Andrew, 2015, p. 351). In relation to infants, emotional capital is conceived of as their active and purposeful use of a range of embodied emotional communication skills (Salamon et al., 2017) that can be observed through their lived experiences and engaging relational practices with others. Babies have sophisticated cognitive, physiological, social, and emotional capacities that motivate them to act with intention, to gain and share attention, and within 6–7 months they can use what they know in powerful ways to guide relational dynamics with adults.

Understanding Infant Development

From before birth, humans process and regulate what they perceive through their senses in parts of the brain that are closely related to physical and biological systems. At its core, the brain stem that works together with the limbic area helps regulate arousal, emotion (Siegel, 2020), and ultimately attention. Infants' physiological and cognitive systems are thus inextricably linked, and understanding this linkage is beneficial to adults who aim to support infant development. When children are physically regulated, they feel safe in their bodies and can begin to engage in key cognitive process that promote learning and development (Siegel, 2020). Infants learn by organising and focusing attention, through repetition and imitation, cause and effect, and acting with intention. In the first six months, they realise they can direct and share attention with others. This joint attention between educators and infants (when sustained) supports cognitive and language development (Degotardi, 2017), which results in co-regulation and, so, promotes self-regulation. In

something of a circular loop, self-regulation then promotes cognitive development. These nuanced interconnections between self-regulation and cognitive development are thus underpinned by the co-regulation that occurs through "serve and return" interactions with others.

Babies are born into social worlds and learn through repetitive action and interaction with the people and places around them. At birth, babies are cognitively, physically, and socially vulnerable, but perhaps their most powerful early developmental capability is being able to cry. Babies use their cries as communication, about physical needs first, and in ideal environments these cries are met by caring adults with culturally bound responses, for example, looking sad, smiling, or consoling. These are among the earliest serve and return interactions from which babies learn about other people and their emotional responses. The holistic nature of infant development means babies' social and emotional development is not separate to their cognitive and physiological development, and in the same way, they can direct adult attention to share objects of interest, by pointing, for example, infants can direct social adult attention to themselves and the things they do (Reddy, 2003). Reddy (2003) gives examples of infants' efforts to "actively recruit" people into emotional engagement by performing in exaggerated ways and repeating clever, funny, and odd actions that previously led to laughter. Similarly, by six months old, babies can repeat and overexaggerate negative emotions that may also have previously recruited adults into emotional engagement through, for example, overexaggerating and at times seeming to fake their now sophisticated cries (Chen et al., 2009).

Infants' developing cognitive associations of cause and effect through social serve and return interactions with emotional expression, nonverbal vocalisations, and embodied expression is similar to verbal language and communication development. Verbal language, for example, starts with cooing, babbling, then single words (Stark et al., 1993), two and three words, and so on. This progression is underpinned by symbolic associations between, first, consonants to their sound and, then, words to their meaning (Majorano & D'Odorico, 2011). Similarly, infants' nonverbal language develops through symbolic associations between their own expression and adult responses to it. Nonverbal language and communication include gaze (linked to cognitive development – suggests babies are paying attention and interested), intensity and types of cries, facial expressions, pointing, body movements, smiling, touching, leaning, and vocalising (Salamon & Harrison, 2015). These early forms of communication are often referred to as cues, and in professional ECE practice, adults are ethically bound to look for and tune into these communicative signals, to make sense of and respond appropriately to the baby's expression. These early turn taking interactions are central to language and communication development (Athari et al., 2021) and help very young children feel heard and understood. Infant emotional capital practices that draw on understandings of this sophisticated holistic developmental communication system can thus be seen as infant voice in these early mutual nonverbal conversations.

Elements of Emotional Capital in Action

Aims

The project aimed to document and deconstruct the evocative emotional capital practices used by infants in their interactions with educators in an ECE context and to engage educators in deep and critical reflective practice about them. The research also aimed to share and disseminate the findings of the research to the centre community, the local community of a regional town in New South Wales, Australia, and feed this knowledge directly back into the Australian early childhood profession. With a focus on infant emotional capital practices as voice, this chapter presents the data and findings that help achieve the first aim of the project, to document and deconstruct infant emotional capital practices and help contribute to accessible understandings of infants' sophisticated emotional capabilities. The project was designed to enable participation and result in reciprocal research partnerships.

Theoretical Orientation

Practice theory approaches are used by researchers to investigate everyday social phenomena and the nature of things as the focus of research and teaching and consider practices to be the everyday actions and interactions that make up society (Nicolini, 2012). Individuals and groups at shared sites are thus connected whereby individual actions and interactions (practices) of practitioners are enabled and constrained by the conditions of the social sites of practice (the arrangements) (Schatzki, 2002). For example, arrangements of ECE settings such as regulations for educator/child ratios and educator qualifications enable and constrain educators' practices which, in turn, shapes the conditions that enable and constrain ECE and opportunities for children's learning (Salamon & Harrison, 2015).

The project used the theory of practice architectures (Kemmis et al., 2014) to identify, deconstruct, and illuminate the ways babies draw on emotional capital in their actions and interactions with educators. According to the theory, practices are *bundles* of individual practitioners' *sayings*, *doings*, and *relatings* that work towards a particular aim, or *project*, and they "do not unfold in entirely smooth, untroubled, harmonious ways: their paths are frequently shaped" (Kemmis, 2022, p. 93). Rather, practices are prefigured and channelled by the three parallel dimensions of social sites known as *cultural-discursive*, *material-economic*, and *social-political* arrangements. The theory of practice architectures highlights the interdependent and interwoven elements of practice, whereby practices mediate the relationships between the individual and social sides of practice. A simplified version of the original theoretical framework, "the map", was central to analysing and making sense of the data collected (Kemmis, 2022) during this study.

Methods

Ethical symmetry between researcher, educators, and babies aims to help acknowledge the similarities of babies and educators as research participants while honouring and working with their differences (Salamon, 2015). Similarly, the project methods and materials were designed to invite infant participation and acted as enabling research arrangements for babies to naturally participate in the enactment of the research to some degrees. For example, the babies were present in group meetings with educators, and laminated pictures of data being shared were provided for them to engage with. The babies were included to uphold their right to participation in parts of the research (Salamon & Palaiologou, 2022). As babies can do over the course of research involving them (Salamon, 2017), infants acted with agency and "stepped into" spaces created by these enabling research arrangements, often shifting them by engaging and directing adult attention, including the researcher's, in different ways. As a result, many of the babies ultimately engaged in the emotional capital practices the project aimed to document and contributed directly to the outcomes of the project.

The study included 16 infants aged between six and 14 months old and three permanent educators. Video and photographic data were gathered using the chief investigators' high quality digital camera and two small digital cameras to record the interactions over the course of eight weeks via "participant observer" research. As per the degrees of infant participation noted above, infants do not understand the nature of the research and that the researcher is there for something different than what would be a normal day in their ECE setting. If the baby approached the researcher, it would be unethical not to respond. Similarly, the project used methods and materials to help educators step into research spaces and, among other things, meet the second aim of the project as active and agentic participants. A planned method for educator participation was to share and interpret video and photographic observations of infants' emotional capital practices with them during daytime meetings (see Fig. 4.1) and use the "Practice Architectures Map" (Salamon & Harrison, 2015) to make sense of the observable practices.

The map was used to organise *bundles* of babies' *sayings*, *doings*, and *relatings* during the group meetings. Iterative analysis of video and photographic data was thus undertaken with educators using the map, which was placed on the wall, to guide discussion. Deductive analysis occurred after this, drawing on developmental literature about infant social and emotional development when data collection was complete and analysis with educators was underway. Educators were included in member checking during subsequent fortnightly visits, to reflect on and confirm early conclusions about the data and deductive analysis. The participatory approach demonstrated a three-way symmetry between infants, educators, and researcher, grounded in the development of respectful, authentic, and reciprocal relationships with all participants. Data were also shared with educators, children, and families at the research site at a family research night during the member checking period. Plans to share the project with the local community were cancelled due to the government's COVID-19 restrictions on gatherings that were in place at the time.

Fig. 4.1 Iterative analysis sharing data with educators during meetings with infants present. (Permission was gained from children's guardians and educators according to the processes of the Charles Sturt University Human Research Ethics Committee (protocol number H20055) to use and publish images with the faces of children and educators who participated in the study for dissemination of the project. Assent was also gained from the babies through researcher observation of holistic embodied infant responses to their presence and their equipment)

Data

Documented Emotional Capital Practice Emotional capital practices were identified with educators as *bundles* of babies' emotionally evocative communication (*sayings*), actions (*doings*), and interactions (*relatings*) that influenced the way capital accumulated in their interactions with educators. Babies displayed combinations of *sayings*, *doings*, and *relatings*, for example, smiling and looking at the adult as well as crying while looking, so it was hard to separate some of these *bundles*. These and other emotional capital practices were enacted by the babies during games of pretending, imitating, and serve and return interactions as well as other infant practices (see Fig. 4.2).

Temperament, Personality, and Cognition Emotional capital practices were focused around both positive and negative emotional *sayings* and purposeful recreation of everyday actions and interactions. Emotional capital practices seemed to be influenced by temperament and personality, that is, some children engaged in these practices more than others, *saying* and *doing* things and *relating* in ways that were specific to the child. Some children did not. For example, a child who was described by educators as having "a big personality" was noticed to wave to everyone, clap, and look and communicate a range of different things with everyone. A child who was described as "quite social when he is happy" engaged adults, including the researcher, with playful *doings* such as blinking at them and then, when the adult blinked back, in response to them (see Fig. 4.3).

- Blinking
- Screaming and looking
- Stops crying
- Cocks head
- Waves
- Shows
- Smiles
- Plays with resuorces – bangs blocks, looks through coloured blocks
- Reaches for and touches my things
- Flapping arms while crying
- Nodding
- Offering – when other person looking
- Asking – looks and lifts hand then two hands
- Expressions increase in intensity, frequency
- Looks at what wants – e.g. educator, food, resource
- Eating in the high chair on own
- Playing with other children
- Babbles
- Points
- Chooses rocker
- Chooses to leave rocker
- Switches intense crying off like a switch
- Hiding
- Engaging with peers
- Pumping arms and legs – happy and sad
- Repeats consonants – ba – a'ba
- Grabbing attention
    - Looking at me till I look then smiling
    - Saying 'boo' to keep peekaboo game going
    - Groaned vocalisation till I looked
    - I was talking to educators. I look over and ## is 'calling me' with her sideways number then arm flap
    - When am talking to one child, other child cocks head
- Crying/screaming while following staff member around
- Head tilt
- Vocalise and look
- Cry and look
- Shaking head and smiling
- Head back and smiling to the air
- Switch vocalisations on/off
- Smile and look
- Rubbing eyes
- Swipes food away when doesn't want
- Touching each other – hands, face
- Keeps trying to engage
- Joins in play episodes w adult and other groups
    - When I blinked and smiled she did it back quickly
    - When I put my hands up they put hands up to head
    - When I repeated/copied waving and shaking legs two others copied me
    - When I repeated/copied shaking head two others did the same
- Babbling and chatting @ arvi tea
- Wiggle butt and arms for dancing
- Comes close and watches
- Half cry with arm flap
- Cries when noisy
- Plays to camera – cocks head etc.
- Repeats word
    - "Thank you" said ed, child repeats "th-da" (one occurrence)
    - Responds to sentence i.e. "you're getting cheekier by the minute, aren't you" and child nods
    - Bopping in place
    - Bops in time to music
    - Claps
    - Stops crying when music starts
    - Starts crying when particular ed walks in

Fig. 4.2 List of observed infant emotional capital practices co-created with educators (and babies)

Fig. 4.3 Sequence of blinking in purposeful and playful ways

Another observation was that those children who engaged more in emotional capital practices came from homes with multiple (at least two) languages or were reported by educators as being "the smart funny ones". This suggestion was followed up with analysis tentatively revealing children's bilingualism and pretence (Van Reet, 2020) are indicators of executive function. This conclusion cannot be verified by such a small case. As theorised, however, emotional capital practices seem to draw on accumulated cognitive, social, and emotional understandings to engage adults in purposeful and powerful ways including with playful pretending (Mireault & Reddy, 2016). Future investigation of influences of this kind of play on infant executive function and cognition is warranted.

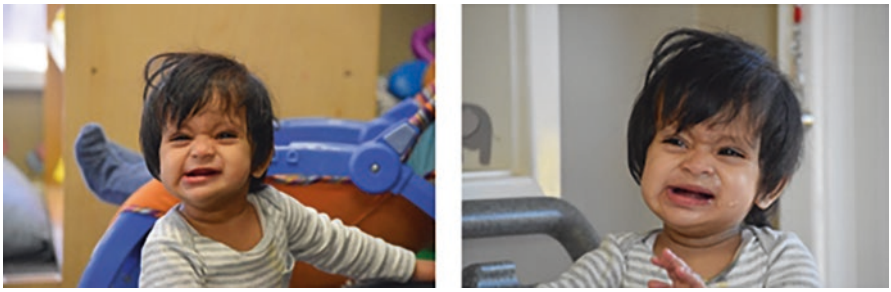

Fig. 4.4 Upturned eyes, cheeks, and mouth for positive affect display (left) and downturned eyes, cheeks, and mouth for negative affect display

Emotional Capital Practices Seem to Be Social Analysis of psychological literature about infant social and emotional development contributed to a significant finding that infants engage in emotional capital practices as part of a social, negotiated expression that involves negotiation with other individuals (Hinde, 1985). Many of the infants' emotional capital practices were directed at adults and at times other children. For example, an educator described the "calling type voice" of a baby who was "trying to get your attention". They went on to explain "you can tell when they're not looking away, they look back and forth. It's like her saying 'hey, get over here!'". Researchers support this reflection stating that infants purposely direct attention to themselves (Degotardi, 2017; Reddy, 2003). Analysis of infants' facial expression further supported the possibility that emotional capital practices were directed at others as more social than emotional expression. According to Ekman et al. (1990), there is also a distinction between parts of the brain where involuntary, natural emotional facial expressions compared with intentional social facial expressions originate. The Duchenne smile, for example, is called a genuine "enjoyment smile" that involves the muscles and lifting in the corners of the mouth as a smile and, at the same time, lifting cheeks and twinkling eyes at corners (Ekman et al., 1990). A common emotional capital practice seems to reflect a purposeful, overexaggerated smile with upturned features that is mostly directed towards someone (see Fig. 4.4 – left). Another common emotional capital practice is the purposeful down turning of the same features to others to display negative affect (see Fig. 4.4 – right).

Discussion and Implications for Babies, Educators, and ECE

With little physical power, infants are picked up and moved around often regardless of what they are doing and who or what they might be engaging with. Facial expressions, body language, cues, and gestures of infants and toddlers are the voice they

use to indicate their needs and wants. This study investigated infant emotional capital practices as voice in research, communicated through sophisticated, embodied social and emotional languages. By honouring the unique cognitive, social, and emotional nature of their expression, at the heart of understanding emotional capital practices, space can be created to respect infants' voices and use their communication as the starting point for quality infant pedagogy in ECE settings. When adults follow infants' lead, babies learn they can influence and control parts of their environment which underpins agency (Fleer & Linke, 2016), acknowledges their voice, and honours their participation rights to actively influence matters affecting them (United Nations, 1989).

In this study, many babies displayed the sophisticated overexaggerated behaviours inherent in emotional capital practices in playful ways of pretending to laugh or cry, so it follows they might be open to engaging in these when they are thoughtfully planned and included as a focus in play-based learning in ECE programs. Research about preschool-aged children considers play a neural exercise that enhances and promotes executive function and underpins cognitive flexibility, inhibition (self-control, self-regulation), and working memory (Colliver et al., 2022; Whitebread et al., 2009). This facilitates significant early learning, development, and school-based learning outcomes (Diamond & Lee, 2011) and lifelong wellbeing outcomes (Moffit et al., 2011). A focus on these capabilities through intentional play-based learning opportunities *prior* to preschool can enhance ECE for all children to begin on developmental trajectories that not only optimise future outcomes and work to fulfil education as a sustainable practice for the future (Kemmis & Mutton, 2012; Siraj-Blatchford et al., 2010) but create rich, social infant and toddler cultures in the present. This creates spaces for infants' voices to be honoured and upholds their rights to provision of quality educational experiences (United Nations, 1989).

When educators closely observe and interpret children's cognitive and emotional engagement in playful pretence, they can plan for cognitive development and emotional literacy and regulation and enact the contemporary ECE practice of intentionality and play-based learning (AGDE, 2022) through pretend play with emotions. Arthur (2020) states that in order to regulate emotions, children need to first be aware of their feelings. Educators can promote this awareness by starting with the everyday natural and negotiated expressions emotional capital practices represent and purposely elicit infants' cognitive, social, and emotional engagement. Rather than pretend play that focuses "almost exclusively on pretending about the identities, attributes and existence of objects" (Reddy et al., 2022, p. 4), responding to and initiating these expressions through shared attention and using meaningful everyday experiences to pretend with babies better honours their voices. Pretending to laugh or cry in overexaggerated ways while naming the associated emotions simply and clearly can underpin regular, stimulating, and playful interactions. It can also help early emotional understanding and communication and develop secure, respectful connections through intentional play-based learning.

Conclusion

This chapter has shown how infants are rights holders according to the CRC (United Nations, 1989). In conclusion these rights will be referred to in the context of Australian practice literature that guides ethical, professional ECE practice. According to the Early Childhood Australia Code of Ethics (ECA, 2016), professionals should aim to act in the best interests of *all* children, working together to ensure that every child is thriving and learning. Understanding infants' emotional capital practices as part of the sophisticated voice of our youngest children is an important step in achieving this aim. Acknowledging, responding to, and promoting the everyday social, cognitive, and emotional development that underpin emotional capital practices can help ECE professionals support the principles of the code that require a commitment to respect and maintain the rights of infants. This commitment can be enacted in democratic, equitable, fair, and inclusive practices (ECA, 2016) with infants, by recognising and understanding their embodied nonverbal communication as a unique strength. In doing so educators can enable societies' youngest citizens' capacity to contribute to the culture of their communities, with civil, linguistic, and social rights to be their sophisticated nonverbal selves, engaging in with infants and toddlers by "speaking their language".

There are many ways emotional capital practices are related to a view of children's lives as characterised by *belonging*, *being*, and *becoming* (AGDE, 2022). The vision here is that all children, including the youngest, contribute their voices to engaging learning that builds success for life. Recognising emotional capital practices with infants creates spaces for infants and toddlers *to be* their playful, creative, and socially engaging selves. Understanding how to promote this playful, language-rich engagement creates ECE spaces where infants and toddlers *can belong* in quality, warm, and joyful social environments. Importantly, incorporating emotional capital practices into planning for infants can promote cognitive, physiological, social, emotional, and language development that, if sustained over time, impact on *children's becoming* through the development of positive lifelong learning outcomes. As has been argued, babies' nonverbal expression, starting at birth, is a unique strength that develops quickly in skill and expertise in the first year. It is a most unique language that, even though it is not often valued, reflects unique infant voices and is a powerful avenue to meaningful, authentic ECE with societies' youngest learners.

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Andi Salamon was a senior lecturer in early childhood development, pedagogy, and practice in the School of Education at Charles Sturt University, Australia during the writing of this chapter. Using the theory of practice architectures, her research focuses on infant cognitive, social, and emotional development and how these come together in holistic communicative practices. Andi incorporates her research into her teaching to help advocate for and transform infant pedagogy and uphold infants' rights to quality early childhood education. She keeps children and families at the front of her mind in her work and encourages pre-service teachers to do the same.

Chapter 5
Contributing to SDGs Through Conceptual PlayWorlds: Changing the STEM Story for Children, Families and Teachers

Anne Suryani, Sue March, Marilyn Fleer, and Prabhat Rai

Abstract Encouraging young children's interests in learning Science, Technology, Engineering and Mathematics (STEM) concepts has been a key focus of educational research across countries. However, there has been less focus on how early childhood children, educators and families engage in STEM through play and how this can be sustained through programmatic research. The chapter discusses emerging findings from the Conceptual PlayLab on a large-scale national study that tested the evidence-based model called Conceptual PlayWorlds (Fleer, 2018). Founded on cultural-historical theory, Conceptual PlayWorlds is an innovative, evidence-based model of learning STEM concepts through play (SDG 4) consisting of five characteristics – selecting a story, designing the Conceptual PlayWorld space, entering and exiting the Conceptual PlayWorld, planning the play inquiry and problem scenario and planning adults' (parent/carer/teacher) interaction (Fleer, 2018). The focus is to create a collective imaginary situation where children and adults engage in problem-solving and STEM learning. With its focus on closing the gap for girls in STEM and mentoring a largely female early childhood workforce (SDG 5), this innovative programmatic study provides a better understanding of how educators, parents/carers and policymakers can support future generations to pursue science-related careers and address the shortages of STEM qualified professionals.

Keywords STEM education · Play-based pedagogy · Early childhood education · Imagination · Teacher education · Family pedagogy

A. Suryani (✉) · S. March · M. Fleer · P. Rai
Monash University, Melbourne, VIC, Australia
e-mail: anne.suryani@monash.edu; sue.march@monash.edu; marilyn.fleer@monash.edu; prabhat.rai@monash.edu

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Introduction

Governments worldwide have identified the need to increase early childhood conceptual learning outcomes (Fleer & van Oers, 2018). The United Nations Sustainable Development Goal (SDG) 4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Meanwhile, SDG 5 aims to achieve gender equality and empower all women and girls. In Australia, the federal government has recognised the need to enhance innovation by engaging young children in Science, Technology, Engineering and Mathematics (STEM) at an earlier age. There is an urgent need to address the skills shortage in STEM due to decreasing rates of STEM enrolment, low female participation and reduced mathematics performance (Australian Industry Group, 2015). Diversity in STEM professions is now a priority.

It must be noted that early engagement in STEM translates to greater potential for involvement in the broader STEM workforce in later years. Therefore, developing innovative and appropriate STEM experiences for the early childhood period is key to creating a strong foundation that supports continued access to STEM education throughout schooling and beyond. More equitable access to education (SDG 4) – particularly for girls (SDG 5) – is crucial for addressing the big issues in science, such as tackling climate change and preserving oceans and forests (SDG 14, 15). The impact of the COVID-19 pandemic on educational gains and the resultant crisis in early childhood and pre-primary education and care (SDG Report, 2021) emphasise the importance of this endeavour. Underpinning all of this is an urgent need to build capacity in researching STEM in early childhood settings to ensure ongoing access to STEM education through the pipeline towards STEM careers is well-preserved.

Founded on cultural-historical theory, Conceptual PlayWorlds is an innovative, evidence-based model of teaching and learning STEM concepts through play that addresses the needs identified in SDGs 4 and 5. In a Conceptual PlayWorld, adults and children construct an imaginary world based on a dramatic children's story and together solve highly engaging STEM problems that arise in the imaginary situation. The Conceptual PlayWorld model consists of five characteristics (Fleer, 2018) and provides a social purpose for engaging with STEM in the context of the shared imaginary situation that is created. This holistic framework to play aligns with the Convention on the Rights of the Child (CRC) imagination of children's rights, where play also facilitates children's wider and independent participation in cultural life and arts (United Nations, 1989, Article 31).

Long-standing international research into young children's science concept formation has focused on children from the age of three but not on the birth to three age period (O'Connor et al., 2021). Empirical evidence from the Conceptual PlayLab is creating new understandings of how infants and toddlers engage with STEM concepts in collective contexts when supported by adults in Conceptual PlayWorlds within centres, schools and family homes. The findings also show that girls play important roles in ensuring the social purpose of STEM investigations (Stephenson et al., 2021). This early engagement in STEM is crucial for later STEM interest in school and participation in STEM careers.

The Conceptual PlayWorld model is being field-tested through a 5-year programmatic study conducted by the Conceptual PlayLab at Monash University in Australia (https://www.monash.edu/conceptual-playworld). Significantly, the Australian Research Council Laureate Fellowship scheme has funded this programmatic study – the first to be awarded in early childhood education. This research aims to shift how STEM concepts are taught in the early childhood period in Australia and internationally. There are three pillars in the research programme: Pillar 1 investigates how infants, toddlers and pre-schoolers form concepts in STEM in play-based early childhood settings; Pillar 2 focuses on STEM learning in family homes; and Pillar 3 measures educators' confidence and competence in teaching STEM concepts.

The Five Characteristics of the Conceptual PlayWorld

A Conceptual PlayWorld is an imaginary scenario created by an educator or parent where young children are invited to go on imaginary journeys, meet and solve challenges and learn STEM concepts – all while playing. A Conceptual PlayWorld can be inspired by a children's book or a fairy tale, and it can be set up in an average room, classroom or outdoor space. There are five characteristics to consider when setting up and developing a Conceptual PlayWorld (Fleer, 2018):

(i) **Selecting a story**: Early childhood educators or families are encouraged to choose a story that is enjoyable to both the children and adults. The story should have a plot with dramatic moments that lend themselves to introducing a problem situation to the children. For example, in the story of Alice's Adventures in Wonderland, the main character, Alice, might get stuck in miniature form and need help from the children to return to normal size (Fleer, 2021a). This lends itself to investigating a range of STEM concepts as a team to generate potential solutions to the problem. Empathy for the character(s) in the story is central to the children wanting to help research and resolve the problem situation. Through repetition and joint imaginative play, children are encouraged to build empathy for the main character, or they may be drawn to a different character in the story. New scenarios can be added to the story as the Conceptual PlayWorld progresses to maintain engagement and incorporate developing interests. It is important that the story has scope for all five characteristics and that it is dramatic with emotional tension.

(ii) **Designing the Conceptual PlayWorld space**: Educators design different opportunities for collective play and child-initiated play in ways that develop the play plot further and support the learning of STEM concepts so that they become personally meaningful. The available indoor and outdoor spaces should be evaluated for their potential to help develop the collective play of the group. They can be designated through using signs (e.g. This way to Wonderland). Props can be helpful for adults and children to enter the imaginary world together (e.g. a key, or phial for the "shrink me" potion, a hat for the Mad Hatter).

(iii) **Entering and exiting the Conceptual PlayWorld space**: It is important to highlight the difference between the real world, for example, the mat space at group time and the space of the shared imaginary world that will be created during the Conceptual PlayWorld. A routine is created so that the whole group enters the Conceptual PlayWorld together, and each chooses a character as they enter the imaginary space together (e.g. going through the tunnel to Wonderland). Returning as a group from the imaginary world is important too, to help children to distinguish between reality and imagination.

(iv) **Planning a problem scenario that is dramatic and engaging**: Planning is key to developing an effective Conceptual PlayWorld. The problem scenario should not be scripted, but rather a general idea of the problem should be planned, and STEM concepts that may help in solving the problem should be researched. Adults need to strike a balance between preparation through researching likely STEM concepts and being flexible in responding to spontaneous developments as the Conceptual PlayWorld unfolds. For example, the children may not empathise with the main character in the story as expected but instead may relate more closely to an animal in the story (e.g. the white rabbit; Fleer, 2021a).

(v) **Planning adult/teacher interactions**: Educators or parents plan for a range of roles in the PlayWorld, both in relation to the children and the other adults. They can choose to be equally present with the children, to model practices in their role or to need help from the children. Their role can also be as together with the child, leading (where they cradle the child or hold their hand and together act out the role or solution). This is particularly the case with infants and toddlers and children who need extra help to engage in the imaginary situation.

The five characteristics of a Conceptual PlayWorld are not sequential but should be planned iteratively in relation to each other. The following sections discuss the theoretical background that underpins the Laureate Fellowship Programmatic Research followed by evidence from the three pillars of the programmatic study in relation to SDGs 4 and 5.

Cultural-Historical Theory and Conceptual PlayWorld

The Conceptual PlayWorld model draws upon Vygotsky's conception of play (1966), development (Vygotsky, 1987, 1998) and imagination, emotions and creativity (Vygotsky, 1971, 2004). The focus of Conceptual PlayWorlds is on children's meaningful learning of concepts in play-based settings. In a Conceptual PlayWorld, learning is in the service of the children's play. Conceptual PlayWorlds is the outcome of research into the play and learning of concepts in science (Fleer, 2017) for the development of executive functions in play-based programmes (Fleer et al., 2017) and in learning engineering principles (Fleer, 2020).

There are four theoretical assumptions underpinning the Conceptual PlayWorld model. First, a cultural-historical conception of play focuses on imagination as the key psychological function that is developing in the early childhood period. Imagination develops through play (Elkonin, 2005). In play, an imaginary situation is created where children change the meaning of actions and objects to give them a new sense and work creatively to build new meaning through different levels of abstraction (Vygotsky, 1966). Play itself develops in relation to the experiences afforded by the child's social environment, from changing the meaning of an object in toddlerhood (the pencil becomes an aeroplane), to image play (the child is a character), to role play (where children play characters and there is a plot to the play), to play with rules (games) in the pre-school and early school age period (Kravtsova, 2014). Vygotsky (2004) noted that play is dialectically related to learning and development through broadening the field of experience available to the child. Second, concepts to be learned are usually historically developed (science as a body of knowledge), culturally defined (Western science) and given meaning in everyday life through interactions with others (early childhood curriculum in action). When children use concepts in the service of their play, they have new possibilities in play and different ways of thinking. Third, play is a creative and imaginative production by the child. Children bring insights and practices from everyday life to their play and, in doing so, are imagining and creating actions in new ways. Children produce new play scripts and negotiate these with their play partners. In the Conceptual PlayWorld model, play plots are introduced through the narrative of a story or through non-fiction play inquiry, both of which develop the group's collective imagination. Fourth, a cultural-historical view of child development suggests that it is important for dramatic moments to occur in the child's social situation of development that support children to think and feel more consciously about a particular phenomenon. In a cultural-historical conception of play, drama (or crisis) brings about development (Vygotsky, 1998).

Finally, the cultural-historical conception of motives, motive orientation and institutional demands (Hedegaard, 2008) is important for understanding children's development of imagination and learning in their play. Teachers inside a Conceptual PlayWorld with a group of infants can help their motive orientation towards collective imagining. In the following sections, partial findings from the Conceptual PlayLab's empirical research in early childhood centres (Pillar 1), in family homes (Pillar 2) and with educators (Pillar 3) are presented.

Pillar 1: Early Childhood Settings

The research that underpins the Laureate Fellowship Programmatic research makes an important contribution to SDG 4. Changing the conditions in early childhood programmes to support inclusive and equitable quality STEM education promotes lifelong learning opportunities for all, particularly in regard to girls' aspirations to succeed in STEM professions (Fleer et al., 2022). This has been realised through

researching how infants, toddlers and pre-schoolers engage in STEM activities in group settings (Fleer, 2021b).

Our research has noted ongoing inequitable access to STEM resources and activities for girls, arising from long-standing practices in early childhood centres, where, for example, the block corner and construction areas are often dominated by boys. Girls have shown a reluctance to enter those areas or are even held back from entering those areas by the boys, and sometimes inadvertently by teachers unaware of the gender bias. A different story emerges in Conceptual PlayWorlds, where two key changes are evident.

First, the motive to solve the problem that arises in the imaginary situation takes centre stage, and all areas of the pre-school become repositories of materials that are seconded to solve that problem: The blocks in the block area change their meaning, becoming part of a crane or a simple machine that is needed to rescue a character in distress; the outdoor area becomes a place to find a safe space to build a burrow to shelter the native animal that is under threat; climbing equipment becomes a mountain to conquer on the quest. As the participants in the Conceptual PlayWorld build their collective understanding of the changed meaning of the resources in the traditional areas of the pre-school, the traditional gender biases associated with those areas fade to the background. The traditional structures of the pre-school no longer reinforce the unconscious biases and associated ways of being that keep girls from accessing STEM materials. Girls feel more empowered to access STEM materials, move them to new areas and use them in new ways to serve the needs of the imaginary situation of the Conceptual PlayWorld. Consequently, our research is showing that the girls are building competence, especially in STEM, simply because they have access to STEM resources and are supported to be STEM active (Stephenson et al., 2021).

The second change in practices is in relation to the role of the teacher. Traditionally, teachers position themselves outside of the play – observing, providing materials and equipment and making suggestions from the sideline. However, in a Conceptual PlayWorld the teacher takes on a role in the play, becoming a character (or object) in the story, rather than passively observing the children playing. The positioning of the teacher as an active play partner brings them closer to the child's perspective, in tune with the developing imaginary situation. From this new position, the teacher can in turn position the girls as STEM capable and STEM knowledgeable. For example, as the need to build a new burrow for a homeless animal in the story becomes imperative, the teacher positioned with the children can say to a group of girls, "Let's put on our engineers' hats and design a new burrow. I wonder what we're going to need?"

Another benefit of being positioned inside the imaginary play is that teachers can more easily identify incidents when more dominant children try to exclude less assertive girls from STEM areas. Being in a position to notice such microaggressions and intervene immediately from within the imaginary situation, for example, "Let's make a space for Gemma to get the lever for the crane to rescue the dragon. We all need to help our chief engineer and save the dragon", helps create experiences in which girls come to see themselves as STEM capable. The STEM

competence and confidence of girls begin with and grow from these early experiences in the changed conditions created by Conceptual PlayWorlds.

The outcomes of our research in early childhood settings actively support the aims of SDG 5 in achieving gender equality and empowering all women and girls. When the studies are collectively examined, we have shown how infants and toddlers who are followed over time and engaged in Conceptual PlayWorlds are building early STEM competence (Fleer et al., 2020) before gendered stereotypes have time to emerge or become solidified with a belief system (Utami et al., 2021). Infants and toddlers therefore become oriented to STEM (Fragkiadaki et al., 2022), contributing to the aims of SDG 4 in ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all.

Pillar 2: Conceptual PlayWorld in Home Settings

One of the prime goals of Pillar 2 research at the Conceptual PlayLab is to generate scholarly knowledge about how families can create new motivating conditions for their children's STEM learning. Our work uses educational experiment methodology (Hedegaard, 2008) to create emotionally amplified collective imaginary situations (Fleer et al., 2020) where parents/carers and children can use their everyday home practices to create learning demands that could facilitate their children's STEM learning. Over the last three years of our programmatic research, this work has been done with families using digital tools such as Zoom (especially during the COVID-19 pandemic) and in-person workshops with families in playgroups and their home setting. Given inequitable access to early care and learning services, we also wanted to target hard to reach families, especially those with young girls. Our collaboration with Playgroup Victoria offered us an expansive network, and we used Zoom during the COVID-19 pandemic to aid in designing a novel way of data collection as well as supporting families and children. Aligned with SDG 4, this collaboration offered an opportunity to work with culturally and linguistically diverse families from multiple socio-economic backgrounds. Three key findings are emerging from this research, as outlined below.

First, drawing on Wartofsky's (1979) work on artefacts and Fleer's (2017, 2019) conceptualisation of 'digital coadjuvant', we make a case that digital technology similar to Zoom could be used to create new STEM learning motives in the home setting. To achieve this high-quality learning environment, there is a need to follow a pedagogical model that works with children's leading motive of play and the family's demand of teaching robust concepts to their children. This is achieved by theorising digital tools from a non-binary perspective that values the mutual constitution of the person and digital (Rai et al., 2021). Our digital educational experiment using the Conceptual PlayWorld model (see previous section for the planning characteristics of Conceptual PlayWorld) introduces families to an innovative pedagogical model that values children's imagination and their love for stories and play to create

a space within their home, backyard or playgrounds where families could go on exploratory journeys together and teach STEM.

Second, concepts from cultural-historical theory – social situation of development, motive and motive orientation and institutional demands – are used to understand children's everyday life situations and evaluate their maturing psychological functions. This helps create a responsive approach to teaching and learning where children and their families' everyday realities are central to thinking about their education. The design of the educational experiment is not limited by material conditions, but a detailed understanding of the social situation of development contributes to creating new transformative opportunities for STEM learning (Rai et al., 2022). The important point worth noting here is that this approach offers a fundamentally different model to thinking about quality education as per SDG 4. Quality as a concept thus is not about an objective universal criteria or certainty and ranking order but refers to working with complex everyday realities, family values and perspectives of children and parents/carers to develop a responsive model of education. Seen in this way, this approach challenges the age and stage-based developmentalism concept, one of the prime theoretical positions guiding curricula worldwide.

Conceptual PlayWorld demands a collaborative approach to working with families. Following an educational experiment methodology, the detailed planning for teaching is done to create "optimal conditions for the learning and development of the participating children" (Hedegaard, 2008, p. 185). In our more recent writings, we unpack the collaborative aspect of the educational experiment to show how researchers, consultants, external organisations and families used Conceptual PlayWorlds to support families to work together. The main aspect of this approach is that the researchers offered conceptual orientation and guiding principles for the practice, while families provided an understanding of their children's development and how Conceptual PlayWorlds could work in their home setting. Methodological focus thus sees families and children not just as a site of data collection but a site where researchers, families and children co-create new opportunities for learning and development to fulfil their intended purposes.

Pillar 3: Professional Development for Early Childhood Educators and Teachers

High-quality early childhood education is paramount for the future of our nation. Children participating in high-quality early childhood programmes has led to policy and educational reform (e.g. Organisation for Economic Co-operation and Development [OECD], 2017). Many governments aim to support long-term educational and life gains by providing high-quality early childhood education. In Australia, the National Quality Framework (NQF) provided a significant and systematic change to the national provision, law and regulation of early childhood

care and education. The Early Years Learning Framework (EYLF) highlights the important role of educators to "provide young children with opportunities to maximise their potential and develop a foundation for future success in learning" (DEEWR, 2009, p. 5). The framework also emphasises the pedagogical practice of *intentional teaching* (DEEWR, 2009). Professional development programmes are necessary to provide educators with the significant knowledge, skills, experience and mentorship to implement intentional teaching practices in play-based settings (Ryan & Northey-Berg, 2014). In Australia, there is a need for the teaching and learning of STEM concepts, particularly on how to teach these concepts in play-based settings. Existing models were primarily developed based on research from school classrooms and not play-based settings. Therefore, it is crucial to empower early childhood educators' confidence and competence in teaching young children STEM concepts (Fleer, 2009).

The Conceptual PlayWorld as a model of intentional teaching is targeted at building the capacity of early childhood educators, parents/carers and families to use intentional teaching strategies for supporting children's learning and development in STEM, which will directly improve children's social-emotional well-being and communication skills. At the completion of the Conceptual PlayWorld professional development, participants gain confidence in teaching STEM concepts and implementing strategies to engage young children in social emotional learning. This creates the appropriate conditions to enable children to be school ready. Additionally, it is expected that educators will become skilled in providing support for any challenges and difficulties faced by the children and their families while teaching STEM concepts to children in play-based settings through continuous reflection and collaboration with colleagues and families.

Conclusions

Through presenting the Laureate Programmatic Research of the Monash Conceptual PlayLab and the innovative, evidence-based model of Conceptual PlayWorlds, this chapter contributes to a better understanding of how educators, parents/carers and policymakers can support future generations to pursue science-related careers by engaging children in STEM early in infancy, toddlerhood and early childhood and homes and play-based settings, thus supporting SDG 4. Through improving equitable access to STEM resources for girls and therefore potential access to STEM education and careers, Conceptual PlayWorlds is proving to be a promising model to achieve gender equality and empower women and girls, which supports the aims of SDG 5.

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Anne Suryani is a senior research fellow in the Faculty of Education, Monash University, Australia. She holds a PhD in educational psychology with a Mollie Holman Medal for the best doctoral thesis in education. Anne has extensive experience working in a range of educational research in the Asia-Pacific Region particularly on large-scale, longitudinal and comparative studies. With the Conceptual PlayLab, Anne leads Pillar 3 activities focusing on improving early childhood educators' competence and confidence in teaching STEM concepts.

Sue March is a research fellow in Laureate Professor Marilyn Fleer's Conceptual PlayLab at Monash University, Australia. She leads Pillar 1 of the research, investigating children's concept formation in early childhood settings. Sue has a PhD in early childhood education and extensive experience in leading field research in imagination, play and early childhood STEM in culturally diverse settings in Australia and mentoring research teams.

Marilyn Fleer is a Laureate professor and holds the Foundation Chair in Early Childhood Education and Development at Monash University, Australia, where she is also a Sir John Monash Distinguished Professor. A Fellow of the Academy of Social Sciences in Australia, Marilyn was selected for the Victorian Honour Roll of Women in 2022. She holds honorary positions at the University of Oxford, Western Norway University and Aarhus University in Denmark. She has held numerous government-appointed advisory positions related to developing quality early childhood education provision and led key research projects valued at over ten million dollars (including five Australian Research Council Discovery Projects).

Prabhat Rai works as a senior research fellow at the Conceptual PlayLab in the School of Educational Psychology and Counselling, Monash University, Australia. He leads research on children's concept formation and assessment in early years in family and community settings. A Felix Scholar and PhD from the University of Oxford, Prabhat has previously worked in academic and leadership positions in India, Bhutan and the UK.

Chapter 6
Children's Mathematical Graphics Illustrating Inner "Voices": A Literature Review

Jenny Dwyer, Amy MacDonald, and Shukla Sikder

Abstract Everyday play encounters are a powerful opportunity for young children to communicate and share their "voices" of personal and cultural meanings giving value to what matters in their lives. These opportunities enable children to share ideas from their understanding and imaginings of present, past, and future worlds. Children's voices can also be made visible through their own personally created visual marks, representing a visual voice. These visual voices carry possible mathematical messages, reflecting children's connection to their mathematical world and socio-cultural worlds. These are referred to as children's mathematical graphics offering children the opportunity to make their connection to the mathematical world visible, and sending visual messages of significant relationships, connections, patterns, and identity is not often acknowledged as holding value. However, these mathematical graphics hold important personal meanings to children. They support children's intersubjectivities in play encounters, communicating and connecting with others through visual messages. They have the potential to make visible children's inner thinking and ideas. Recognising children's mathematical graphics is one way of acknowledging this important symbolic language for communication and expression. This chapter examines existing literature relating to children's mathematical graphics to illustrate an important way children communicate their inner voices. The synthesis of literature will provide an insight into listening to children's voices and enable adults to value these important voices.

Keywords Early childhood · Mathematical graphics · Visual voices · Expression and communication as voice · Children's rights

J. Dwyer (✉) · S. Sikder
Charles Sturt University, Bathurst, NSW, Australia
e-mail: jedwyer@csu.edu.au; ssikder@csu.edu.au

A. MacDonald
Charles Sturt University, Albury, NSW, Australia
e-mail: amacdonald@csu.edu.au

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Introduction

Visual marks are an important mechanism for children to share their voices to communicate their connection with their world (Department for Children, Schools and Families, 2008). However, the mathematical potential within children's mark-making is not always realised and well understood for its communicative qualities (Department for Children, Schools and Families, 2008). The aim of this chapter is twofold: firstly, the literature review will address existing literature relating to children's mathematical graphics as a way of communicating ideas to others, sending messages of what matters in their early lives; and, secondly, the review will identify gaps in the literature to provide scope for further research on children's mathematical graphics as a means to illustrate their inner voices and communicate mathematical thinking.

Central to this chapter is a child's rights perspective in promoting and illustrating children's mathematical voices. The seminal research of Carruthers and Worthington (2005, 2008, 2009, 2010, 2011) coined the term, *children's mathematical graphics*, that is children's mark-making which holds mathematical significance. These authors note that children's visual marks (graphics) help children to "explore their mathematical thinking and communicate this thinking" (Carruthers & Worthington, 2009, p. 3). While these graphical marks are a powerful way for the child to express important thinking, they can also hold mathematical meanings used in their play intentions and interactions with others. However, these mathematical graphics are often not valued by adults (Moyles, 2011) as the child's voice expressing inner thoughts and ideas. Liben and Downs (1992) report that children's graphical marks are not representative of a thing or an object, but a fusion with no separation between the child's mind, thoughts, and the graphic being constructed. With this in mind, children's mathematical graphics can be seen as real, constructed, or imagined, and exist as the idea or intention within the children's minds. In communicative terms, children's own created mathematical graphics stand for their reality and are communicated to significant others.

Theoretical Framework

Underpinning this chapter is a conceptual framework incorporating Vygotsky's (1978) cultural historical theory and Malaguzzi's (1993) hundred languages of children theory. Vygotsky and Malaguzzi share the same core philosophy – that humans, including young children, need to communicate. They acknowledge that one way young children communicate is through their own invented marks, graphics, and symbols. Vygotsky believed that when children start making marks and symbols and assign meanings to these, a significant cognitive shift occurs. Vygotsky (1982) believed this is a visual representation of the child's thoughts, stating "It is the meaning that is important, not the sign" (p. 174), emphasising the child's ability to

signify personal and cultural meanings. Graphical marks are intentional, and as Vygotsky (1978) reveals, children learn to understand the relationship between thought, symbols, and meanings with their emerging mark-making.

Malaguzzi's contribution to children's expressive and communicative languages is reflected in his hundred languages of children. Best known as the founder of the Reggio Emilia Educational Project, Malaguzzi believed that children possess a hundred languages to encounter the world, process knowledge, and express their thinking and views (Edwards et al., 1998). In his famous poem *No way. The Hundred is there*, Malaguzzi (1996) writes about the child possessing a hundred languages, stating "The child has a hundred languages, a hundred hands, a hundred thoughts, a hundred ways of thinking of playing, of speaking" (Malaguzzi, 1996). One of these hundred languages is children's mathematical graphics, which, like other visual languages, is often considered simpler and clearer than words. Thus, children's mathematical graphical marks give insights into children's mathematical thinking and what matters to them before words can.

A Child's Rights Perspective

A child's right perspective as expressed in the Convention on the Rights of the Child (CRC) (United Nations, 1989) is the starting point for this literature review. The CRC states that the child is a citizen with rights with Article 12 stating in part, the "right to express matters affecting the child, the views being given due weight" (United Nations, 1989, p. 4). Furthermore, Article 13 states that the child "shall have the right to freedom of expression; this right shall include freedom … to impart information and ideas of all kinds … either orally, in writing or in print, in the form of art, or through any other media of the child's choice" (United Nations, 1989, p. 4).

A child's rights perspective also endorses the image of the child as being capable of expressing their views in both complex and simple ways (Malaguzzi, 1994). This is an invitation to see the extraordinary moments within their everyday lives often communicated through their freely drawn graphical images (Malaguzzi, 1994; Vygotsky, 1978). To see and hear what matters to children means taking seriously the symbolic meaning of their visual marks that hold mathematical significance. Five years after the ratification of the CRC, Malaguzzi (1993) wrote "A charter of rights: A journey into the rights of children" to highlight the unheard voice of children. In the Foreword, Sergio Spaggiari states that the voice of the child is often seen to take on "a strange artificial sweetness that makes them lose their freshness and originality", that children have "been the most gagged and silenced subjects" … and that their voices "leave no trace" (Spaggiari, 1995, inside front cover). "Listen carefully", suggests Malaguzzi (1993) to these unseen and unheard voices of children, "especially their requests made to the adult world" (p. 11), and the germination of their thoughts and ideas. Similarly, Rinaldi (2013) states that the voice of the child is neither singular nor in isolation. Although the child's voice speaks for the construction of themselves and their reality of the world, it is also constructed by

their social and cultural worlds. Rinaldi (2013) believes that to think of a child as a possessor of rights means creating a context of listening to and seeing the child in the fullest sense. Even so, listening to the voice of the child can only happen within a relationship when the child is listened to and listens to others with respect to uniqueness and difference (Kronqvist, 2010).

The "Voice" as a Language

The Lundy model (Lundy, 2007) emphasises the child's right to give their views and perspectives on matters that relate to them and the right to be heard. However, this is problematic when young children are not given the tools and language to express their own views or have significant others nearby to value their voice. Malaguzzi (1996) believes the child has the right to have these languages fully developed. Graphical languages, including children's mathematical graphics, are seen as a critical language that allow children unique ways to bring about particular forms of thinking, to make meaning, and to voice ideas, often well before they have full command of the ability to speak (Kress, 1997). The child's voice introduces and connects them to their social and cultural realities, reflecting a specific socio-cultural and historical viewpoint (Deguara, 2015; Mphahlele, 2019; Papandreou & Tsiouli, 2020; Vygotsky, 1978). Deguara and Nutbrown (2018) emphasise the importance of seeing and hearing children's voices through culture and the construction of their social and cultural lives. Often, however, the child's voice is interpreted differently from the message conveyed by the child (Deguara, 2015). Understanding what matters to the child means bearing witness to the individual and collective cultural voice revealing multiple world views and perspectives.

Marks as Children's "Voice"

Jackendoff (1994, as cited in Matthews, 1999, p. 94) calls language a "window on consciousness". Likewise, Matthews (1999) sees children's mark-making and graphics as a language representing children's visual perception and understanding. The earliest form of children's marks, Matthews (1999) argues, is not unintentional and random scribbles, but a beginning to the child's intentionality and thought processes encoded through marks. These marks revolve around issues that are of profound concern to humanity. Young children's mark-making are the first moments in time when they can leave traces of their thoughts, identity, and humanity. It also supports children's social interactions and shared intersubjectivity with others, in that these marks are social (El'konin, 2001; Worthington, 2021). Keyte-Hartland (2016) sees this as a visual becoming, rather than a recall or remembering of something past. As Teubal et al. (2007) emphasise, children use their own personal marks and symbols to create a deeper understanding, develop relationships, and

communicate their thinking to others. Even so, these marks are not often valued by adults who are primed to ensure that children's thinking and expression are more realistic and less imaginative (Moyles, 2011). This dissonance can create confusion about the importance of graphical marks as worthy of a child's voice. These graphical marks help establish "connections with young children's developing sense of communication" (Worthington, 2021, p. 13).

As young children learn the value of making marks, it is important to acknowledge the role and purpose of symbolism in their lives and how their own personally created marks are an avenue to express and communicate what matters to them. Simply stated, this is the child's voice, where a child makes a sign or mark to represent an idea or meaning significant to them. Symbolism is a critical part of the developing child and important for the child's neural structures, supporting higher mental functions (Bodrova & Leong, 2015; Worthington, 2021). Vygotsky (1986) defines higher mental functions in children's use of sign-mediated, intentional, and internalised. This development of higher-order thinking occurs when children share and communicate meanings with others (Bodrova & Leong, 2015). Mortimer and Wertsch (2003) believe that this is not to be seen as a transmission of information from speaker to listener, but a shared social reality, where children are shareholders, not owners, creating moments of intersubjectivity. Young children's symbolic graphical marks, if allowed to flourish, will encourage more advanced symbolic thinking and expression (Vallotton & Ayoub, 2010). This means that specific and personal meanings are offered and communicated to others, alongside developing abstract thought processes (Bodrova & Leong, 2015; Vallotton & Ayoub, 2010). Vallotton and Ayoub (2010) see symbolism as a set of abilities that enable children to understand and communicate concepts and ideas in their absence and beyond the here and now, from the concrete to the abstract. It is a form of expression and communication of what matters to them: imagined or otherwise. Likewise, the invented symbolism that children use in their mathematical graphics is an early form of written mathematical notation, to communicate, often in abstract ways, the mathematical world they see and experience.

Graphical Marks

It is important to acknowledge two perspectives on how adults view children's graphical marks, noting that it is the second perspective that is adopted within this chapter. The first viewpoint considers children's marks as visual representations. This is based on the notion that marks record recognisable shapes of an object or person. This kind of visual representation is often referred to as children's art or drawings. Piaget (1962) theorised that children's earliest marks, referred to as scribbles, are a developmental precursor to children making realistic drawings (Carruthers & Worthington, 2008). Likewise, many adults see children's realism in their drawings and artwork appealing and worthy of comment, due to the replicative and recognisable physical characteristics of the objects or persons, as well as the perceived

developmental elements (Matthews, 1999). From this viewpoint, children's scribble marks are less valued than those that are more visually realistic. That is, the more the drawing or artwork looked like the object or person, the more it was seen as representing the child's maturity. As Matthews (1999) states, "if the observer cannot recognise an object within the drawing, then it is usually not considered a drawing at all but, at worst, a scribble … to be finally abandoned when children learn 'correct' forms of representation" (p. 93). Children are encouraged to make marks about representations of people or objects rather than thoughts or ideas (Matthews, 2006; Moyles, 2011). Lubawy (2009) believes this closely relates to the process of children learning to observe, see, look, and draw.

The second perspective of children's visual marks, which is central to this chapter, deems children's graphical marks as a form of personal language communicating ideas, intentions, and imaginations. These visual marks can be unrecognisable to the adult eye and can be overlooked and discounted as holding any significant meanings. This is perhaps due to their limited representative value (Matthews, 1999; Worthington, 2012). However, these graphical marks freely drawn by children reveal an emerging form of expression and symbolism (Carruthers & Worthington, 2006, 2011; Worthington, 2021). Children's graphical marks support their development in different ways: that is, to think symbolically and abstractly. Matthews (1999) believes that the meanings of these marks are "encoded on the drawing surface in arbitrary ways" (p. 79). Moyles (cited in Carruthers & Worthington, 2011, p. xx) agrees, stating that "graphics appear to be much more than 'drawing'". The value is not as a direct representation of objects and people, but as a communication of children's ideas and conceptual knowledge. Graphical marks also contribute towards the development of a multi-dimensional representation of the child's world, and alongside the advent of speech, very young children have the capability of using "visual media [as] a powerful expressive and communicative language" (Matthews, 1999, p. 29).

Moyles (2011) acknowledges that valuing these graphics will "more likely … ensure that the children's voices are heard" (p. xx). Seeing graphical marks as distinct from art or drawing has the potential to *see* children's voices as a form of communication to create shared meanings and intersubjectivities within their play encounters (Carruthers & Worthington, 2006, 2011). Essentially this means seeing children's graphical marks as communication, rather than for their pictorial and aesthetic appeal. This interpretation also includes an ethical approach with the child's right to dignity and respect in all forms of research and communication channels when listening to young children. Drawing on Vygotsky's (1978) view of the social nature of graphical marks for communication and expression, Worthington and van Oers (2017) describe these as characteristics of children's development in meaning-making and sense-making as opposed to the more isolated experience of children's drawing and artwork. These authors saw children's own invented abstract symbolic systems in the early years as important for learning mathematical notation, paving the way for a better understanding of mathematics at school. Tomasello (2019) claims that in using graphical marks and symbols, children "internalise the communicative intentions behind the physical symbol" … which … "like linguistic

symbols, may be … used as aids for thinking" (p. 131). This is when children develop the understanding that a graphical mark or symbol can be used to signify a meaning to be expressed and communicated (Carruthers & Worthington, 2011; Vygotsky, 1982). However, graphical marks do not just convey important messages of past realities, but possible worlds as children imagine the world as they would like it to be (Deguara, 2015; Keyte-Hartland, 2016).

There is a strong link between graphical marks and children's communication of complex concepts, be it implicit or explicit (Liben & Downs, 1992). Liben and Downs (1992) saw these graphics as a two-dimensional mark that stands for the meaning of something real, constructed, or imagined. They believe that these graphics do not exist as a representation, but that the graphic itself is also "real" – there is a fusion with no separation between the two; they both exist as the idea. They also become the avenue through which children create a shared language to use for communicative purposes in developing their intersubjectivities within their play encounters (Liben & Downs, 1992; Mphahlele, 2019).

Children's Mathematical Graphics

As stated previously in this chapter, children's graphical marks are mostly used for communicative and expressive purposes. They can be used as one of the many ways children can voice what matters to them and include their own invented symbolism highlighting their connection to the mathematical concepts in their world. As Perry (cited in MacDonald, 2018, p. 10) states, there is "mathematics in everything", referring to how children use the world to understand and voice knowledge about mathematics and how mathematics helps children understand and voice knowledge about their world. The rest of this chapter will highlight how children's mathematical graphics can be seen as a *voice* for young children. An important question to consider is how children's mathematical graphics are seen as a voice in communicating their connection to and knowledge of their world. As noted, children's mathematical graphics are their own invented graphical marks enabling them to communicate ideas and intentions to others (Carruthers & Worthington, 2010). These marks are seen as the beginnings of the child's communication skills. This graphical language holds personal messages of mathematical significance and provides connection and communication between individuals and their cultural, social, and physical worlds.

To begin with, it is important to establish what mathematics is. This is not an easy task, according to Latterell (2012), who emphasises the elusive nature of defining mathematics. Latterell (2012) provides some answers, stating that mathematics includes concepts such as a set of rules, patterns, calculations and counting, and solving a set of problems. Bishop (1988) framed mathematics through six fundamental universal categories that enable children to engage with mathematical thinking and ideas in everyday contexts and play experiences (Cooke, 2016). These are counting, measuring, locating, explaining, designing, and playing (Bishop, 1988).

These perspectives establish that young children use mathematics to understand their world, to see patterns and relationships, and to predict the future (Cooke, 2016). The Organisation for Economic Co-operation and Development (OECD, 2017) states mathematical literacy includes "using mathematical concepts, procedures, facts and tools to describe, explain and predict phenomena" (p. 1) to solve problems that are "located in reality" (Worthington, 2021, p. 11). Although a difficult concept to define, mathematics is increasingly acknowledged and recognised as important for twenty-first-century learning and living. Sarama and Clements (2009) found what young children know and can express mathematically, especially through written mathematics, is a strong predictor of mathematical achievement in later years.

Young children express their knowledge of mathematical concepts through their graphical marks, communicating their thoughts, ideas, and knowledge, and how they make sense of their world through mathematics. These mathematical graphics range from scribbles to invented and finally standard symbols. Carruthers and Worthington (2008) believe that when children use mathematical graphics, they express a deep understanding of the beginnings of written notation to communicate what they know. They further believe that mathematical graphics allow children to see their thinking and ideas reflected back to them. Beyond this, it helps children begin to understand abstract symbols, which is central to early mathematical learning. Children's mathematical graphics, Carruthers and Worthington (2008) argue, are not seen as recording a past event but include the process of mathematical thinking, including "creative thinking, reasoning, meanings, understanding, problem-solving, negotiation and co-construction of understanding" (p. 3). The rest of this section highlights and theorises leading researchers' work with reference to children's mathematical graphics.

Hughes' (1986) seminal research reviewed young children's difficulties in learning a symbolic language such as mathematics. He found that young children can invent and create their own personal marks and graphics to communicate their understanding of mathematical concepts, specifically meanings about quantity and the number system. Hughes (1986) proposed that children's informal and intuitive marks play a significant role in translating between their own visual illustrations and their understanding of abstract symbols in school mathematics. Hughes (1986) suggested that greater emphasis should be placed on children's early communication of mathematical understandings by "introducing symbols in meaningful communicative situations … if this idea can be communicated effectively to children, it may have a profound effect on their subsequent mathematical education" (p. 172). Hughes' research emphasises the importance of children being able to develop their own visual mathematical voice at a young age to enable them to communicate their knowledge of mathematical concepts. In other words, encouraging the child's own mathematical voice is a critical consideration for expressing mathematical ideas and knowledge in the early years, as well as success in written mathematics at school. Hughes' message from his research inferred a lack of valuing children's personal marks in communicating how they solve every day problem-solving situations.

Children bring their own experiences of reality and what matters to them when communicating through mathematical graphics (Carruthers & Worthington, 2010). Their symbols communicate meaning. This is seen as both their personal and cultural voice, highlighting perspectives with reference to specific mathematical concepts. MacDonald's (2011) research on children's mathematical understandings of measurement began with a group discussion, after which children were given the opportunity to "voice" perspectives and knowledge through their own invented mathematical graphics. These mathematical graphics tell of children's personal connection with reality. What was revealed was children's immersion into rich learning cultures that promoted and supported children's own meanings of measurement. These mathematical graphics were mostly readable to the adult eye, reflecting a realism in their graphics, and mostly contained an accompanying narrative to explain their mathematical conceptual ideas. What was evident in this research was that children had very personal and individual ways of expressing and communicating their ideas of measurement to develop a shared meaning with others. MacDonald's (2011) message is that children have much to communicate through their illustrated understandings of mathematics with each child revealing their personal and cultural reality. Children's inner voices illustrated through mathematical graphics help others see the mathematical world the child sees.

The long-standing research by Carruthers and Worthington (2005, 2006, 2008, 2010, 2011) on children's mathematical graphics analysed over 700 examples of mathematical graphics. These range from child-initiated marks within play to adult-directed group-time sessions within the context of early childhood settings and children's homes. The central purpose of this research was the need to support children's mathematical thinking and communication of their mathematical ideas that were personally meaningful to them. This, they expressed, has not been researched with young children before. It is essential for children to develop their own abstract symbolism and free-range and creative written mathematical marks (Carruthers & Worthington, 2005). Two key messages have evolved from their ongoing research into young children's mathematical graphics: the first is that it is important to acknowledge, recognise, and encourage children's mathematical meanings in play encounters with others communicating through their own invented mathematical graphics; the second, understanding the difference between "children 'recording' a piece of mathematics after they have done it practically" and "children representing their own mathematical thinking" through mathematical graphics (Carruthers & Worthington, 2010, p. 1).

Worthington's (2021) most recent research on children's mathematical graphics within their spontaneous play encounters investigated how young children's freely chosen mathematical graphics were used to communicate (mathematical) thinking and ideas in their pretend play. The research looked at children's choices in using mathematical graphics with social-communicative contexts, revealing their need and desire to communicate their thoughts within a cultural context. Her research revealed children's personal meanings as influenced by their familial cultural knowledge and reflected within the nursery school (3–4 years) (United Kingdom). Worthington (2021) states that it is important for the child to be "able to create

mutual understandings, with the jointly shared signs and symbols" and to acknowledge "human beings need to communicate" (p. 9). Additionally, Worthington's research found children's intentions to construct meaning through mathematical graphics highlight an understanding of the value of marks and signs to meaningfully express and communicate thoughts, ideas, and knowledge. Worthington's message is that children's mathematical graphics support the development of language and the child's voice, giving a platform within a social context to communicate and symbolise their important mathematical messages.

The Research Gap

This literature review has revealed (a) the value of children's invented symbols as a personal language to convey their mathematical thinking; (b) the gap between children's personally invented mathematical graphics and school-written mathematical notation; (c) the processes and progression through which this occurs; and lastly, (d) personal and cultural situated knowledge and realities, individually and collectively within social play encounters. In using the aforementioned conceptual framework (Vygotsky and Malaguzzi's theories), an alternative lens can be used to view children's mathematical graphics. Additionally, by adopting a child's rights perspective, that is, the right to the freedom of expression to impart information and ideas through the child's choice of media and the right to express matters affecting the child with the views given due weight, attention can be given to children's inner voices and reveal messages of importance. As the title of this chapter suggests, there is a need for more extensive research into children's personal meanings through their invented mathematical graphics to understand and examine messages on what matters and see their knowledge expressed graphically. This narrative analysis of literature used a combination of the theoretical lens of Vygotsky and Malaguzzi and considered children's rights perspectives and found the four main gaps as discussed above. Taken together, a conceptual framework is developed to understand children's mathematical graphics in Fig. 6.1.

This dynamic framework will support an analysis of empirical data of children's mathematical graphics in terms of children's perspectives, which will establish children's visual voice to understand their mathematical thinking. The framework will enable children's voices to be interpreted mathematically, not always artistically, and to value their graphical voice revealing an emerging mathematical world children see and are part of, either explicitly or implicitly.

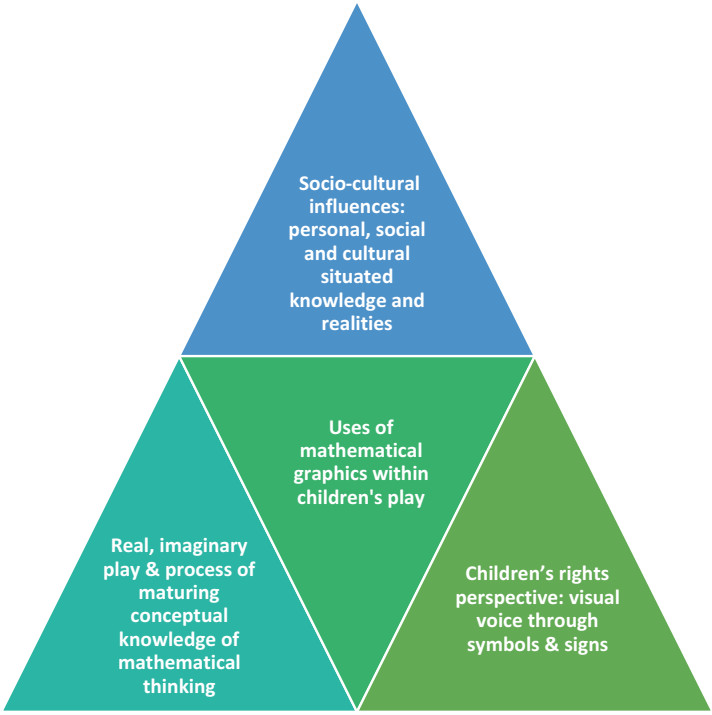

Fig. 6.1 A conceptual framework to analyse children's mathematical graphics within play

Conclusion

This chapter has highlighted salient features from scholarly research into children's mathematical graphics, illustrating a voice of children's personal, social, and cultural realities. Different viewpoints on how children's visual marks can be interpreted have been discussed. However, all have acknowledged the importance of children's mathematical graphics as a way of expressing ideas and knowledge that have mathematical significance. Future research is important in identifying what matters to children through their mathematical graphics, revealing the meaning-making processes of the mathematical world, and how in doing so they also develop a shared language to connect and communicate with others. Future research that emphasises children's mark-making as a mathematical "voice" is required to broaden our understanding and knowledge of young children as mathematical thinkers and communicators.

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Jenny Dwyer is an early childhood teacher, a doctoral candidate at Charles Sturt University, and sessional academic teaching early childhood education. She has worked in the early childhood field for many years as a teacher and director, university lecturer, and TAFE teacher, teaching students about how young children play and learn.

Amy MacDonald is a professor of early childhood mathematics education and the associate head of school (research and external engagement) for the School of Education at Charles Sturt University. Amy's research focuses on the mathematical experiences and understandings of young children in early childhood settings and the early years of school.

Shukla Sikder has been working as a lecturer at Charles Sturt University in Australia since 2016. Dr. Sikder has expertise in early childhood science, technology, engineering, and mathematics (STEM) and play-based pedagogy, focusing on Vygotsky's cultural historical theory, inclusion, and diverse culture in play.

Chapter 7
Early Childhood Friendships as a Significant Value of Education for Sustainability: The Voices of Young Children and Educators

Tamara Pribišev Beleslin and Sanja M. Partalo

Abstract In this chapter, three studies on young children's friendships compose a methodological and thematic mosaic of research with different designs to understand how these peer relations build values that are the basis for sustainable education, especially its social dimension. The first intrinsic exploratory case study was conducted within a friendship-oriented early childhood programme to nurture the children's friendships and support their social status in institutional education. The second, a qualitative study involving a phenomenological approach supported by bioecological developmental theory, aimed at investigating children's words about friendship. The third study used play-based focus groups with children and semi-structured individual interviews with educators to investigate the power of friendship in developing a sense of social sustainability. Altogether, these three studies identified the following findings: peer status in the group can be improved by nurturing friendships among children; children's culture reflected in friendships is developing in their microsystem, but external influences can be visible in it, too; and interactions supported by friendship have the potential to support a curriculum in developing a sense of belonging and being. Therefore, children's and teachers' voices about friendship present the basis for a pedagogical approach and curriculum strategies to sustainability that promotes respect for others and partnership from an early age.

Keywords Children · Early childhood (EC) educators · Early friendships · Mosaic approach · Perspectives · Social sustainability

T. P. Beleslin (✉) · S. M. Partalo
University of Banja Luka, Banja Luka, Bosnia and Herzegovina
e-mail: tamara.pribisev-beleslin@ff.unibl.org; sanja.partalo@ff.unibl.org

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Introduction

Peer relations are the basis of friendships and impact the overall development, growth, and education of young children. Friendship represents the most important type of peer relationship. Characterised by reciprocity, mutual trust, and closeness, friendships are organised mostly as egalitarian structures because they are based on equal power, have a horizontal structure (Hartup, 1992), and are constructed within a culture that relies on play and fellowship (Janson, 2007). Children are equal in these relations, expressing and harmonising opinions and developing an altruistic need and affection for another person. As a stimulus to social and emotional development, friendship is also defined as the 'core dimension for a child's well-being' (Dunn, 2004, cited in van Hoogdalem et al., 2014, p. 236). It provides emotional security and develops social competence, strengthening self-confidence and feelings of satisfaction and happiness. Establishing close and more stable relationships with friends reflects on higher self-esteem, increased interpersonal competencies, individual adjustment to a social group of peers (Ladd & Sechler, 2012), and social popularity (Cillessen & Bellmore, 2011). As children expect their friends to behave consistently, friendships are built on similarities in behavioural patterns (Hartup & Abecassis, 2002), connecting children through participation in common play, activities, initiatives, empathy, and imitation (Avgitidou, 2001), which is a determinant of peer culture. Therefore, through its peculiarities, friendship represents a form of children's effective participation in culture.

In this chapter, the Mosaic approach (Clark & Moss, 2001) was used as a methodological inspiration to develop an image of different voices of friendship at an early age. Several studies that have investigated the same phenomenon have generated several methodological and thematic perspectives, allowing the author to bring 'together different pieces or perspectives in order to create an image of children's worlds, both individual and collective' (Clark, 2005, p. 31). Based on authentic insights from children's and educators' perspectives, the intention was to reflect on children's friendships as a valuable basis for developing a sense of sustainability, especially its social dimension, from an early age. The chapter mainly addresses researchers and educators in early childhood education and care. Furthermore, it could be interesting for curriculum developers and parents who are striving to understand how to encourage and support children's permanent peer interactions to promote children's development and build a fairer society.

Ethical Considerations

The studies were conducted over almost a decade. During this time, researchers sought to meet the ethical requirements necessary for the implementation of research, including notification and consent of parents (2014/2015; 2020, 2022), consent of pre-school institutions (2014/2015; 2020, 2022), and the consent of the

Ministry of Education and Culture of the Republic of Srpska (2022). The confidentiality of data and protection of the identities of participants were considered when collecting and analysing the data in all studies. In all three studies, children were invited to participate in the research. In each research setting, conducted within the familiar environment of a pre-school and in a play context (a puppet served as the researcher in the focus group), they were able to express authenticity. The research environment was purposefully meaningful, taking into account the balance of power dynamics among the child, the peer group, and the adult. Additionally, in the case, that child exhibited discomfort in the research situation she/he had the option to withdraw from the study, as it was founded on the principle of voluntariness. The instruments were constructed to be comprehensible to children, utilising simple and clear questions. Throughout the interviews and focus groups, researchers respected children's authentic expressions and statements. The puppet researcher contributed to the spontaneity as a significant context for engaging with children during the research.

Different Perspectives, Same Theme: Studies on Young Children's Friendships

The studies are presented linearly in the context of the time when they were conducted. However, the results of each study served to develop more comprehensive insights into promoting social sustainability as a collective and individual right that can be built early in the childhood (Višnjić-Jevtić et al., 2021) by respecting and strengthening children's voices and active participation within the context of ECE institutions and the ECE curriculum. Furthermore, given the implications of the studies, the intention of the chapter was to find out how close and mutual relationships can support children in gaining the necessary knowledge and skills for promoting Sustainable Development Goal (SDG 4), as well as a peaceful and inclusive society (SDG 16), from early childhood. Table 7.1 presents an overview of the studies within the chapter that make up the pieces of the mosaic.

Through a case study description, the first study shows the potential of a longer-term friendship-oriented programme to influence social status in early childhood. In the second study, the focus is directed towards children's words used to describe their friendships. From the point of view of bioecological theory, children's interactions in their microsystem are the focus of interest, although the influence of unforeseen planetary social events from the macrosystem, such as the COVID-19 pandemic, is visible. The third study provides an in-depth insight into the understanding of friendship from children's and educators' perspectives, providing a basis for reflection on how such relationships between children can be interpreted in the context of the ECE curriculum. The presentation of each study ends with conclusions based on the research results obtained, which are given in the form of

Table 7.1 Different studies on children's friendship as pieces of the mosaic

Study title	Perspectives and kinds of research	Participants	Problem/research focus	Data collection and analyses	Main results	Implications for practice
Study 1: Scaffolding the Friendship (2015)	Constructivist approach Case study within the action research	A boy (5 to 6 years old) during the period of applying the *programme on friendship*	Influence of the *programme* on nurturing the children's friendships in conditions when the child has an unfavourable social status in the group	Follow-up during the programme and reflection Observation scale (for EC educators) Sociogram (initial and after) Friendship test (instrument for children)	Peer status in the group is improved	Through a specially designed ECE programme, structured around the different dimensions of friendship, educators can intervene in the socialisation through friendship 'Peers-as-socialisers' hypothesis (Ladd & Sechler, 2012, p. 33) can be applied to the ECE practice as a social sustainability dimension

Study 2: Children's Words About Friendship Before and During the Pandemic (2020)	Phenomenological qualitative approach Interviews with children	60 children (before COVID-19), and 30 during the pandemic	To describe and compare children's words about friendship before and during the pandemic	An inductive analysis (with open coding)	Words on friendship are related to four categories equally: Action, behaviour, emotional state, and opposition to quarrel Pandemic patterns and symbols are visible in children's activities: Behaviour of friends and spontaneous play	Children's culture, with its activities, rituals, communication and behaviour patterns, relationships, and so is reflected in friendships Children incorporate the external system influences into their worldviews and play EC educators can support friendships as the value of social sustainability through nurturing the 'proximal processes'
Study 3: Perspectives on Friendship (2022)	Constructivist approach Play-based focus group with children In-depth individual interviews with EC educators	Eight focus groups with 40 children (aged 6) Six EC educators	Children's and educators' understandings of three categories that describe friendship	Thematic qualitative text analysis	Different perspectives, roles and voices of children and educators within three categories of friendship	Interactions supported by friendship have the potential to shape a sense of belonging, being, and mutuality ECE institution as a natural environment for relation-based pedagogy

implications for practice. The intention is to encourage educators to respect children's friendships as a value of education for sustainable development and to nurture them through children's interactions and spontaneous play.

Study 1: Scaffolding the Friendship

Case Study Outlines

Within the context of the broader study for the author's doctoral thesis (Partalo, 2017), *Programme for Scaffolding Children's Friendships in ECE Institutions,* action research was employed. Eight educational groups of different ages from third to sixth year in public ECE institutions in Banja Luka (the Republic of Srpska, entity of Bosnia and Herzegovina) were included. In one pedagogical group, a special case study was conducted that included an intensity sample—showing an intensive form of the studied phenomenon (Hatch, 2002)—to monitor the child within the programme in the context of supporting his peer social status. A topic of interest in this intrinsic case study (Stake, 1995, as cited in Hancock & Algozzine, 2006, p. 30), which was exploratory in nature (Yin, 2003), was explored to gain in-depth insights into the influence of the programme in its natural context (Hancock & Algozzine, 2006). Through an individual case study using multiple sources of information (observation, sociometry, checklists, and ongoing interviews with educators), the effects of children's activities were organised to scaffold and monitor pedagogical groups in developing friendships.

Programme Outlines: Themes

The programme covered 18 topics that broadly aimed at supporting the development of children's friendships through the importance of nurturing friendships, mutual help and a sense of community and sharing, the importance of good communication and kind behaviour, encouraging cooperation and good relationships with friends, awareness of compassion through compassionate behaviour, philanthropy and nurturing humane relations between people, tolerance, play between friends, overcoming hostility through love and understanding, experiencing happiness among friends, feeling connected through folk art and playing authentic country dances, overcoming selfishness, encouraging friendship through beauty and creativity, connection with and belonging to a group, developing a sense of sacrifice and care for others and a positive attitude towards the world, and the development of social skills necessary in everyday life.

Case Study Description

The following is an excerpt of the reflection on the programme (Partalo, 2017, pp. 168–172).

A boy, five years and six months old, as the only child, lived with his father and mother, and at the time when the action research was carried out, he attended kindergarten for two years. According to educators, he was interested to participate in peer companies and group activities but was not inclined to adhere to the rules that apply in kindergarten and was not ready for group reconciliation. He shared toys and sweets with others, he had established communication and interaction with other children but was not always motivated to support and help them. Usually, he was ready to accept the role assigned to him by friends in play, although he rarely suggested the content and structure of the play. However, he tended to initiate conflict situations, with open aggressiveness towards other children. Although he had friends in the group and was receptive to positive emotions, he often showed anxiety, sometimes was shy and lonely, and rarely was chosen by other children. His conflicts with peers and manifestation of antisocial behaviour mostly manifested in leisure activities. He was happy to play with other children if they accepted him but showed intolerance towards children who expressed opinions opposite to his own and who ignored him. Intolerance towards children who did not accept him often ended in conflicts and even physical violence. As a result, his peers condemned him and retaliated with violence. The initial sociometric survey pointed to negative status in the group. In addition, the constant complaints about the boy from the parents of other children presented an additional burden for educators.

During the realisation of the group activities in *Programme for Scaffolding Children's Friendships*, the boy actively participated and showed great interest, as it was expected, because he had previously been inclined to cooperate in joint structured activities. However, the educators noticed that, in leisure activities he showed understanding for children and gave examples of sociable behaviour. This indicated the emergence of self-awareness and intrinsic motivation to change his behaviour. Repeated sociometric examination, which was realised at the end of the action research, showed that the boy had better peer status, as the number of positive choices increased, while the number of negative choices decreased.

Conclusion

Friendship-oriented ECE programmes based on fostering children's interactions and supporting children to understand and establish relations can facilitate balancing a pre-school child towards a peer group, developing altruism, social awareness, inclusion, and belonging. As a supportive context, friendship becomes a space for personal development and learning. These are the values of social sustainability,

which educators can initiate and enrich through specially structured ECE programmes, as shown in the presented case study. In inclusive intervention programmes oriented towards children's friendship, educators play a significant role, both through their social model and by organising opportunities for establishing social experiences (Krone & Yu, 2019). In this context, educators should develop their competencies in using different strategies for supportive intervention programmes, which range from environmental arrangements, naturalistic strategies, and planned routine activities to higher-intensity interventions (Kemple, 2004, cited in Han & Kemple, 2006, p. 243). In addition to setting an environment that provides the atmosphere necessary for developing a sense of belonging, educators should provide continual opportunities for facilitating dyadic interactions and fostering children's play (Hollingsworth & Buysse, 2009). The comprehensive strategies in the ECE curriculum balance the guided and initiated activities of educators with the spontaneous activities and interactions of children, which strengthens the social dimension of sustainability.

Study 2: Children's Words About Friendship Before and During the Pandemic

Theoretical Framework for Understanding Children's Friendships in Context

Brofenbrenner's bioecological theory of human development was used as the initial basis for the study (Pribišev Beleslin & Partalo, 2020). This theory emphasises the necessity of understanding a child's development in relation to the child's immediate and broader environments. Accepting the importance of the child's subjective experience of the world, the nature of the child is determined by biological determinants ('the qualities of the person') (Bronfenbrenner & Morris, 2006, p. 796) and by proximal processes in the microsystem (Ashiabi & O'Neal, 2015; Bronfenbrenner & Morris, 2006). Proximal processes, based on a child's involvement in activities and mutual interpersonal interactions, must be regular and longer in time, as well as in space (e.g. kindergartens, outdoor places), and can include objects and symbols. Play has a central position in these processes. Besides, environmental, family, societal, political, and cultural influences of the system at different levels (micro-meso-exo-macrosystems), as well as the time dimension (chronosystem), can directly but also indirectly affect a child's development.

During 2020, when the study was conducted, the COVID-19 pandemic was declared, which caused sudden changes in the daily lives of children all over the world (interruption of attending kindergarten, wearing masks, insisting on epidemic measures, social distancing, emphasised media images of the disease, etc.). The research benefit of such societal change was the possibility of comparing how

children perceived the concept of friendship before and during the pandemic. Starting from the assumption that influences from the wider social context can affect the child's microsystem, children's voices were considered a reflection of friendship in changed social contexts.

The intention of the study was to investigate children's determinations of friendship, especially the words they use in definitions of friendship, and to find possible differences in children's words about friendship in two social contexts that have changed dramatically and suddenly.

Method

In this qualitative study with a phenomenological approach, the following research questions were asked: How do children define the concept of friendship? Are there any differences in how children perceive the concept of friendship before and during the pandemic?

An occasional sample of 90 five- to six-year-old children attending a public ECE institution in Banja Luka was selected, along with two subsamples: 60 children before the pandemic (realised in 2014/2015 for a doctoral thesis (Partalo, 2017, pp. 91–92)) and 30 during the pandemic (May and October 2020). An inductive analysis (with open coding without previously defined categories) was conducted. Responses before and during the pandemic were analysed as two separate data sets. During the first reading of the data, categories were constructed using thematic analysis. Then, to describe these categories and find differences before and during the pandemic, a re-reading was carried out, focusing on searching for meanings, words, and phrases that children used, as well as looking for similarities and differences in children's responses (Kuckartz, 2014).

Results

Before the pandemic, friendship was related to four categories: Action, Behaviour, Emotional State, and Opposition to Quarrel (Pribišev Beleslin & Partalo, 2020), as Fig. 7.1 presents.

The Action and Behaviour categories dominated the children's answers. The words the children used in all the answers (before and during the pandemic) most often referred to their joint activities (playing, physical activities, and mutual activities). The category Behaviour is manifested during communication with friends (being together, listening, being nice). Emotional State, as a category, was connected to words such as love, kindness, and politeness. The category Opposition to Quarrel is a small one.

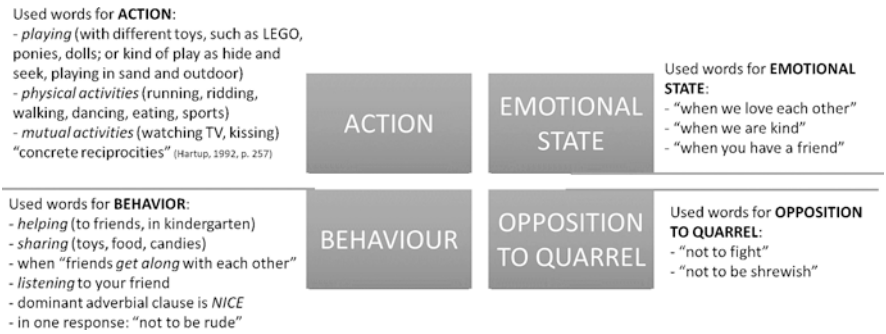

Fig. 7.1 Friendship described by children's definitions and words. (Source: Pribišev Beleslin & Partalo, 2020)

The analysis, which focused on the differences in the use of words in the responses during the pandemic, showed that the words describing a physical distance and the pandemic measurements appeared to be more frequent when referring to (1) the behaviours of friends ('Friends are wearing the masks') and (2) in the friends' play and close activities ('We play "as if" we are wearing masks').

Conclusion

In relationships with peers and broader social contexts, children create their own sub-cultures within the microsystem in which they grow up (in family, peer groups, kindergarten). Within children's culture, friends' playful behaviours are expressed through spontaneous communication when engaging in their favourite joint activities, togetherness, physical and outdoor play, cooperative play, constructive play, and symbolic play with friends. In this sense, the friendships of pre-school children are spaces where children, supported by the 'proximal processes' (i.e. their play) (Bronfenbrenner & Morris, 2006), can practice similar behaviours, explore, create, live their perspectives, and discover that friends are a good source of information. Carter and Nutbrown (2016) pointed out that these close relationships among friends in pre-school institutions have been neglected by educators and researchers. Therefore, educators should pay more attention to the potential that such children's culture can have on the educational process, especially in the form of tacit knowledge. The tacit knowledge transformation approach emphasises strategies for creating a pleasant and meaningful environment for children's engagement and activities through student–student interactions in the classroom (Zheyu et al., 2021).

In addition, the study shed light on how the dramatic and sudden social changes caused by the pandemic were mostly evident in the children's explanations of the following question: how do friends behave towards each other? (Pribišev Beleslin & Partalo, 2020, slide 9). Friendship can be seen as involving a mutual, cooperative

socialisation (Hartup, 1992), in which children interact with one another in social roles such as peers-as-socialisers (Ladd & Sechler, 2012). Therefore, as environmentally healthy spaces for young children, kindergartens should encourage the development of friendships by providing quality interactions for a particular child as an active participant.

Study 3: Perspectives on Friendship

Introduction to Study

Play-based focus groups with children and in-depth individual semi-structured interviews with educators were conducted to understand how friendship can be valuable for developing education for sustainable development. Deductive constructed categories (Kuckartz, 2014, p. 55) served as the basis for reading and coding data: approach to belonging, approach to empathy and the perspectives of others, and approach to mutuality and sharing. A thematic qualitative text analysis (Kuckartz, 2014) with open coding was chosen, emphasising parts of the participants' responses as 'larger unit—sentences' (Miles & Huberman, 1994, p. 64). During the first reading, both authors searched for statements related to predetermined categories, which led to the construction of subcategories and the selection of examples that described these categories. Then, in the second reading of the selected statements, the authors searched for descriptions of the subcategories, as well as determining their hierarchy in relation to the frequency of occurrences in the statements. The research included eight focus groups of children aged 5–6 attending a public ECE institution and six educators.

'Friends Know Who Their Friends Are Because Of Friendship – Yes!': Findings

Thematic analysis of children's and educators' responses generated subcategories that are described in Table 7.2 by some most authentic and representative statements. Subcategories are listed based on the severity and frequency of occurrence in the children's focus groups and in the educators' responses. Subcategories show the existence of different perspectives on friendship within the same categories and can be connected towards social sustainability:

> And how do friends treat each other? – Nice. – Nice, polite and to share things. – And it is not polite when they don't want to share things, quarrel and fight. – And the worst is when they say ugly words. – The worst is when someone prepares something for someone out of great effort and then they say they don't like it. That's the worst. (Excerpt from a focus group with children).

Table 7.2 Different perspectives of children and educators according to three categories of early friendships

Category	Children's perspective	Educator's perspective
Friendships support children's approach to belonging	Being in close relationships with a friend can encourage prosocial behaviour Children can recognise that a network of close friends can be developed in and out of their kindergarten Through participation in friends' activities (playing, drawing, being together), children awake belonging to peers' groups Compliance with the group rules and harmonising with friends introduce children to belonging to a wider community	The educator helps the children to connect with each other and has a role of a mediator The educator supports and fosters friendships through routines and activities The educator sets boundaries and rules in the friendship zone
Friendships support children's approach to empathy and perspective of others	Children emphasise that they share the same needs and interests with their friends Need for protection and care for others is supported through friendship A feeling of mutual importance and other person's emotions can be recognised through being with friends	The educator is an informant—Gives a child information about her/his friend The educator is an empath who understands but sets limits
Friendships support children's approach to mutuality and sharing	For children, friendship is a space for sharing things, toys, candies, and even friendship Children develop fellowship and reciprocity by helping and sharing skills with their friends	The educator is a person of trust and a 'safe haven' in different, even painful, situations that friendship brings Teachers have tacit and implicit attitudes towards children's sharing with others

Conclusion

The study illuminates the power of friendship to influence the foundations of the ECE curriculum. Acting implicitly, complex interactions between friends support the building of a sense of belonging and the development of an awareness of being. Consequently, children's relationships in the curriculum can contribute to a more comprehensive development of sustainability from an early age. Partnerships and close relations are natural and meaningful learning environments in which children can gain knowledge from their peers, alongside the immediate practising of social skills through enjoyable activities, togetherness, and spontaneous play.

Towards Sustainability Through Nurturing Early Friendships in EC Institutions

How can the peculiarities of early friendship be explained as values of the social dimension of education for sustainable development?

In ECE theory and practice, sustainability is developed on a child-focused perspective (Engdahl, 2015) as a three-dimensional model that includes environmental, social and cultural, and economic dimensions (Engdahl, 2015; Siraj-Blatchford & Pramling-Samuelsson, 2016). The social and cultural dimension remains a less frequently researched issue and is in practice less dominant than the environmental dimension (Pribišev Beleslin & Travar, 2022). According to Weldemariam et al. (2022), 'Social sustainability concerns well-being, fairness, social justice, cultural capability, adaptability and social accountability' (p. 11) in the context of developing awareness of the integrity of the environment (UNESCO, 2016).

The research presented in this chapter highlights the different levels and perspectives on friendship that underpin social sustainability. On the one hand, perspective is personal, that contributes to a child's emotional and social well-being, and which arise from the need to belong, those that affect the child's development. On the other, acting bidirectionally and interacting externally—from child to group, and from group and wider context towards the child, another perspective places the child in the position of an active partner in social processes who has the power to act and change.

Authentic participation and the need for belonging overlap in friendships. According to Engdahl and Furu (2022), children are participants and drivers in education for sustainability. As personal 'emotional attachment to other individuals and communities' (Juutinen et al., 2018, p. 250), the sense of belonging among children is expressed in the sense of community and sharing, in dialogue and exchange, and play and physical closeness. Therefore, interactions and relationships between peers are always related to the context in which they occur (Hartup, 1992). The kindergarten represents an arena and a specific microsystem in which children shape their social experiences and culture with peers by and through continuous sustained interactions. In mutual relations with other systems, this environment can influence, provoke, and strengthen children's behavioural patterns, perceptions, and attitudes towards the world. Children live close to the ideas of social sustainability.

A systematic and comprehensive approach to incorporating the paradigm of sustainability into the ECE system is becoming an increasingly hot political and professional issue, locally and globally. Educators are expected to be agents for a more holistic approach to sustainability in the ECE context (Engdahl & Furu, 2022). According to the conclusions of a recent study, 'A caring relationship is vital in promoting social sustainability, particularly in ECEC settings, where young children deserve the best quality of care' (Weldemariam et al., 2022, p. 2). As shown by the studies presented in this chapter—especially the intrinsic case study—the institution in many ways encourages the establishment of interactions and relationships among children and influences their maintenance and deepening. The peculiarities

that children develop during friendship build the basis for their tacit knowledge and understanding of the crucial values of peace, equality, justice, and tolerance, which form the core of social sustainability. Within this context, a play-based curriculum encourages relations.

In the broadest sense, the relationship between children is influenced by the philosophy of the curriculum and the pedagogical paradigm on which it is based, the type and nature of the activities in which children engage and the initiative and involvement of educators (Kutnick et al., 2007; Ladd & Sechler, 2012). Nurturing play relationships among children that are inspired by the theme of friendship can—by providing conditions, time, and resources for child-initiated play—create a suitable framework for the action of the 'implicit pedagogy of friendship' (Kutnick et al., 2007, p. 383). On the other hand, social sustainability can occur through the planned and initiated activities of educators, as shown by a case study providing insight into the operation of a specially prepared programme for scaffolding child and group into awareness of self, others, and the surrounding world. Encouraging and nurturing children's friendships through participation, play-based curricula, and relational pedagogy create a meaningful social and learning environment in which children, together with their friends, can develop a sense of competence, power, and belonging to the community and global society, adopting and understanding societal values like peace, equality, justice, and tolerance.

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Tamara Pribišev Beleslin is a full professor in the Study Programme for Early Childhood Education in the Faculty of Philosophy at the University of Banja Luka, Boznia and Herzegovina where she is also the Department Chair of Pedagogy and Methodics. Her research and expert interests are pedagogy in early childhood, curriculum issues, ICT and mathematics in early childhood education, and teachers' professional development. She has been a member of many expert groups working with governmental institutions in the Republic of Srpska and Bosnia and Herzegovina concerning legislative acts of pre-school education, national curriculum, pedagogical documentation, and policy in early childhood education.

Sanja M. Partalo is an associate professor of Preschool Pedagogy in the Faculty of Philosophy at the University of Banja Luka, Boznia and Herzegovina. In her scientific, teaching, and professional work, she represents a humanistic orientation in working with children, emphasising the importance of developing friendly and partner relations in upbringing and education. Her research interests include children's play and creativity, the social-emotional development and education of pre-school children, motivation of pre-school children, education of children of nursery age, the development of speech and communication, and modern concepts of pre-school education.

Chapter 8
"Ears to Listen So I Can Hear": A Holistic Self-Report Tool of Children's Listening at Preschool

Lysa Dealtry and Laura McFarland

Abstract Although research conducted with young children increasingly incorporates methodologies where children have input, self-reports are rarely used with children under six years. This is problematic given that children's rights to express their expertise and opinions are enshrined in the Convention on the Rights of the Child. This chapter draws on a study that developed and implemented a holistic self-report tool that aimed to enable children's active participation in research focused on their experiences of hearing and listening at preschool. The self-report tool was completed by 69 children aged 3–5 years. Data from two children are presented as vignettes. Analysis of these vignettes indicates that children can effectively report on their experiences of hearing and listening using the self-report tool. The multiple opportunities for communicating experiences about hearing and listening are proposed as the key features that made this an effective tool. The potential for the self-report tool to inform research and direct work with children in various fields, in Australia and internationally, is discussed.

Keywords Children's voices · Children's participatory rights · Children's self-report tool · Hearing · Listening

L. Dealtry (✉)
Charles Sturt University, Albury, NSW, Australia
e-mail: ldealtry@csu.edu.au

L. McFarland
Melbourne Graduate School of Education, The University of Melbourne, Melbourne, VIC, Australia
e-mail: laura.mcfarland@unimelb.edu.au

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Introduction

This chapter draws on a study that developed and implemented a holistic self-report tool to enable children's active participation in research focused on their experiences of hearing and listening at preschool. Participatory, rights-based research (Dockett & Perry, 2015) underpinned the design of the self-report tool.

Participatory Rights-Based Research with Children

The fundamental rights of all humans are ratified in the Universal Declaration of Human Rights (UDHR) (United Nations [UN], 1948). Further and more specific interpretations of children's rights are acknowledged in the Convention on the Rights of the Child (United Nations, 1989). Participatory, rights-based research with children expands on this call for children's rights and seeks to recognise children as reliable and competent sources of knowledge about their own lives (Huser, 2019). In particular, participatory, rights-based research seeks to realise Article 12, which states that children have rights to contribute to matters that affect them, and is relevant to Article 13, which upholds children's right to communicate freely (United Nations, 1989).

To support children's rights and their active participation in research, researchers must consider how to balance child-adult power relations and ensure that children's participation is self-determined (Huser et al., 2022). Typically, adult researchers hold power over child participants, which has the potential to impede children's agency. To overcome this, participatory, rights-based approaches, which aim to treat children ethically, support a more balanced power relationship (Lundy et al., 2011). In doing so, research methods used with children need to be evaluated for their appropriateness in supporting children to communicate their assent and dissent as well as their perceptions and opinions (Huser, 2019).

It is not enough to simply recognise that children have rights. Researchers must also incorporate methodologies that enable children to express their perspectives and share their experiences on what is being researched (Huser, 2019). It is particularly important for early childhood research to focus on children's perspectives of their experiences, as children are active participants in constructing their world and are constructed by the multiple contexts in their world (Kincheloe, 2004). Researchers are becoming increasingly aware of children's influence on their social worlds and are implementing methodologies that acknowledge children's diverse experiences and views (Palaiologou, 2014). However, there is debate about what constitutes ethical participatory, rights-based methods for children in research (Huser, 2019). Some researchers adapt methods commonly used with adults, whereas others prefer to develop specific "child-friendly" methods (Groundwater-Smith et al., 2015). The rationale for "child-friendly" methods is that children and adults have different areas of expertise and competencies. For example, children

may be familiar with expressing themselves through drawing, painting, and play; therefore some researchers incorporate these methodologies into their research with young children. However, "child-friendly" methods have been criticised for denying children's competence and failing to give children the respect they deserve (Palaiologou, 2014).

Children's Self-Reports

Although research conducted with young children increasingly incorporates methodologies where children can have input (Kaplun, 2019), self-reports, such as surveys and questionnaires, are uncommon in research with young children (Massey, 2021). Studies with older children indicate that self-reports can be used effectively and reliably on various topics relating to children's lives, including children's hearing and listening experiences (Mealings et al., 2020; Nelson et al., 2020).

Some studies have effectively incorporated self-reports from children under five years (Palaiologou, 2014; Waller, 2006). Palaiologou (2014) suggests that researchers move beyond the traditional narrative methods with young children and incorporate a wider variety of methods, more commonly used with adults. Quantitative methods for collecting young children's perspectives are rare in educational research; however, the limited research on using quantitative self-reports for children under five years suggests that this methodology can be reliable and valid (Durbin, 2010). Sturgess et al. (2002) found that children from the age of four years can report self-information that is unique and stable over time.

Given the evidence that self-reporting measures can provide appropriate opportunities for young children to share their knowledge and experiences, self-report research should be explored further in the context of young children's rights to express their views and feelings. Further, adult reports do not always accurately reflect children's experiences (Hou et al., 2019; Kernan et al., 2000; McFarland & Dealtry, 2017). Researchers need to seek children's perspectives when at all possible to "directly capture and address the unique experiences of children" (Greco et al., 2016, p. 240).

Elements of Quality Children's Self-Report Measures

To elicit children's perspectives on any topic, self-report measures must be designed well, must be engaging for the child, and must reduce the chances of socially desirable responses (Sturgess et al., 2002). Researchers working with young children must consider that children express themselves through, and should be listened to across, multiple means (Wall et al., 2019). Visual research methods, such as drawing,

photographs, and emoji, are common in child-centred self-report research with young children, as innovative ways to capture children's perspectives (Fane et al., 2018; Massey, 2021).

Emoji have attracted attention as a research methodology to gain children's perspectives (Massey, 2021). An emoji is an ideogram representing facial expressions, feelings, gestures, objects, animals, food and drink, and various activities (Novak et al., 2015). Fane et al. (2018) used emoji as a self-report methodology to elicit 3–5-year-old children's understandings of well-being. These authors conclude that "emoji as a visual research method did work to shift hierarchical power balances between the researcher and children and leave space for children to determine what was important for the researcher to know and enact control over their participation in the research process" (p. 372).

Visually based rating scales have been trialled with young children. For example, Royeen (1985) found that three-point Likert scale ratings for children aged 6–12 years elicited reliable reports. Although a three-point scale may be less statistically powerful, it can still demonstrate change (Sturgess et al., 2002). Sturgess et al. (2002) state that "the distinguishing feature of self-report… with children, is that the answer is accepted for what it is. It is not judged and, if it is explored further, this is only to get more detail of relevance and not to get 'the truth'" (p. 113). Furthermore, using concrete stimuli, such as photographs, is useful in helping children to understand what is being asked of them (Mahakwe et al., 2021).

Other researchers examining young children's perspectives advocate using drawings and narrations to allow children to represent their views on matters that affect them (Harrison, 2015; Martin, 2019). Harrison (2015) highlights that providing opportunities for children to interact with others about their drawings, which can include narrating, and explaining the drawings and the meanings behind them, is an important methodological consideration. What children say about their drawings can be a critical part of interpreting children's drawings; thus, self-report measures for young children that incorporate drawings should also include opportunities for children's narrations.

Method

Participants

The participants were 69 children who attended a non-profit, community-based preschool in a regional town in New South Wales, Australia. Up to 160 children aged 3–6 years attended the setting between one and three days per week. The participants were aged 3–5 years (39 male, 30 female). Nine early childhood educators (all female) participated in the study. One educator held a certificate III, four held diplomas, and four held a bachelor's degree.

Procedure

The preschool director introduced the research to the educators at a staff meeting. Information sheets and consent forms were distributed to teachers and families. To build meaningful research conversations with the children during recruitment, group time sessions involving the children, for whom there was parental consent, were attended by both researchers. These sessions aimed to provide an opportunity for the children to actively construct their understanding of what the research was about. The study was approved by the university ethics review committee.

Implementation of the Children's Self-Report Tool The children's self-report tool was in a hard copy booklet format. The final page contained a script for the educators to follow when introducing the booklet to the children and obtaining their assent. While the process of completing the booklet once initiated was scripted, the decision about when to invite children to complete the booklet was made by the educators. The educators were asked to read the cover information to the children, which included images of children and briefly described the booklet's purpose. They assured the children that they would be assisted by their teachers to "tell [the researchers] or draw some pictures about listening in your classroom".

Following the introduction of the booklet, the children's initial assent was sought by asking them to write their name and/or draw a picture if they wanted to participate (see Fig. 8.1). The educator script prompted the educators not to pressure a child to participate if the timing the educator chose did not suit the child. Given the educators invited the children during the regular class day to complete their booklet, the researchers were conscious that some children might prefer not to participate at the time chosen by the educator. To obtain ongoing assent, the children were asked to circle an emoji face that represented how they felt about being asked some questions and shown some pictures: a happy face or a sad face (see Fig. 8.2). After completing the questions (rating scale section), the children were asked again if they wanted to draw a picture (see Fig. 8.5). The educators were prompted to explain that it was okay for the child to decide they did not want to continue. If a child opted not to complete the booklet, they were asked if they would like to be asked again later.

In accordance with recommendations for researching young children's perspectives, the self-report tool used a combination of affective, verbal, and visual or arts-based expression (Fane et al., 2018). First, a series of eight questions asked the children about their listening experiences in the classroom. The questions were framed around how easy or hard the child found it to hear in different classroom situations. Examples of questions included, "When one of your friends is telling their news" and "When you are sitting at the back of the mat". Each question was accompanied by a photograph of the situation, thus contextualising the questions. The educators read out the questions to the children and sat with them while completing the booklet. If a child was unsure of what was being asked, the educator script allowed for repetition of the question and/or referring the child to the accompanying photograph.

Initial assent **Date:**

Your parents were asked if it is okay for us to talk to you about listening in your classroom. They have signed a letter to say that it is okay. If you are okay with it too, you can write your name here...

Or, you can draw a picture of yourself here...

Fig. 8.1 Children's initial assent

Ongoing assent **Date:**

We are interested in learning about what you think and how you feel about listening at preschool. To learn from you about listening at preschool, I would like you to look at some pictures and draw a picture about what you think about listening at preschool. We can do this in this booklet and when you are finished, we will give it to the researchers that you met to look at.

You can circle the face that tells me how you feel about doing this today.

If you circled NO (thumbs down), could we ask you again later?

If you do not feel like talking or drawing after a while, you can stop at any time. It is okay.

Fig. 8.2 Children's ongoing assent

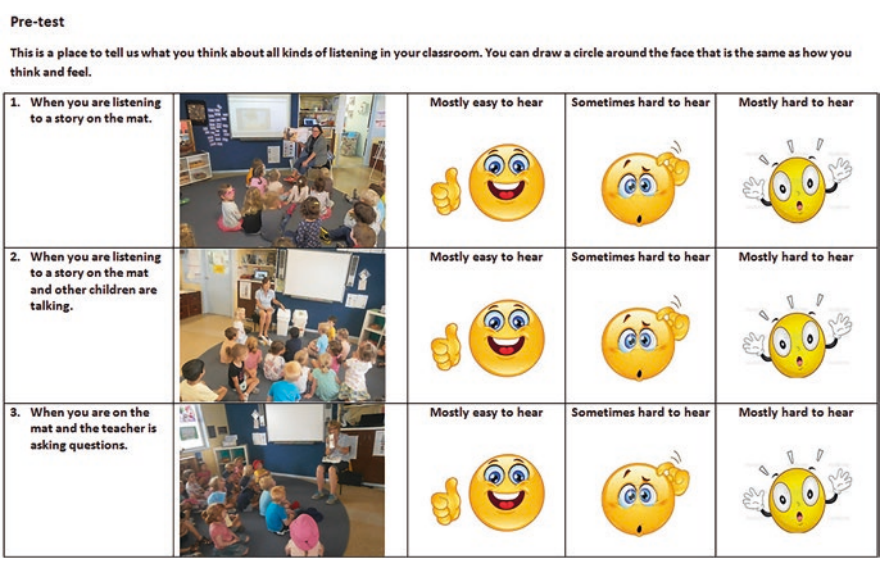

Fig. 8.3 Children’s self-report booklet

A visually based, three-point emoji Likert scale was used. Children were asked to circle a response of “Mostly easy to hear”, “Sometimes hard to hear”, and “Mostly hard to hear”. Each response was accompanied by an illustrated emoji: a smiling face with a “thumbs up” (mostly easy), a confused face (sometimes hard), and a frustrated face (mostly hard). A sample page from this tool is shown in Fig. 8.3.

The self-report tool included an opportunity for the children to draw a picture and tell the educator about listening at preschool. The educator script prompted the educators to ask the children about their drawing and caption the drawings according to what the child said. This allowed the children to communicate the meaning of their drawing and tell what they thought was important to know about their experiences. As a process of ongoing assent, the children were asked if they consented to let the researcher keep their drawing or if they wanted it back.

The educators reported that all but two of the children seemed able to understand the questions and what was expected of them to complete the self-report tool. Only one child did not assent to participation. Thirteen of the children did not consent to the researcher keeping their drawing about their experiences of listening.

Results and Discussion

To demonstrate the potential of this self-report tool to elicit children’s perspectives, data from two children which reflect the holistic picture that the tool can offer are presented and discussed.

Vignette 1: Jacob

Jacob is a 4-year-old child who indicated that he had some trouble hearing during particular activities at preschool. Figure 8.4 shows that Jacob can use the three-point emoji rating scale to indicate that he finds it "mostly hard to hear" while listening to the smartboard on the mat and when another child is telling their news. Jacob reported finding it "sometimes hard to hear" when on the mat when the teacher was explaining what was needed to do next.

Jacob's drawing and narration support his report of experiencing hearing difficulties in the rating scale. That is, Jacob's drawing and his description of the drawing that explains about experiencing difficulty hearing "on the mat at preschool" because "my ears are blocked" (see Fig. 8.5) indicate Jacob responded in the rating scale with his intended meaning. The perspectives Jacob expressed about hearing and listening via drawing and narration, together with the rating scale, bear relevance to each other and the self-report tool's intended purposes. This suggests Jacob understood the questions in the rating scale and the emoji-based rating system. As such, the combined elements of the self-report tool enabled Jacob to convey a fuller picture of hearing and listening experiences than one element alone would afford. Namely, Jacob provided important contextual knowledge about hearing through the statements: "I can't hear because my ears are blocked. I've got medicine".

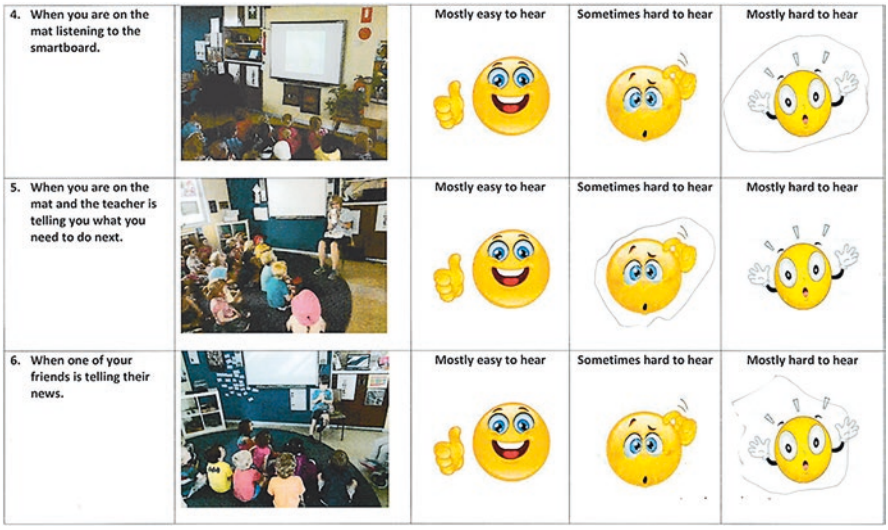

Fig. 8.4 Jacob's self-report booklet

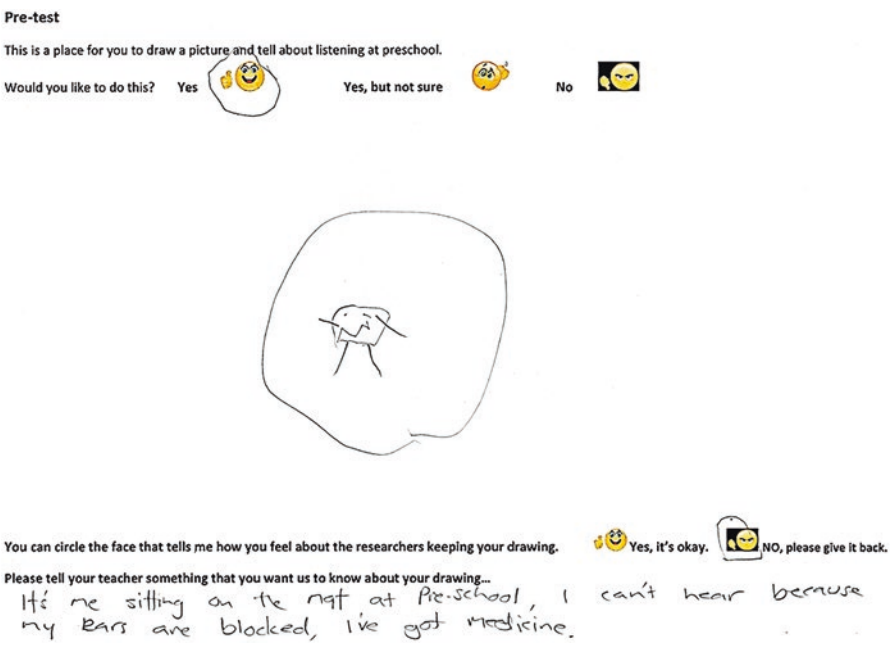

Fig. 8.5 Jacob's drawing and narration

Vignette 2: Maya

The drawing and narration provided by Maya, age four years, illustrate her understanding of the role of the ears in listening. In Fig. 8.6, Maya explained she had drawn "ears to listen" and her own "lips to zip so that I can listen". Through references to her own bodily experience of hearing and listening, Maya's drawings indicate that the drawing component of the self-report tool was a meaningful way to express her experiences of hearing and listening. Maya's comments highlighted hearing and listening as an active and embodied process that was within her control. As such, the drawing component of the self-report booklet facilitated a more holistic understanding of Maya's hearing and listening than the rating scale alone. It is possible that Maya's narration reflected explicit teaching about what children should attend to when listening. However, the use of personal pronouns in Maya's explanation of her drawing such as "…so I can listen" might also be seen as Maya expressing her own sense of self as a competent listener.

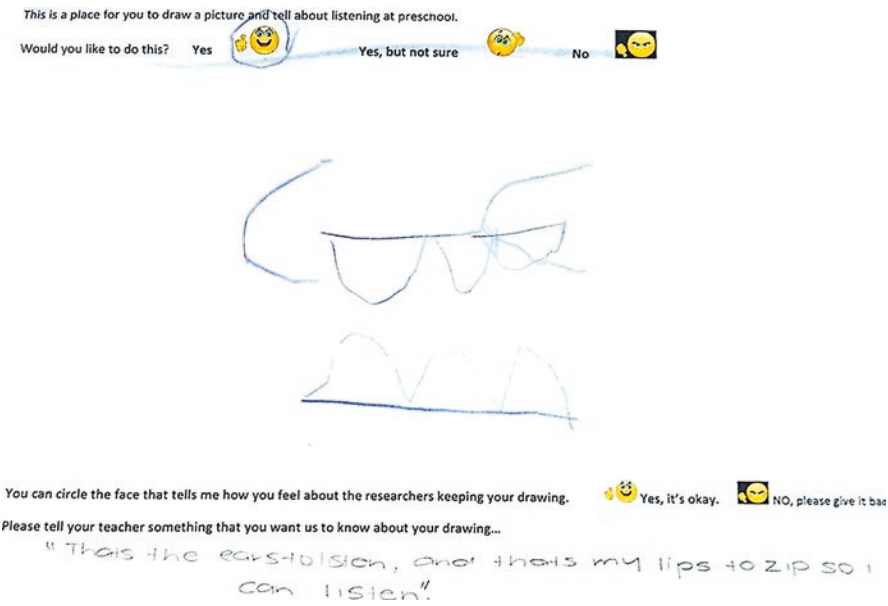

Fig. 8.6 Maya's drawings and narrations

Enacting Articles 12 and 13 of the Convention of the Rights of the Child

The children's vignettes presented in this chapter indicate that children as young as four can understand and complete the tool, albeit with appropriate guidance from educators. This self-report tool promoted children's active engagement and self-expression through tasks that were of interest and familiar to them. Vignette 1 presented Jacob's ability to report on his hearing difficulty by responding to questions about his listening experiences via the visual rating scales that used emoji, suggesting his familiarity with emoji and their function as a mode of expression. Like Fane et al. (2018), the study reported on here found that emoji offer promise as an engaging and appropriate way for children to self-report their experiences.

Both children appeared to respond meaningfully to the drawing and narration task. The opportunity for children to ascribe their own meaning to their drawings was a notably powerful feature of the self-report tool, which supports other research (Kaplun, 2019). For example, Jacob's explanation of his blocked ears and Maya's awareness of the role of the ears and mouth in hearing and listening provided deeper insights into children's experiences of hearing and listening, beyond the drawing alone and the rating scales.

Notably, Jacob's narration provided important and immediate information to educators who can then assist Jacob to navigate what is likely to be a temporary, but significant hearing loss. Importantly, the option to draw and then tell gave Jacob the

opportunity to choose what information would be imparted. This element of choice of vehicle for expression is fundamental to Article 13 (United Nations, 1989) and responsive to the diverse communication strategies of children (McLeod, 2018; Wall et al., 2019). Additionally, both children used their narrations to position themselves as agentic in relation to their hearing and listening. Jacob, who was experiencing hearing difficulties, explained taking medicine to resolve the difficulties. Maya positioned herself as an active and competent listener.

There was also evidence that the rating scale section and its use of photos taken of children during real-life listening experiences helped the children understand what was being asked of them in the rating scale (Sturgess et al., 2002) but also supported meaning-making in the drawing and narration section of the tool. For example, there was some indication that the images accompanying the rating scale questions fed into or influenced the drawing and narrating process for Jacob, further attesting to the holistic nature of meaning-making and meaning-sharing that the tool facilitated.

Enacting Sustainable Development Goal (SDG) 4: Quality Education

Access to "inclusive and health-promoting learning environments" is a key pillar of implementing the SDG 4—Education 2030 Agenda (United Nations Educational and Scientific Cultural Organisation [UNESCO], 2017, p. 8). A self-report tool like this could result in the detection of, and intervention for, early childhood onset hearing difficulties such as otitis media (OM). As one of the most common conditions affecting young children, OM can cause fluctuating or ongoing conductive hearing loss at levels that can impede children's healthy development (Bell et al., 2021). An effective tool that enables young children to self-report their listening experiences regularly might be used to signal the need for medical attention or audiometric assessment, offering both diagnostic and clinical history information to inform a more holistic understanding of the onset and impact of hearing difficulties caused by OM (Gan et al., 2018). Detecting OM that occurs in the years before starting school plays an important role in intervention pathways to reduce the detrimental effects on academic achievement that intermittent hearing loss might lead to (Bell et al., 2021). Detection methods that facilitate the participation of both educators and children in the detection process can be critical to early detection (Dillon et al., 2018).

Children's use of the self-report tool indicates its value for research and education contexts where it is essential to gain children's first-hand perspectives. For example, Mahakwe et al. (2021) indicate there is a need to develop such tools to allow children to report on their wellness and mental health. However, it needs to be recognised that using visual tools may elicit sensitive data (Martin, 2019), so consideration of ethical and relational dimensions of the research takes on additional weight in such contexts.

Enabling children to meaningfully self-report their hearing and listening experiences can inform a better understanding of children's listening experiences across different classroom locations and situations. This speaks to using the self-report tool as a pedagogical instrument as well as for supporting children to self-advocate their hearing and listening needs. Children's self-report data can direct educators to act where required to improve all children's listening experiences, therefore fostering inclusive and equitable education (UNESCO, 2017). Educators adjusting the learning environment or their teaching practices, based on children's responses to real-life listening situations depicted in the pictorial component of the rating scales, can immediately benefit children and provide them with the conditions to access and participate in education. Due to its contextualised nature, the self-report tool could also be used to identify situations in which children experience barriers to listening that occur in educational environments, such as background noise and poor room acoustics. Noise and poor acoustics are common in early childhood classrooms (National Deaf Children's Society, 2015) and compound challenges for children with hearing difficulties. More broadly, poor classroom acoustics have been shown to harm children's sense of well-being (Astolfi et al., 2019). The holistic nature of the tool lends itself to a broader understanding of listening as encompassing cognitive and affective dimensions for all children, including those with hearing or auditory processing impairments (Bodie, 2013). From a pedagogical perspective, this potential for gaining a holistic understanding of children's hearing and listening aligns with established early childhood practice (Australian Government Department of Education [AGDE], 2022), making it a purposeful pedagogical documentation tool that educators might readily adopt to promote access to learning for all children. While recognising that customising the self-report tool with context-specific images places demands on educators' time, this is a feature of the tool that may present pedagogical advantages not afforded to children and educators by existing hearing and listening screening tools.

Methodological and Ethical Considerations

More accurate educator understanding of children's hearing impairments is an area that requires consideration (McFarland & Dealtry, 2017; Slovik et al., 2020). This accuracy might be aided by children playing an integral role in the design of self-report tools (Lundy et al., 2011). The study reported on in this chapter did not involve children in developing the tool. Future research could facilitate children's input during the design of a self-report tool to recognise their adeptness with multiliteracies and affirm their right to actively participate in decision-making processes that affect them (United Nations, 2005).

This chapter proposes that young children can self-report on their experiences. However, children were invited to complete the tool by an educator and required educator support to complete the self-report tool. The asymmetrical power relations inherent to teacher-child interactions (Palaiologou, 2014) can influence children's

assent and their responses while completing the self-report tool. Partly, educator influence was addressed by providing instructions for educators premised on participatory, rights-based research. However, individual educator approaches to administering the booklet might affect the overall sense of ownership and agency they conveyed to children as the interactions unfolded. Thus, an issue to navigate with a self-report tool for young children is the need for adult mediation. Arguably, the educators' relationships with children might be desirable and support their capacity to listen and respond ethically to children's communications (Palaiologou, 2014). However, when considering research with children through the lens of ethical praxis (Palaiologou, 2014), the authors propose that future research to be carried out using the self-report tool should more fully consider and make visible the potential complexities of educator-led research with young children.

Conclusion

This chapter explains the development of a self-report tool that allowed multiple outlets for children's self-expression and active participation in research. The data speak to the effectiveness of the combined elements of the self-report tool for eliciting children's knowledge about their hearing and listening and as a vehicle for communicating that knowledge (United Nations, 1989). The children's self-report tool can affirm young children as competent knowledge holders, and when given appropriate opportunities, they are willing and active participants in research. Self-reporting can therefore provide young children with the opportunity to engage meaningfully with research that affects them and communicate their own experiences in ways that are self-chosen. Moreover, the chapter contributes to current debates about how researchers can design tools that respect children's agency and expertise and enable them to communicate their experiences and views. While this chapter has primarily explored the use of the tool for young children to report on their hearing and listening experiences in a research context, it is suggested that the tool could be adapted for eliciting children's perspectives in a range of contexts, such as health and well-being to ensure equitable education.

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Lysa Dealtry is a Lecturer with the School of Education on the Albury-Wodonga campus of Charles Sturt University. Dr Dealtry's research is primarily concerned with facilitating inclusion and social justice. Her work has explored research methods that facilitate young children's participation in research and how eliciting children's voices on their experiences can inform inclusive pedagogies.

Laura McFarland is a Senior Research Fellow at the University of Melbourne, Faculty of Education, Research in Effective Education in Early Childhood (REEaCh) Centre. Dr McFarland's research focuses on supporting the well-being of children, families, and educators in the early childhood education context. Her research is driven and informed by current issues in the early childhood education field and demonstrates ongoing, collaborative relationships with early childhood education services and advocacy bodies.

Chapter 9
Jamaican Children's Drawings of Talking in Jamaican Creole and English

Karla N. Washington, Rachel Wright Karem, Corrine Macaluso, Cecilia Schwartz, and Sharynne McLeod

Abstract More than half the world's population is multilingual, with most children speaking two or more languages. This linguistic diversity necessitates culturally responsive practices and creative solutions that uphold children's right to communicate and enact Articles 12 and 13 of the Convention on the Rights of the Child (CRC). This research explored children's views and ratings about their talking in both of their languages to describe their cultural and linguistic experiences. Cross-sectional insights from 23 multilingual children in Jamaica were gained via children drawing themselves talking when conversing with an adult in Jamaican Creole and English. No key differences were observed between the children's drawings in each of these elicitation contexts. However, sometimes children drew more people when their drawings were elicited in Jamaican Creole, possibly indicating the collectivist culture in Jamaica and the perceived individualistic culture in formal English-speaking contexts. Children's drawings provide ecologically valid resources for expressing their voices in ways that can increase profession-

K. N. Washington (✉)
Department of Speech-Language Pathology, University of Toronto, Toronto, ON, Canada

Department of Communication Sciences and Disorders, University of Cincinnati, Cincinnati, OH, USA
e-mail: karla.washington@utoronto.ca

R. W. Karem
Indiana University, Bloomington, IN, USA
e-mail: rwkarem@iu.edu

C. Macaluso
Butler Educational Service Centre, Hamilton, OH, USA
e-mail: corrine.macaluso@bcesc.org

C. Schwartz
Springfield City School District, Springfield, OH, USA

S. McLeod
Charles Sturt University, Bathurst, NSW, Australia
e-mail: smcleod@csu.edu.au

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als' understanding of communicative experiences. However, it is important to consider children's drawings and their descriptions cautiously and not over-interpret their meaning. Drawings engage children as experts in their lives and allow them to communicate about matters concerning them.

Keywords Multilingual · Jamaican Creole · Drawings · Education · Speech-language pathology · Children

Multilingual speakers comprise more than half the world's population (Eberhard et al., 2023), and professionals such as educators and speech-language pathologists (SLPs) routinely encounter multilingual children in their classrooms and clinics. With communication being a fundamental human right (McLeod, 2018), there is an increased need for professionals to provide culturally responsive practices that reflect a commitment to the Convention on the Rights of the Child (CRC) (United Nations, 1989) and Sustainable Development Goals (SDGs) (United Nations, 2015). When children's views are listened to and taken seriously by educators and SLPs, they support efforts to reduce inequality (SDG 10) and enhance quality education (SDG 4) and good health and well-being (SDG 3).

Children's Voices

Internationally, consideration of young children's voice is recognised in Articles 12 and 13 of the CRC (Lundy, 2007; United Nations, 1989), among other global conventions and declarations (McLeod, 2018). Articles 12 and 13 of the CRC describe how and when children have the right to "seek, receive, and impart information and ideas of all kinds" and express their views in all matters that affect them. To enact the CRC, children need to be provided with *space* (i.e. opportunity), a *voice* (i.e. are heard) and an *audience* (i.e. are listened to) and be afforded *influence* (i.e. what they say is acted upon) (Lundy, 2007). Thus, Articles 12 and 13 acknowledge children as experts in matters that concern them, supporting the movement away from activities *on/about* to activities *with* children, emphasising child-centred practices (Angell et al., 2015).

While it is important that children's voices are included in decision-making processes, available tools and strategies for collecting and evaluating multilingual children's voices are lacking (McCormack et al., 2022). This paucity has resulted in applying more traditional practices involving parents and teachers as experts on children's lives, with children's views being supplementary to adults' commentary (Kaplun, 2019; Roulstone & McLeod, 2011). With the global endorsement of Articles 12 and 13 of the CRC, our challenge lies in reconciling the need for expert

knowledge with approaches that ensure children's perspectives are considered by using child-friendly and age-appropriate techniques (Lundy, 2007; McLeod et al., 2006).

Listening to Children's Voices Using Arts-Based Approaches

Various creative methods have been used to listen to young children (e.g., Kaplun, 2019; McCormack et al., 2019; McCormack et al., 2022; Roulstone & McLeod, 2011). The CRC states that children should have the "right to seek, receive, and impart information and ideas of all kinds…in the form of art" (Article 13, United Nations, 1989). Arts-based approaches to include children's voices (e.g. drawings) have been applied in descriptive research, reflecting active listening (McLeod et al., 2006). These approaches empower children to express their perspectives, emotions or attitudes in ways that might otherwise be difficult to achieve verbally (McCormack et al., 2022). Drawings are also a familiar and fun part of children's lives, granting them control over situations used to inform their views (McLeod et al., 2006), making drawings an ecologically valid approach for gathering child-led information (Angell et al., 2015; Harrison, 2014).

In multilingual contexts, drawings have been used to consider perspectives about learning a new language in a new country (McLeod et al., 2015) and interpreting social contexts and life experiences (Alvarez, 2018). While researchers acknowledge that drawings offer an important means for accommodating children's capacities and interests and for allowing creativity in sharing matters of importance to them, they have also cautioned against over-interpreting their meaning. In other words, it is important to attend to children's drawings; however, arts-based data need to be sensitively interpreted along with other data (Carter & Ford, 2013) and should include children in the interpretation (Angell et al., 2015).

Sound Effects Study Drawing Protocol

The Sound Effects Study Drawing Protocol was developed and implemented in a research study with 124 4-to-5-year-old Australian children with speech sound disorders (SSD) to support children in expressing views about their talking (McCormack et al., 2022). Researchers applied a trifold approach to gathering and analysing data that reflected a holistic perspective, evidence-based decision-making and child-centred practices in keeping with the SDGs and Articles 12 and 13 of the CRC. The protocol included (a) drawing/observing, (b) listening/talking and (c) responding/discovering, including questions about feelings about talking using the Speech

Participation and Activity Assessment-Children (SPAA-C; McLeod, 2004). Their findings revealed the Sound Effects Study Drawing Protocol demonstrated clinical and educational utility for children with SSD to express views about their talking in a child-friendly manner. While success in the application and interpretation of drawings has been achieved in understanding children's experiences in educational and health-related speech-pathology research, none have considered understudied linguistic contexts important in diversifying the applicability of this approach.

Jamaican Languages

The Jamaican language situation is diglossic; meaning there are two languages in existence in this linguistic community: Jamaican Creole (JC) and Jamaican English (JE) (Brown-Blake, 2008; Cassidy, 1966). JC (also known as Patwa or Patois) (Harry, 2006) has heritage influences from English, West African and French languages (Brown-Blake, 2008; Cassidy, 1966). JC is typically used informally (Irvine, 2008) and is described as the *basilect* or low-status language. JE is the official language of Jamaica and is also called the "Queen's English", the *acrolect* or high-status language. JE is used formally, in oral and written forms, and is the language of instruction in schools (Brown-Blake, 2008; Irvine, 2008). Jamaicans typically hear and learn to speak JC and JE from birth (Meade, 2001) and are competent at code-switching (Wright Karem et al., 2022).

Listening to Jamaican Children

The current study provided an opportunity to consider typically developing Jamaican children's understanding of talking in JC and JE to offer a balanced approach to considering children's responses about their cultural and linguistic experiences using their voices. The Sound Effects Study Drawing Protocol (McCormack et al., 2022) was applied to describe these multilingual JC- and JE-speaking children's experiences of talking using their drawings. The pairing of JC with JE also provided a unique perspective regarding using drawings within the educational and speech-language literature where, typically, Western English-speaking contexts are explored. Growth in this linguistic populous worldwide increases the possibility of educators and SLPs meeting children from diglossic backgrounds, necessitating evidence to inform culturally responsive practices. This chapter addresses listening to children's voices using the following aims:

1. To compare how Jamaican children portray their talking experiences in JC and JE by examining themes and focal points in their drawings.
2. To describe Jamaican children's perceptions and feelings about their talking in JC and JE.

Method

Ethical Approval

The University of Cincinnati Institutional Review Board and Medical Ethics Board, Faculty of Medicine, University of the West Indies, Jamaica, provided ethical approval. Support and permission were obtained from the Early Childhood Commission, Government of Jamaica and three early learning centres. The Council for Professions Supplementary to Medicine approved licensure for speech therapy in Jamaica. Before gathering data, parents provided written consent and children gave verbal assent. Specifically, parents received a detailed consent form, which was discussed with a research team member to make clear the voluntary nature of participation, that they had the right to withdraw without consequence, that their child would have the opportunity to express their assent or dissent to participate and that their data would remain confidential and private. During the research there was an intentional balancing of child-adult power relations using activities such as drawings that empowered children and offered them control over the information being gathered by an adult to better understand children's communication experiences.

Children

Participants were 23 children from pre-schools in Kingston, Jamaica, who were simultaneous speakers of JC and JE and provided drawings and completed ratings about their talking experiences. The children were aged 4;1–6;1 (M_{age} = 5;3, SD = 0;7), with 12 females (52%) and 11 males (49%). Children demonstrated typical development as evidenced by typical speech, hearing, cognition, oromusculature, no neurological or pervasive developmental disorders and enrolment in typical classrooms recommended by the Early Childhood Commission in Jamaica. See Table 9.1 for participant demographics.

Procedure

Jamaican children completed a series of speech-language and related tasks as part of the Jamaican Creole Language Project in JC and JE lasting approximately 2 h (see Washington et al., 2017). Breaks based on child cues were provided. Children's speech and language data related to the current aims are described in Table 9.1. Activities were completed in a classroom setting at the children's pre-school with a licensed and language-specific SLP or SLP student supervised by the SLP using the same procedure.

Table 9.1 Participant demographics

Description	Study sample (n = 23)
Age *M (SD)*	5;3 (0;7)
Sex	
Female *n* (%)	12 (52%)
Male *n* (%)	11 (49%)
Cognition[a] *M (SD)*	96.3 (14.0)
Oral motor screening[b] *M (SD)*	53.4 (3.6)
PCC[c] *M (SD)*	
JC	98.1 (2.5)
JE	98.7 (2.3)
Mean ICS[d] *M (SD)*	
JC[d]	4.7 (0.5)
JE[e]	4.6 (0.5)
Household income *n* (%)	
Dual	17 (73.9%)
Single	4 (17.4%)
Unemployed	0 (0.0%)
No response	2 (8.7%)
Language input *M (SD)*	
JC	50.0 (18.4)
JE	53.5 (13.2)
Language output *M (SD)*	
JC	45.2 (17.8)
JE	56.8 (12.5)

Note. JC = Jamaican Creole, JE = Jamaican English. [a]Primary Test of Nonverbal Intelligence (Ehrler & McGhee, 2008). [b]Diagnostic Evaluation of Articulation & Phonology (Dodd et al., 2002) raw scores. [c]Percentage of Consonants Correct. [d]Intelligibility in Context Scale-JC = Intelligibility in Context Scale—Jamaican Creole (McLeod et al., 2012b). [e]Intelligibility in Context Scale (McLeod et al., 2012a)

Sessions were counter-balanced by language, meaning half completed tasks in JC first and the other half in JE first. As part of these sessions, the children completed the Sound Effects Study Drawing Protocol (McCormack et al., 2022), producing a drawing of themselves talking to someone. To complete drawings, the children were given an A4-sized piece of paper and felt-tip markers (black, brown, red, yellow, orange, light green, dark green, light blue, dark blue). They were then asked a series of questions about their drawing and their responses were transcribed verbatim. The children also completed the 10 SPAA-C questions (McLeod, 2004) by circling emojis to describe their feelings about talking. These tasks took 5–7 min and were repeated 10 days later. Therefore, each child produced four drawings: two elicited in JC and two in JE. All children gave permission for drawings to be retained by the research team.

JC Procedure The research protocols were translated by the Jamaican Language Unit in collaboration with the first author. For example, to elicit drawings using the Sound Effects Study Drawing Protocol (McCormack et al., 2022), the sentences “I

want you to draw a picture for me. Is it OK if I keep it when you are done?" "Draw a picture of you talking to someone" were translated as *"Mi waahn yu jraa wan pickcha fi mi. Mi kyan kiip i wen yu dun?", "Jraa yuself a taak tu smadi els"*. For the SPAA-C (McLeod, 2004), "How do you feel about the way you talk?" translated as *"Ou yu fiil bout ou yu taak?"* and children were asked to circle a face in response to each of the 10 SPAA-C questions: ☺ "*api*/happy"; 😐 "*ina di migl*/in the middle"; ☹ "*sad*/sad"; ❍ "*wan neda fiilin*/another feeling"; and ? "*nu nuo*/don't know". During the JC elicitation, one of two researchers who had Jamaican heritage interacted with children individually using JC instructions to elicit drawings and SPAA-C responses.

JE Procedure During the JE procedure, researchers who spoke American-English interacted with children individually to elicit drawings and responses about how children felt about their talking. The only differences between the JC and JE procedures were the language used and the examiners' heritage; otherwise, all aspects were similar.

Data Analysis

The drawings were analysed using a meaning-making approach to capture children's expressions, feelings and experiences about their talking (Harrison, 2014). They were analysed qualitatively for three themes and seven focal points, that is, "what our attention focuses on in pictures…including…shape, colour, movement direction, repeated objects" (Furth, 2002, pp. 32, 35), previously used in similar works examining Australian English-speaking children's drawings (Holliday et al., 2009; McCormack et al., 2022). The three themes (T) were: T1 express talking/listening, T2 drew "self" talking to family/friends and T3 portray "self" as happy talking to family/friends. The seven focal points (FP) were: FP1 portrayal of talking/listening, FP2 accentuated body features, FP3 facial expressions, FP4 colour/vitality, FP5 image/sense of self, FP6 conversational partners and FP7 negativity (Table 9.2).

All drawings were coded across the five authors. Firstly, the drawings were reviewed by the first and third authors (KNW, CM) with the last author (SM), who co-developed the Sound Effects Study Drawing Protocol and developed the SPAA-C, providing training and procedures to analyse and code each drawing. The third and fourth authors (CM, CS) along with a trained SLP research student individually viewed each drawing, along with the child's description, answers to questions and feelings about talking (e.g. ☺, 😐). Using this child-led information, team members independently analysed and coded each drawing for the presence of the three themes and seven FPs. While coding, coders were blind to the language of elicitation, as each drawing could be coded for multiple themes and FPs. Responses to SPAA-C items were analysed using the visual Likert scale (e.g. ☺, 😐). Analyses were based on the first eight questions, in line with prior research recommendations (cf. McLeod et al., 2017).

Table 9.2 Number and percentage of themes (T), focal points (FP) coded for each drawing at each timepoint and for each language

Drawings	JC Time 1		JE Time 1		JC Time 2		JE Time 2	
	n	%	*n*	%	*n*	%	*n*	%
T1—Express talking/listening	18	78.3%	19	82.6%	19	82.6%	21	91.3%
T2—Drew "self" talking to family/friends	15	65.2%	20	87.0%	20	87.0%	17	73.9%
T3—Portray "self" as happy talking to family/friends	18	78.3%	18	78.3%	18	78.3%	15	65.2%
FP1—Portrayal of talking/listening	20	87.0%	18	78.3%	19	82.6%	17	73.9%
FP2—Accentuated body features	4	17.4%	3	13.0%	1	4.3%	2	8.7%
FP3—Facial expression	20	87.0%	21	91.3%	21	91.3%	20	87.0%
FP4—Colour/vitality	12	52.2%	11	47.8%	11	47.8%	13	56.5%
FP5—Image/sense of self	20	87.0%	20	87.0%	20	87.0%	19	82.6%
FP6—Conversational partners	22	95.7%	21	91.3%	19	82.6%	21	91.3%
FP7—Negativity	2	8.7%	1	4.3%	0	0.0%	3	13.0%

Note. Themes and focal points are based on based on Holliday et al. (2009) and McCormack et al. (2022). JC = Jamaican Creole, JE = Jamaican English. FP1—Words, speech bubbles, open mouths. FP2—Large mouths, ears, eyes. FP3—Emotion, sad/happy mouth. FP4—Many colours, detail, vibrancy. FP5—Proportion of objects/people, distance between partners. FP6—Human/non-human partners, close together, purposefully apart, or positive partner. FP7—Single person, scribbling over faces, negative emotions

Reliability

Inter-rater reliability was completed for 10% of drawings by two independent coders (CM, RWK). A Kappa-statistic was completed to establish inter-rater agreement for the coding of themes and FPs. There was excellent agreement for the identification of themes for JC $K = 0.81–1.0$, $p < .001$ and JE $K = 0.81–1.0$, $p < .001$. Similarly, there was excellent agreement for the identification of FPs for JC $K = 0.81–1.0$, $p < .001$ and JE $K = 0.81–0.96$, $p < .001$.

Results

Ninety-two drawings were elicited across 23 children in JC and JE at two time points. These multilingual Jamaican children were able to draw interpretable pictures, describe their drawings in response to adults' questions and express their views and perceptions about how they interpret and make sense of their world. Children's descriptions generally provided a setting (e.g. "a play area"), interlocutors (e.g. "me and my friend") and a conversation topic (e.g. "talking about flowers"), but at times they were more general in their descriptions (e.g. "we outside"; "talking", "people").

Children's Drawings: Themes

All three themes were coded in most children's drawings in both languages and at both time points (Table 9.2). Children expressed themselves talking (T1), drew themselves talking to family and friends (T2) and portrayed themselves as happy talking to their family and friends (T3). For drawings elicited using JC, the most frequently coded themes at time point 1 were T1 and T3 at 78.3% ($n = 18$) each. For time point 2, it was T2 at 87.0% ($n = 20$) and T1 at 82.6% ($n = 20$). For children's drawings elicited in JE, the most frequently coded themes at time point 1 were T2 at 87.0% ($n = 20$) and T1 at 82.6% ($n = 19$). For time point 2, T1 ($n = 21$) at 91.3% and T2 ($n = 17$) at 73.9% were coded. Figure 9.1 features the four drawings by participant 266 (male, aged 5;4), demonstrating the three themes and similarities between drawings at each time point and for each language. Figure 9.2 features four drawings by participant 263 (female, aged 5;9), illustrating differences between drawings for each language with more communicative partners drawn in the JC condition.

Children's Drawings: Focal Points (FPs)

All seven FPs were coded in at least some children's drawings in both languages and at both time points (Table 9.2; Fig. 9.3). That is, children's drawings included FP1 portrayal of talking/listening, FP2 accentuated body features, FP3 facial expressions, FP4 colour/vitality, FP5 image/sense of self, FP6 conversational partners and FP7 negativity. For drawings elicited using JC, the most frequently coded FPs at time point 1 were FP6 at 95.7% ($n = 22$), followed by FP1, FP3, FP5 at 87.0% ($n = 20$), with FP1, FP3, FP5 and FP6 also commonly coded at time point 2. Similarly, FP1, FP3, FP5 and FP6 were commonly coded for drawings in JE at time points 1 and 2. FP4 colour/vitality was coded for approximately half the drawings elicited using both languages. In contrast, two FPs were rarely coded in either language: FP2 accentuated body features and FP7 negativity (Table 9.2).

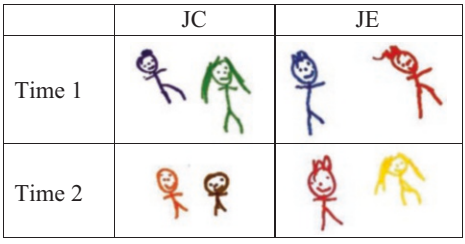


Fig. 9.1 Participant 266 (male, aged 5;4) drawings demonstrating the three themes and similarities between the drawings at each time point and for each language. Themes. T1: express themselves talking. T2: draw themselves talking to family and friends. T3: portray themselves as happy talking to their family and friends

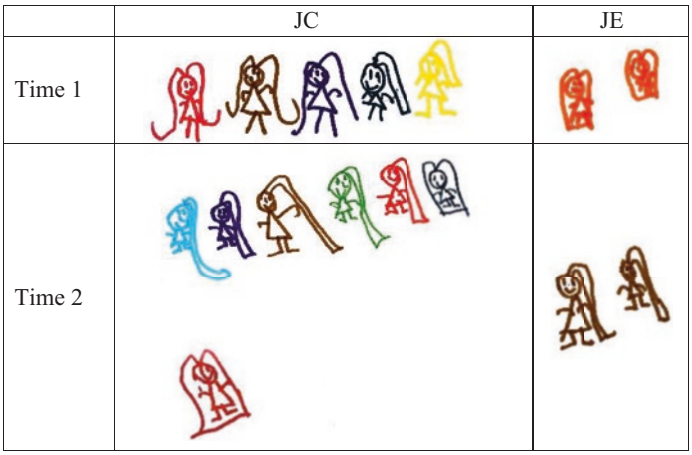


Fig. 9.2 Participant 263 (female, aged 5;9) drawings demonstrating differences between the drawings for each language protocol with more communicative partners drawn in the JC condition. Themes. T1: express themselves talking. T2: draw themselves talking to family and friends. T3: portray themselves as happy talking to their family and friends

Children's Feelings About Their Talking

Children's responses to the first eight questions of the SPAA-C are provided in Table 9.3 (cf. McLeod et al., 2017). Across languages and time points, children typically were happy to talk to friends, siblings, parents, teachers and peers. The question that received the most positive response was how children felt about their talking, with more than 90% indicating they felt happy.

Discussion

This chapter addressed the issue of gathering and analysing evidence necessary to inform the practice of educators and SLPs working with pre-school-aged multilingual children. This need was attended to by listening to the views and experiences of multilingual JC-JE-speaking children in both of their languages through their drawings, descriptions and ratings about their feelings about talking using the Sound Effects Study Drawing Protocol (McCormack et al., 2022) and SPAA-C (McLeod, 2004). The drawings and ratings were examined in a cross-sectional repeated design to identify potential differences, similarities and consistencies in children's experiences with talking. Themes and FPs were identified at each time point and for each language.

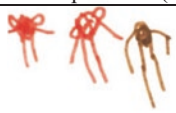
FP1-Portrayal of talking/listening	 Participant 249 (male, aged 6;0)
FP2-Accentuated body features	 Participant 274 (male, aged 4;1)
FP3-Facial expressions	 Participant 256 (female, aged 5;3)
FP4-Colour/vitality	 Participant 265 (female, aged 6;1)

Fig. 9.3 Drawings by a variety of participants demonstrating the seven focal points

FP5-Image/sense of self	 Participant 281 (female, aged 6;0)
FP6-Conversational partners	 Participant 248 (male, aged 4;5)
FP7-Negativity	 Participant 270 (male, aged 4;6)

Fig. 9.3 (continued)

Table 9.3 Number and percentage of "happy" responses on the SPAA-C (McLeod, 2004) at each timepoint and for each language

SPAA-C	JC Time 1		JE Time 1		JC Time 2		JE Time 2	
	n	%	*n*	%	*n*	%	*n*	%
1. Feel about talking	21	91.3%	22	95.7%	21	91.3%	22	95.7%
2. Talk to best friend	16	69.6%	16	69.6%	18	78.3%	18	78.3%
3. Talk to siblings	18	78.3%	15	65.2%	19	82.6%	17	73.9%
4. Talk to parents	17	73.9%	18	78.3%	18	78.3%	21	91.3%
5. Talk to teachers	17	73.9%	20	87.0%	18	78.3%	19	82.6%
6. Teachers ask a question	15	65.2%	19	82.6%	19	82.6%	17	73.9%
7. Talk to whole class	18	78.3%	13	56.5%	18	78.3%	19	82.6%
8. Play with children	18	78.3%	18	78.3%	21	91.3%	19	82.6%

Children's Drawings: Themes

Using a meaning-making approach, the "message conveyed through the child's drawing" (Holliday et al., 2009, p. 252) was obtained. Children were able to express talking/listening (T1), connections with communication partners through

talking (T2) and emotions experienced while talking (T3) (Table 9.1, Fig. 9.1). There were similarities and differences observed in the themes coded in children's drawings across time points and language elicited. Commonly, children's communication partners were parents, siblings, friends, other family members and less often with inanimate objects (e.g. cars), pets (e.g. dinosaurs) or non-family members (e.g. teachers). These communication partners were similar to those found in other studies (cf. McCormack et al., 2022). In a few instances, children drew themselves talking with more people during the JC elicitation than when elicited using JE (e.g. Fig. 9.2), possibly identifying with the Jamaican motto "out of many, one people", demonstrating the importance of community within the Jamaican experience.

Children's Drawings: Focal Points

Seven focal points (i.e. what was emphasised, unusual or captured attention) were also considered in the children's drawings (Furth, 2002; Holliday et al., 2009; McCormack et al., 2022) (Table 9.2, Fig. 9.3). The data showed consistency across languages. The most frequently coded focal point was conversational partners, followed by images/sense of self, portrayal of talking, facial expressions and colour/vitality, with negativity being the least coded. When FPs were considered with children's descriptions, the children might have been conveying (a) talking with a conversational partner was important and fun; (b) talking was an activity often engaged in by children; (c) talking was generally viewed as a positive and non-passive activity; (d) talking involved use of facial expressions and colour to send messages; and (e) children included themselves as central in communication exchanges.

Children's Ratings About Their Feelings

Children rated their overall impressions about talking using the SPAA-C (McLeod, 2004), where feelings of happy, sad, in the middle or another feeling could be expressed. Regardless of the language or time point, the predominant rating was *happy* (Table 9.3), and this was confirmed by facial expressions demonstrating smiles in most drawings. These data are consistent with prior studies (e.g. McCormack et al., 2019, 2022), where young children with communication disorders frequently expressed a positive attitude about talking. Interestingly, in the current study, a small number of children expressed different ratings about talking in each of their languages. For example, a 5-year-old male indicated that he felt "sad" when talking to his brother in JE but "happy" when talking in JC.

Educational and Clinical Implications

Children's drawings, descriptions and ratings about talking promote their involvement in matters that concern them. For educators and SLPs working with multilingual children, it is important to understand that children's views and culture can be meaningfully expressed using arts-based approaches, such as the Sound Effects Study Drawing Protocol (McCormack et al., 2022) and SPAA-C (McLeod, 2004), offering additional ways of understanding life experiences in multilingual contexts. By expanding these approaches, children can be provided with *space, voice, audience* and *influence* (Lundy, 2007) to undertake research *with,* not *on*/*about* children (Cronin & McLeod, 2022). Caution in over-interpreting children's drawings is needed, and it is important to elicit children's descriptions of their drawings so educators and SLPs can more accurately represent what children are communicating.

Conclusion

It is important to engage in holistic, evidence-based and child-centred practices that acknowledge children as experts in matters that concern them (McCormack et al., 2022; Roulstone & McLeod, 2011). In these efforts, children's drawings and descriptions begin to consider children's expertise and right to have a say in their lives. In the current study, children's voices were listened to in ways that meaningfully informed practice beyond that of verbal exchanges (Lundy, 2007; Roulstone & McLeod, 2011) while enacting principles of the CRC (e.g. Articles 12 and 13), SDG 3 (good health and well-being), SDG 4 (quality education) and SDG 10 (reducing inequality). This chapter also considered children's ratings of feelings about talking experiences in different languages and with different interlocutors to better understand children's perceptions, views and attitudes about their communication. There is value in gathering data about children's views, feelings and perceptions using the communicative experiences of typically developing multilingual children from Jamaica. Data provided in this chapter demonstrate that acknowledging children's expertise is critical to supporting culturally competent and responsive practices in education and speech pathology.

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Karla N. Washington is an associate professor at the University of Toronto, Canada; formerly at the University of Cincinnati, USA. Her research focuses on typical and disordered speech-language development in monolingual and multilingual pre-schoolers. Her efforts are centred on characterising children in the context of their environment using the lens offered by the International Classification of Functioning, Disability and Health. By applying this framework, she seeks to inform culturally responsive practices that distinguish development from disorder. Karla's work has been supported by the National Institutes of Health to investigate Jamaican children's communication profiles and monolingual pre-schoolers' language function. She is an editor for *Language, Speech, and Hearing Services in Schools* and is a Fellow of the American Speech-Language-Hearing Association.

Rachel Wright Karem (clinical assistant professor) is a certified bilingual English-Spanish-speaking speech-language pathologist. Rachel obtained her clinical competency in services for multilingual learners from the Indiana University Speech Therapy Education, Practicum, and Services (STEPS) program. She obtained her PhD in Communication Sciences and Disorders from the University of Cincinnati, USA. Her research and areas of clinical expertise include multilingual language development, comprehensive assessment practices and culturally sustaining classroom practices.

Corrine Macaluso is a speech-language pathologist. Corrine earned her master of arts in speech-language pathology from the University of Cincinnati, USA. She has her Certificate of Clinical Competence from the American Speech-Language-Hearing Association. Corrine participated in research focusing on evaluating bilingual speakers and cultural competency during her time at the University of Cincinnati as part of Dr Karla Washington's lab. She is currently a clinical speech-language pathologist serving a diverse population of students in the educational setting.

Cecilia Schwartz is a speech-language pathologist. Cecilia earned her master of arts in speech-language pathology from the University of Cincinnati, USA. She has her Certificate of Clinical Competence from the American Speech-Language Hearing Association. Cecilia participated in research focusing on the evaluation of bilingual speakers and cultural competency during her time at the University of Cincinnati as part of Dr. Karla Washington's lab. She is currently working as a clinical speech-language pathologist providing services to diverse populations in a variety of settings, including inpatient rehab, outpatient clinics, home health and telehealth.

Sharynne McLeod is a professor of speech and language acquisition at Charles Sturt University, Australia. She is an elected Fellow of the Academy of the Social Sciences in Australia and has been an Australian Research Council Future Fellow. She was the first international recipient of the Honors of the American Speech-Language-Hearing Association and is a Life Member of Speech Pathology Australia. Her research focuses on children's speech and foregrounds the right of everyone to participate in society. She presented a speech about communication rights at the United Nations and has provided expertise for the World Health Organization.

Chapter 10
Vietnamese-Australian Families: Children's Language Competence and Home Language Maintenance

Van H. Tran, Sharynne McLeod, Sarah Verdon, Kate Margetson, and Ben Phạm

Abstract Children's home language maintenance is sustained through integrated language learning between the home and community. Many Vietnamese-Australian families are currently in the second or third generation since migration, when language loss has been noted for many migrants across the world. This chapter reports key findings from VietSpeech (https://www.csu.edu.au/research/vietspeech), an Australian Research Council Discovery Project that considered Vietnamese-Australian children's language competence and home language maintenance across four studies. The language profiles of Vietnamese-Australian adults (n = 271) and families (n = 151) will be described, including factors associated with children's language use and proficiency and parents' attitudes towards home language maintenance. Families' successful experience of home language maintenance (n = 7) and consultations from international experts (n = 15) in home language maintenance and children's language education will be presented, followed by results from the VietSpeech SuperSpeech program (n = 30), an online model for supporting home language maintenance for young children. Finally, the chapter discusses the challenges of home language maintenance in multilingual Australian society and proposes families' recommendations for government support, including more accessible community language education and raising public awareness of multilingualism.

V. H. Tran (✉) · S. McLeod · K. Margetson
Charles Sturt University, Bathurst, NSW, Australia
e-mail: vtran@csu.edu.au; smcleod@csu.edu.au; kmargetson@csu.edu.au

S. Verdon
Charles Sturt University, Albury, NSW, Australia
e-mail: sverdon@csu.edu.au

B. Phạm
Charles Sturt University, Bathurst, NSW, Australia

Hanoi National University of Education, Hanoi, Vietnam
e-mail: ben.phamthi@hnue.edu.vn

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Keywords Multilingual · Speech · Language · Vietnam · Home language maintenance · Children

Multilingualism is like a superpower benefitting people in many ways. Multilingualism brings educational and occupational advantages, enhances cognitive functioning, strengthens socialisation and connection to community and promotes a sense of identity (Barac et al., 2014; Bialystok et al., 2007, Espinosa, 2015; Okal, 2014; Verdon, 2023). However, in multilingual societies, many immigrant children risk losing their home language, especially when nearing school entry (Tran et al., 2022b; Verdon et al., 2014). The home language (also known as heritage language or community language) is used at home among family members and is different from the majority language.

This chapter reports key findings from VietSpeech (https://www.csu.edu.au/research/vietspeech), an Australian Research Council Discovery Project that considered Vietnamese-Australian children's language competence and home language maintenance. The Vietnamese language is spoken at home by 1.3% of the Australian population; that is, Vietnamese is the third most spoken language other than English (ABS, 2022). Globally, Vietnamese is the twentieth most spoken language, with over 77 million speakers (Eberhard et al., 2022). Standard Vietnamese is taught at schools in Vietnam; however, there are several dialects, including Northern, Central and Southern Vietnamese that are spoken across the world (Phạm & McLeod, 2016). While Australia is one of the most diverse multicultural countries in the world with 22.8% of Australians speaking a language other than English at home (ABS, 2022), home language maintenance remains a challenge to most immigrant communities in Australia, including the Vietnamese (Tran et al., 2021).

Home Language Maintenance Around the World

Maintaining a home language not only brings cognitive, academic, economic and social advantages but also promotes family connection and perception of cultural identity (Barac et al., 2014; Bialystok et al., 2007; Espinosa, 2015; Keh & Stoessel, 2017; Verdon, 2023). Home language maintenance among second-generation immigrants onwards is a challenging process for several reasons, including the social and educational dominance of the majority language, insufficient social and community support, parents' misunderstanding of the importance of home language maintenance and multilingualism and children's increasing school and social commitments (Piller, 2019). The loss of home language is due to both family and social factors. Immigrants' families may focus on the majority language in the hope of better social integration and higher academic achievement (Dixon et al., 2012). This places immigrant children at risk of losing their home language when they

start formal education (Lo Bianco, 2008). The society's monolingual mindset (Clyne, 2008) and inadequate sense of home language community (Tran et al., 2022b) contribute to the loss of the home language and shift towards the majority language. In multilingual countries, including Australia, the monolingual mindset remains predominant and hinders home language maintenance initiatives (Piller & Gerber, 2018). While some parents are highly motivated to maintain their home language, they lack the skills, resources and support (Tran et al., 2022a). Other parents' negative perceptions and attitudes towards home language maintenance may influence their approach towards maintaining home languages for their children (Jeon, 2010).

Communication is a human right (McLeod, 2018), and supporting children's home language maintenance upholds Articles 12 and 13 of the Convention on the Rights of the Child (CRC) (United Nations, 1989), enabling children to have the right to "freedom to seek, receive and impart information and ideas". Maintaining home languages contributes to Sustainable Development Goals (SDG) reduced inequalities (SDG 10), and peace, justice and strong institutions (SDG 16). The VietSpeech research has contributed to good health and well-being (SDG 3), quality education (SDG 4) and partnerships for the goals (SDG 17) (United Nations, 2015).

Factors Related to Language Maintenance

Factors associated with home language maintenance can be classified using Spolsky's language policy theory: language practices, language ideologies and language management (Spolsky, 2004). These factors can be further categorised into four subgroups—child, parent, family and community-related factors.

Child-related factors include age, gender, birth order and sibling presence, migration status, the start of education, English usage, perceptions of the importance of home language maintenance, perception of cultural identity and home language proficiency (Tran, Wang et al., 2021). Studies exploring the impact of age on children's home language maintenance indicated that the age from birth to before formal education was the best period to learn a home language (Biedinger et al., 2015; DeCapua & Wintergerst, 2009; Gollan et al., 2014; Keh & Stoessel, 2017). For example, Tran et al. (2022b) interviewed seven Vietnamese-Australian parents with successful home language maintenance experience who indicated that starting early was a key factor in helping children maintain their home languages.

Parent-related factors that support home language maintenance include home language input, perceptions of the importance of home language maintenance, language proficiency, sense of cultural identity, socio-economic status and education, regular visits to the home country and parent-child cohesion. Most studies that investigated the parents' role in children's home language maintenance found that parents' home language input positively impacted their children's home language use (Kennedy & Romo, 2013; Pham & Tipton, 2018; Tran et al., 2024; Xia, 2016).

For example, Tran et al. (2024) surveyed 151 Vietnamese-Australian families, and the statistical analysis indicated that children had a higher proficiency and use of Vietnamese if their parents often used Vietnamese with them.

Family-related factors include grandparent or relative contact, sibling presence and birth order (Tran, 2022). A number of studies have described a positive relationship between home language maintenance and living with or being regularly cared for by grandparents or relatives (Verdon et al., 2014). Yi (2009) studied 73 Korean-American children aged between eight and 17 years and found that children learnt more colloquial expressions and had a wider vocabulary through interactions with their grandparents and relatives. Meanwhile, community-related factors include proximity to home language community, access to and engagement in community language schools, home language-immersed education, teacher/peer influence and religion (Tran, 2022). For example, Gollan et al. (2014) found that among 90 school and university students speaking Mandarin, Hebrew and Spanish, those with access to more home language speakers achieved higher scores in picture naming tests in their home languages.

Theoretical Frameworks

The VietSpeech project is underpinned by three theoretical frameworks: Linguistic multi-competence (Cook, 2016), the emergence approach to speech acquisition (Davis & Bedore, 2013) and Spolsky's (2004) language policy theory. Firstly, linguistic multi-competence is defined as "the overall system of a mind or a community that uses more than one language" (Cook, 2016, p. 2). The theory of linguistic multi-competence is based on three key premises that were applied to the development of the VietSpeech project: (1) Linguistic multi-competence concerns the knowledge of more than one language and the relationships between languages, including code mixing, code switching and cross-linguistic transfer; (2) the multi-competent speaker should not be compared to monolingual native speaker norms; and (3) multi-competence affects the whole mind, that a person's use of language is linked closely with cognitive activities such as memory, inference, attention or perception and these activities cannot be separated from language.

Secondly, the emergence approach to speech acquisition (Davis & Bedore, 2013) posits that speech acquisition results from the interactions of three factors: (1) biologically motivated intrinsic capabilities (cognition, perception and production), (2) socially motivated interactional capabilities with communication partners (joint attention, turn taking and intention reading) and (3) the influence of the extrinsic context (ambient phonology and socio-cultural influences). For multilingual children these influences may vary across the languages they speak, and the quantity and quality of language exposure may vary between languages, even among children within the same family. Each of these factors has been considered in the

VietSpeech project to consider the influences upon speech acquisition among bilingual Vietnamese-Australians.

Thirdly, the theoretical framework underpinning the home language maintenance element of the research is Spolsky's (2004) language policy theory, which outlines three components: (1) language practices, (2) language ideologies and (3) language management. In the context of home language maintenance, language practices refer to the use of the home language and the majority language among family members. Language ideologies are the beliefs and attitudes towards that language use, while language management is related to the policies at work that affect the use of the language in the family. These three aspects are interrelated in that how family members perceive the role of a language (language ideologies) affects their use of that language (language practices) as well as their language-related practices (language management).

VietSpeech: Exploring Home Language Maintenance in Australia

VietSpeech (https://www.csu.edu.au/research/vietspeech) was an Australian Research Council Discovery Project that considered Vietnamese-Australian children's language competence and home language maintenance. Four studies were undertaken.

- Study 1: survey data from 271 Australian-Vietnamese adults including 151 parents and a focus group of seven parents from five families.
- Study 2: assessment data from 154 children and adults.
- Study 3: interviews with 15 international experts in home language maintenance.
- Study 4: VietSpeech SuperSpeech program (n = 30), an online model for supporting home language maintenance for pre-school children and their families.

VietSpeech used a mixed-method approach to utilise the benefits of both quantitative (survey questionnaires, assessment) and qualitative data (focus group discussion and interviews).

The research studies adhered to the guidelines outlined in the National Statement on Ethical Conduct in Human Research (NHMR) and obtained approval from the Charles Sturt University Human Research Ethics Committee (approval number H18084). Participants were provided with a detailed participant information sheet outlining the research and a consent form. Prior to data collection, participants were required to complete and return the consent form. Participants had the option to withdraw from the study at any time if they wished, with clear guidance provided on the withdrawal process. In cases where children directly participated, either the children signed assent forms or parents signed consent forms on their behalf. The researchers ensured strict confidentiality and safeguarded the privacy of all research participants, including children and their families.

Participants

Participants were 271 Australian people with Vietnamese heritage (Study 1, survey Part 1); 151 Vietnamese parents with children under 18 years (Study 1, survey Part 2); 154 Vietnamese English-speaking children, their parents and significant others (Study 2, speech assessment); 15 international experts in children's language and home language maintenance (Study 3, interview); seven Vietnamese-Australian parents from five families (Study 3, focus group); and 14 families (Study 4, intervention, interview). Participants of Study 1 and Study 2 were recruited by random snowball sampling via the research team's networks. Participants of Study 3 were selected based on their expertise and research experience on home language maintenance and multilingual children's language acquisition. Participants of Study 4 were primarily selected from Study 2. All adult participants were asked to provide consent, and child participants were asked to provide assent before participating anonymously in the studies. They were aware of being able to withdraw at any stage.

Method

VietSpeech Study 1 involved a questionnaire that was developed based on an extensive literature review (e.g., Cavallaro, 2005; Kang, 2015; Luo & Wiseman, 2000; Tannenbaum, 2003) and consisted of two parts. Part 1 contained 42 questions about the participants' demographics, migration status, language proficiency, language use, home language maintenance, family language background and connections with Vietnamese culture. Part 2 contained 32 questions about family language policies and rules, language use with children in various contexts, family cohesion and thoughts and beliefs about children's language maintenance. The bilingual questionnaire was available in English and Vietnamese (McLeod et al., 2019; Tran, 2022; Wang et al., 2021). Participants were recruited using convenience and snowball sampling through the research team's contacts and social media.

VietSpeech Study 2 involved speech assessments conducted with 154 participants (69 children aged 2–8 years and 85 adult family members). Two single-word assessments were administered: the Vietnamese Speech Assessment (VSA) (Phạm et al., 2017) to assess Vietnamese speech sound production and the Diagnostic Evaluation of Articulation and Phonology (DEAP) (Dodd et al., 2002) to assess English speech sound production. Data were collected face to face by a team of transcribers that included a linguist and accredited interpreter and speech-language pathologists, most of whom were bilingual in Vietnamese and English. Speech was transcribed during the assessments, then checked and finalised through consensus according to the VietSpeech Multilingual Transcription Protocol (Margetson et al., 2023). Speech data were analysed using the emergence approach as a framework (Davis & Bedore, 2013).

VietSpeech Study 3 involved expert interviews to gain the latest knowledge and research for supporting home language maintenance and developing the VietSpeech SuperSpeech program. Interviews were conducted with 15 international experts in the fields of children's multilingualism and home language maintenance. They were conducted over Zoom, an online communication platform. Experts were from a range of disciplines involved with home language maintenance, including linguists, psychologists, researchers, educators and speech-language pathologists. They were based in Australia, the USA, Sweden, Vietnam, Portugal, Canada and Belgium. The interviews were transcribed, and a thematic analysis was undertaken to identify key themes for supporting children's multilingual development.

VietSpeech Study 3 involved a 2-h focus group discussion, held and recorded online via Zoom and was guided by eight questions. The participants, five mothers and two fathers from five Vietnamese-Australian families, participated in the discussion in Vietnamese. The data were transcribed in Vietnamese, translated into English by a NAATI-accredited translator and analysed bilingually and inductively to identify themes related to the successful experience of home language maintenance.

VietSpeech Study 4 involved the SuperSpeech intervention program (https://www.csu.edu.au/research/vietspeech/info) that was piloted using a case-control design (McLeod et al., 2022). Thirty Vietnamese-English-speaking children and their parents participated in the study: 14 children in the intervention group and 16 in the control group. Pre- and post-intervention, speech was assessed in Vietnamese and English, and parent questionnaires exploring speech development and home language maintenance were administered. SuperSpeech was a bilingual intervention program that encouraged children and their families to see multilingualism as a superpower. The program was delivered online for 1 h per week for eight weeks targeting Vietnamese and English words and speech sounds. Information for parents on home language maintenance was also included at the end of each session. Post-intervention assessments were conducted 10 weeks after pre-intervention assessments for both the intervention and control groups. Parents' interviews were conducted after the intervention and analysed thematically to explore parents' experience of the program.

Results

Vietnamese-Australians' Language Use

Among 271 participants in VietSpeech Study 1, 78.5% reported to be most proficient in Vietnamese and 21.3% reported to be most proficient in English (McLeod et al., 2019). Between 84.1% and 94.6% of the participants rated their proficiency as *well* or *very well* across four language proficiency domains (speaking, understanding, reading and writing) with mean scores ranging from 4.38 to 4.61 (of a total of five). Regarding English proficiency, 68.6% and 74.0% of the participants

self-assessed as *well* or *very well* across the four domains, with mean scores ranging from 3.86 to 4.00. The participants reported different levels of language use in different settings (McLeod et al., 2019). Regarding language use with different people, more than 50% of the participants reported a higher use of Vietnamese, relative to English, with Vietnamese-speaking people including their parents, older siblings, Vietnamese-speaking grandparents, other relatives in Vietnam and Vietnamese friends. While there was a variety of languages used by the participants when communicating with younger siblings compared to their older siblings, the general trend was that more English was used with younger siblings than older siblings.

Of the 151 parents surveyed in VietSpeech Study 1 (McLeod et al., 2019), more than half reported either living close to or having access to the Vietnamese community and cultural events annually. More than half of the participants (57.3%) also regularly visited Vietnam and 16.4% intended to live in Vietnam in the future. While 18.7% of the participants reported always using Vietnamese when speaking with their children, 33.1% spoke mostly Vietnamese and sometimes English. When speaking with their partners, nearly half of the participants (44.4%) reported always using Vietnamese and nearly a quarter (23.2%) always spoke English. Parents and children used different languages in different places (McLeod et al., 2019). Vietnamese was always used by two-thirds of the participants (68.8%) in holidays in Vietnam, while English was chosen by 60% of the participants to be the language at work, when studying and visiting non-Vietnamese stores or restaurants. English was also always used by nearly half of the participants (43.2%) during leisure activities. While more variations of language choices were reported when the participants were at cultural or religious gatherings or visited Vietnamese shops or restaurants, more people chose Vietnamese as always in these settings, relative to other options. English was reported to be the dominant language chosen by the participants across various media. More than 50% of the participants reported mostly watching TV or listening to the radio in English while a similar number reported using English and Vietnamese equally on social media, when listening to music and when reading news. In terms of other media, including magazines, books, movies and videos, more people (more than 70%) chose English than Vietnamese or at least used English and Vietnamese equally when accessing these media (McLeod et al., 2019; Wang et al., 2021).

Factors Associated with Home Language Maintenance

Factors linked with home language maintenance of the 151 families studied in VietSpeech Study 1 include factors linked with children's language proficiency and use (Tran et al., 2021), parents' language use and attitudes towards home language maintenance (Tran et al., 2024) and the presence of family language policy (Tran et al., 2022b).

Factors associated with children's Vietnamese proficiency (oral/written) included child age, child language use, parents' Vietnamese proficiency, parents' attitudes

towards the importance of Vietnamese language maintenance, parents' length of stay in English-speaking countries and parents' intention of future residence in Vietnam. Factors associated with children's English proficiency (oral/written) included child age, children's Vietnamese written proficiency, parents' income, parents' length of stay in English-speaking countries and number of children. Factors associated with children's language use included children's Vietnamese oral proficiency, parents' language use with children, parents' attitudes towards the importance of Vietnamese language maintenance and vicinity to the Vietnamese community (Tran et al., 2021).

Parents' language use with their child was most significantly associated with their language use in social situations, which in turn was predicted by language practice factors including their Vietnamese proficiency, English proficiency and language use with child and a language management factor, which is frequent attendance at community events, and a demographic factor, which is parents' age. At the same time, parents' positive attitudes towards home language maintenance were predicted by language ideology factors, including a higher sense of Vietnamese identity, belief that home language helps maintain bonds with relatives and obtain wider career options and belief in the importance of English language maintenance for their child, and a demographic factor, which is lower income (Tran et al., 2024).

Factors associated with having a family language policy included parents' Vietnamese proficiency and use and intention of living in Vietnam in the future. This indicates circular migration is a major motivation for home language maintenance among the Vietnamese community in Australia. While positive attitudes towards maintaining Vietnamese culture, values and language were observed, just one-third of the families reported having a family language policy. This supports other studies in that parents are interested in maintaining home language for their children (language ideology), but this is not always observed from their language use (language practices) or the application of consistently enforced family language policies (language management) (Tran et al., 2022a).

Vietnamese-Australian Children's Speech Production

In VietSpeech Study 2 (n = 154), Australian Vietnamese-English-speaking children's consonant accuracy was found to be high in both languages, with children achieving a mean of 87.76% consonants correct in Vietnamese (including dialectal variants as correct) and a mean of 82.51% consonants correct in standard Australian English (McLeod et al., 2022). Adult family members (n = 85) achieved a mean of 98.04% Vietnamese consonants correct (including dialectal variants) and a mean of 85.73% standard Australian English consonants correct. Voiceless plosives and fricatives were least often correct in Vietnamese compared to other consonants, and fricatives and affricates were least often correct in English. Children were allocated to groups according to their language proficiency. Order of consonant acquisition was determined for each language according to the children's language proficiency

groups, based on how many participants could produce consonants accurately: early (90–100% of participants had acquired these consonants), middle (70–89%) and late (<70%) (McLeod et al., 2022):

- High Proficiency of Vietnamese and English

  Vietnamese speech sound acquisition:

  Early: /b, m, f, j, w, d, c, ʈʰ, s, ɲ, l/, Middle: /h, n, t, v, p, x/, Late: /ʔ, ɣ, ŋ, k, z, ʂ, ʈ, ʐ/

  English speech sound acquisition:

  Early: /n, h. m, w, ŋ, k, b, p, f, ɡ, l, ʧ, t, d, j/, Middle: /v, ʃ, s, ʤ, ʒ, z, ɹ/, Late: /ð, θ/

- Low Proficiency of Vietnamese and English:

  Vietnamese speech sound acquisition:

  Early: /b, w, j, h, m, f, d/, Middle: /s, n, t, p, c, ɲ/, Late: /ʈʰ, l, ʔ, v, ŋ, k, x, z, ʂ, ɣ, ʈ, ʐ/

  English speech sound acquisition:

  Early: /h, w, m, f, n/, Middle: /b, j, ŋ, k, d, ɡ, ʃ, t, p/, Late: /ʧ, s, v, ʒ, ʤ, l, z, ð, ɹ, θ/

- English Proficient (higher proficiency at English compared to Vietnamese):

  Vietnamese speech sound acquisition:

  Early: /d, b, j, f, m, w, h/, Middle: /v, c, l, ʈʰ, ɲ, s, n, t, p/, Late: /ʔ, z, ŋ, k, x, ɣ, ʂ, ʈ, ʐ/

  English speech sound acquisition:

  Early: /h, w, m, f, n/, Middle: /b, j, ŋ, k, d, ɡ, ʃ, t, p/, Late: /ʧ, s, v, ʒ, ʤ, l, z, ð, ɹ, θ/

Overall, children's consonant accuracy and speech intelligibility varied according to their level of language proficiency (cf. Phạm & McLeod, 2019; Phạm et al., 2017). Children's consonant productions most often matched their mother's productions, compared to siblings or other adult family members.

Strategies and Practices of Successful Home Language Maintenance

The parents' reasons for home language maintenance in VietSpeech Study 3 (Tran et al., 2022b) included the preservation of cultural identity, communication with grandparents and relatives, parents' desire to speak their home language and beliefs

in cognitive and emotional benefits. Families also faced challenges including children starting school and growing older, parents' insufficient time and persistence and a lack of support in terms of resources, formal Vietnamese education and teacher quality. The families were successful in language maintenance, thanks to strategies including 100% Vietnamese speaking, teaching Vietnamese directly using textbooks and indirectly through book reading, daily interactions and watching Vietnamese TV. The parents recommended changes in language education policy and advocacy, including more accessible formal home language education, better resources including more systematic textbooks and raising awareness of the benefits of home language maintenance.

Experts' Advice

Experts' advice on home language maintenance in VietSpeech Study 3 (Verdon et al., 2021) focused on five themes: (1) an ecological approach is needed, (2) languages must be visible and valued, (3) attitudes matter, (4) make it fun and (5) home language maintenance is hard but worth it. The ecological approach outlines that home language maintenance must be supported in all contexts: family, school, friends, the media, government and society. Home language should also be visible and valued in children's lives for children to see and understand its value through daily family interactions and educational and community environments. The third theme identified that positive attitudes towards the home language and culture are essential to actions being taken to support home language. This includes the attitudes of parents, family, schools, community, government and society as a whole. The fourth theme revealed that if home language learning is to be effective with children it must be seen as fun. This will increase motivation and positive experiences of using the home language. The final theme from experts is an encouragement that home language maintenance is hard but worth it. While stopping a shift to the majority language was compared to "holding back the ocean", the benefits that home language maintenance brings to families, communities and society are valuable.

VietSpeech SuperSpeech Intervention Program

The VietSpeech SuperSpeech intervention program (McLeod et al., 2022) was developed by incorporating evidence from VietSpeech Studies 1–3, including the language profile, factors associated with home language maintenance, parents' successful experiences of home language maintenance and experts' advice. The program aimed to support Vietnamese-Australian children and families to maintain their home language and enhance children's speech and language skills in Vietnamese and English. Statistically significant improvement was observed in

children's intelligibility in English, children's happiness talking in Vietnamese and English and parents' encouragement of their children to speak Vietnamese. While there was no significant change from pre- to post-intervention in terms of children's speech sound production in Vietnamese or English, Vietnamese intelligibility, English vocabulary and hours of Vietnamese spoken each week, parents' feedback via emails during and following the intervention and interview after the program indicated their support for the program. The lack of statistically significant change for some of the outcome measures could suggest a longer intervention period may be required for greater impact.

Parents appreciated various benefits they gained by participating in the program, including knowing how to support their children in home language maintenance (e.g. teaching Vietnamese through daily interactions and book readings), developing stronger parent-child bonds and increasing children's interest in Vietnamese language and culture.

For example, a mother recounted in the post-program interview:

> "Tôi dành nhiều thời gian với con hơn và biết cách làm thế nào để giúp con học tiếng Việt tự nhiên, vui vẻ trong các sinh hoạt hàng ngày." [I now spend more time with my daughter, I have learnt simple ways of how to make Vietnamese learning fun..."]

Another mother noticed the change in her son's interest in Vietnamese:

> "Ngay sau buổi học đầu tiên tôi thấy cháu quan tâm đến tiếng Việt, cháu hay hỏi các câu hỏi như 'Cái này tiếng Việt là gì?', 'Từ này có nghĩa là gì?'" [Right after the first session, I noticed my son got more interested in Vietnamese, he asked me more questions like 'What is it in Vietnamese?' 'What does it mean?']

A father mentioned the benefit of bonding with his sons through activities of the programme:

> "Tham gia chương trình, tôi không chỉ biết các cách hỗ trợ con phát triển cả hai ngôn ngữ Việt-Anh mà còn dành nhiều thời gian đọc truyện với con hơn, điều mà trước đây tôi không nghĩ quan trọng đến như vậy. Tôi thấy một sự ấm áp mỗi tối 2 bố con ngồi đọc truyện với nhau, tôi thích việc giải thích cho con, hay giúp con làm các hoạt động về ngôn ngữ." [I have learnt how to help my children learn and use Vietnamese. More importantly, I have a chance to spend more time with my boys, which I didn't notice could be so meaningful. I feel warm when reading books with them every evening, explaining to them the meaning of the words or answering their questions. The program is not just about maintaining Vietnamese but also about strengthening the bond between parents and children.]

Discussion and Conclusion

The VietSpeech study has provided insights into Vietnamese-Australian community with regard to their language profile, factors associated with their language use and attitudes towards home language maintenance and successful home language maintenance strategies. VietSpeech has gathered the largest bilingual dataset of speech acquisition that examines two languages simultaneously for children and their family members. The study also sheds light on typical bilingual speech acquisition,

including dialectal variants in the definition of accuracy, grouping participants with similar language experience and considering the ambient phonology produced by adult family members. An ecological approach towards home language maintenance recommended by experts and a program to support families in maintaining home language for their children were also among the key outcomes of the project.

While the first-generation Vietnamese-Australians in the study were proficient in Vietnamese due to their status as recent immigrants (Verdon et al., 2014), the maintenance of the home language among second and third generations depends on a range of factors, most of which are related to the parents. This highlights the importance of the families in home language maintenance and indicates the need for other stakeholders to support families, including the government, community and schools (Tran, 2022). As the maintenance of home language among each immigrant community contributes to the development of the multilingual and multicultural Australian society, home language maintenance not only brings individual and family benefits but also national ones. This can only happen with the awareness of the importance of home language maintenance as well as policies to support it, including accessible formal education of home language from an early age and parents' education to support families in home language maintenance and bilingual development.

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Van H. Tran, PhD, is an adjunct research fellow at Charles Sturt University Australia and a NAATI-accredited translator. She has taught English language and linguistics, translation and interpreting and Vietnamese language at the University of Wollongong, Western Sydney University, and the Defence Force School of Languages. She hosts an SBS Vietnamese weekly show on maintaining home language among families with Vietnamese heritage. Her research focuses on home language maintenance among Vietnamese-Australian families, multilingualism and multilingual children's speech and language acquisition.

Sharynne McLeod, PhD, is a distinguished professor of speech and language acquisition at Charles Sturt University, Australia. She is an elected Fellow of the Academy of the Social Sciences in Australia and has been an Australian Research Council Future Fellow. She was the first international recipient of the Honors of the American Speech-Language-Hearing Association and is a Life Member of Speech Pathology Australia. Her research focuses on children's speech and foregrounds the right of everyone to participate in society. She presented a speech about communication rights at the United Nations and has provided expertise for the World Health Organization.

Sarah Verdon, PhD, specialises in research regarding children's speech, language and literacy in culturally and linguistically diverse contexts at Charles Sturt University, Australia. She is a speech-language pathologist and early childhood researcher who is passionate about embracing the diversity of children from different cultures, languages, socio-economic backgrounds and levels of ability to create equal opportunities for all children to have a strong start to life and reach their full potential. Sarah applies her research and skills in a volunteer capacity as a director of the Trinh Foundation Australia, an Australian-based international not-for-profit organisation whose mission is to develop speech therapy in Vietnam.

Kate Margetson is a speech-language pathologist and a postdoctoral scholar at Charles Sturt University, Australia. She has worked clinically supporting multilingual children and their families in Australia for over 10 years and as a speech pathology trainer and clinical educator in Vietnam. Her PhD research focuses on speech-language pathology assessment and diagnosing speech sound disorders in Vietnamese-English-speaking children.

Ben Phạm, PhD, is a senior lecturer at the Division of Speech-Language and Hearing Impairment, Faculty of Special Education, Hanoi National University of Education, Vietnam, and an adjunct research fellow at Charles Sturt University, Australia. She is a member of the International Association of Communication Disorders and Sciences (IALP), the Asia Pacific Society of Speech, Language and Hearing and the International Expert Panel on Multilingual Children's Speech. Her main research interests are speech acquisition and disorders of Vietnamese-speaking children.

Chapter 11
Many Voices, Many Languages: Listening and Learning from South African Children

Michelle Pascoe, Mikateko Ndhambi, Olebeng Mahura, Nomfundo Peaceful Buthelezi, Nicole Husselmann, and Babalwa Ludidi

Abstract South Africa is a country characterised by great linguistic and cultural diversity, with 11 languages officially recognised in its constitution. Despite the formal recognition of this language diversity, many of the languages are not well-researched, and children acquiring most of the indigenous languages are disadvantaged by a lack of resources, including speech-language assessments and professionals who share their first language. Our multilingual research team documents children's early acquisition of South African languages, information needed for theoretical and applied purposes, particularly for the early identification and support of children with language difficulties. This chapter describes the starting point for some of these projects: listening to families, professionals who work with young children, and the children themselves. We describe the approaches we have taken to better understand the perspectives of families, professionals, and children regarding their experiences, needs, and challenges in a complex environment of linguistic diversity, social inequality, and extreme poverty. Findings from these engagements are described, together with the ways they informed our work and how we might improve this critical aspect of our research to promote social justice and equality for all children.

Keywords South Africa · Children · Multilingualism · Speech-language pathology · Research · Language acquisition

M. Pascoe (✉) · M. Ndhambi · N. P. Buthelezi · N. Husselmann · B. Ludidi
University of Cape Town, Cape Town, South Africa
e-mail: michelle.pascoe@uct.ac.za; mikateko.ndhambi@smu.ac.za; buthelezin11@ukzn.ac.za; nicole.husselmann@alumni.uct.ac.za

O. Mahura
Charles Sturt University, Albury, NSW, Australia

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Every member of society—irrespective of age or the languages used—should have a voice. All individuals should be able to make their wishes known, protest against perceived inequalities, and be empowered to bring about changes in their lives and those of others. The Convention on the Rights of the Child (United Nations, 1989) includes a focus on children's rights to express themselves freely (Articles 12 and 13), noting:

> this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice.

Speech-language pathologists (SLPs) are well-placed to help support this vision through their engagements, interventions, and research with children with communication difficulties and their families. This work aligns with a range of Sustainable Development Goals (SDG) (United Nations, 2015), particularly, SDG 3, good health and well-being; SDG 4: quality education; and SDG 10, reduced inequality. This chapter focuses on children with communication difficulties (or at risk of communication difficulties), asking the following questions:

- How has listening to families informed our research and practice?
- How has listening to professionals informed our research and practice?
- How has listening to children informed our research and practice?
- As speech-language pathologists, how can we improve our ability to listen to and incorporate these voices in our research and practice?

To address these questions, we focus on our experiences working in South Africa with children from many cultures and languages, and their families. We start by describing the work of our research team and the contexts in which we work. We then outline a theoretical framework used in the remainder of the chapter, before responding to the questions above.

The Work We Do and Where We Do It: Contextualising Our Speech-Language Pathology Practice in South Africa

South Africa is a multilingual and culturally diverse country with more than 60 million people. Eleven official languages are recognised by the country's constitution: isiZulu, isiXhosa, Setswana, Sesotho, Siswati, isiNdebele, Xitsonga, sePedi, Tshivenda, English, and Afrikaans. There are many more unofficial languages, and each comprises multiple variations often linked to geographical region. Monolingual speakers are rare; most children and adults are multilingual, often speaking different languages at home, school, and the workplace. Social and economic challenges abound in South Africa, with many problems linked to the country's long history of colonisation and the former apartheid regime. Despite the advent of democracy in South Africa in 1994, the country is still beset by a weak educational system, high unemployment, widespread poverty, and corruption. The country faces many

problems, but there are also many opportunities for growth, and the diversity of languages and cultures is celebrated. The country's constitution has been widely hailed as progressive, emphasising equal rights for all, including children. But, in this context, are children included in decision-making that concerns them? Do professionals, like speech-language pathologists, always listen to children in their research and practice? In this chapter, we describe how our team has included children's voices in our work, following guidelines from the South African constitution, the Convention on the Rights of the Child (United Nations, 1989), and the Sustainable Development Goals (United Nations, 2015). However, we also show that as professionals with specific expertise in communicating—and facilitating communication—with young children, there is a great deal more that we could be doing in our practice to ensure children's voices are heard.

The *South African Child Gauge* (Children's Institute, University of Cape Town https://ci.uct.ac.za/child-gauge/child-gauge-overview) is an annual report that tracks South Africa's progress in realising children's rights together with updates on legislative developments that affect children's rights. Each edition follows a specific theme, with the 2010/2011 volume focusing on *Children as citizens: Participating in social dialogue* (Jamieson et al., 2011). Children's rights to participate in decision-making are discussed, and conditions needed for children's meaningful participation in social dialogue are described. The challenges and benefits of children's participation in different contexts are considered, from one-to-one encounters with professionals to involvement in democratic governance. Children's experiences of participation and the role of inter-generational dialogue in challenging and transforming how adults and children communicate with each other are also discussed in the *South African Child Gauge* and have informed our practice. For example, Bray (2011) notes that "acting in the best interests of the child" (p. 33) must necessarily involve listening to children and that children's voices must be heard in line with the country's constitutional framework and global human rights. When children can make their voices heard, they start to develop "their own democratic citizenship in a way that respects and celebrates cultural diversity, as an end in itself and as a model for others" (p. 33).

Speech-language pathologists work with people of all ages who experience difficulties in communicating, but our team works primarily with children, and here, we focus mainly on children younger than eight years of age. Children with communication difficulties may experience problems in participating. Physical challenges related to a communication impairment (e.g. being born with a cleft lip and palate) may make a child's early words challenging to understand. Speech and language delays may be less easily observed but may mean the onset of spoken communication is delayed—a child knows what they want to say but cannot find the right word or join words together appropriately. Speech and language difficulties may be linked to a hearing impairment, intellectual disability, or being on the autism spectrum; however, in most cases there is no known cause. Speech-language pathologists are, therefore, key professionals in helping children to participate fully and use their voices (or other means) to generate messages. Children's participation refers to:

> the active involvement of children in conversations that inform decisions about their own lives and broader society. It goes beyond children being present, to asking those in charge to create opportunities for children to have influence. Children's participation rights are not imposed as a blanket over other considerations but are woven into a broader process of dialogue. And true dialogue lies at the core of children's participation because it requires two-way communication, where both parties are able to express themselves and to be heard. (Bray, 2011, p. 30)

Our multilingual research team documents the nature of early speech and language acquisition in under-researched languages in our country. Of South Africa's 11 official languages, there are few early speech and language assessments (apart from English) and limited information about what to expect in typically developing children acquiring these languages. This is problematic because it means that children with speech and language difficulties are often not identified early and receive support only once they are failing at school. Our group works to devise assessments and collect data to better understand speech and language development of young children acquiring isiXhosa, isiZulu, Setswana, Afrikaans, and Xitsonga (Mahura & Pascoe, 2016; Maphalala et al., 2014; Pascoe & Jeggo, 2019; Rossouw & Pascoe, 2018; Southwood et al., 2021). These assessments and the knowledge that we generate regarding acquisition of these languages is a first step in ensuring that all children in the country have equal opportunities and support—despite the language spoken. Much of our work has focused on children's ability to produce the speech sounds of their language (Mahura & Pascoe, 2016; Maphalala et al., 2014; Pascoe & Jeggo, 2019; Rossouw & Pascoe, 2018). We have used culturally appropriate picture materials (and/or objects) to get children to name pictures and then analysed the children's speech productions compared with adult speakers of that language. This information is then helpful for speech-language pathologists working in South Africa who can use the assessment in clinical practice and relate findings about a specific child to normative data regarding the typical age of acquisition for speech sounds. Our team has also focused on early vocabulary development, working to adapt MacArthur Bates Communicative Development Inventories (MB-CDIs or CDIs) for local languages (Southwood et al., 2021). These tools comprise checklists of words that young children (under the age of three years) might be expected to be able to use and understand, and parents or caregivers are asked to work through the list and indicate the words that their child knows. Other parent-report measures cross-culturally adapted for use in South Africa's official languages include the Intelligibility in Context Scale, a short screening questionnaire designed to provide information about a child's intelligibility in specific contexts (Pascoe & McLeod, 2016). Intervention is also a key theme of our research. In the chapter, we include some examples of intervention studies where children have shared their perceptions of the intervention. This has then been used to develop and improve interventions going forward.

Theoretical Framework

Bronfenbrenner's (1979) ecological framework is used in this chapter to conceptualise a child as the central point in a complex environment. The child is at the centre of the model, surrounded by concentric circles representing the microsystem (family, peers, and school), mesosystem (the relationship between the different microsystems), exosystem (neighbours, social services, etc.), and macrosystem (the attitudes and ideologies of the culture). Each layer has a cascading effect on the interactions of the other layers. We have already described some of the broader contextual factors surrounding children in South Africa. Thus, we now turn our attention to the microsystem focusing first on families and how they have informed our work, before moving on to professionals and children themselves.

How Has Listening to Families Informed Our Research and Practice?

Many of our research projects collaborate with parents and carers of young children as the first step to ascertain their views on the tools we are developing. Multilingual families hold diverse views on childhood, communication, and disability, necessitating careful listening. Parents of young children are experts—they know the most about their children, their language/s, and what their children need. To this end, we have started many of our projects by inviting parents of young children (either typically developing or with communication difficulties) to attend focus groups or individual interviews where we listen to their perspectives. Southwood et al. (2021) describe the focus groups used in the cross-cultural adaptation process for the CDIs. For Afrikaans, there were two focus group discussions (one with professionals and the other with parents of young children), each in a different part of the country. For isiXhosa, focus groups took place with parents in rural areas, and individual interviews were held with parents of children in an urban area. Parents pointed out words that would be culturally inappropriate or unusual for a child to use. They made suggestions for words that could replace items removed and advised slightly different word choices given their child's age and where they live. Questions were asked about children's speech and gestures: "Please tell me the last ten words that your child said." "What did your child say this morning?" "What sentence did your child say last?" Dowling and Whitelaw (2018) describe the confusion among rural speakers of isiXhosa regarding the word "tissue" the isiXhosa translation of the original CDI list gave this as *i-tissue*, corroborated by middle-class and working-class isiXhosa-speaking parents living in urban areas. However, parents in the rural Eastern Cape did not know the word.

> 'What are the functions of a tissue?' they asked. We explained that it was to wipe noses or clean hands in the absence of a wet cloth. Eventually the parents started laughing. That's toilet paper! Tissue? Tissue! My goodness! Sometimes we can't even afford toilet paper, and you expect us to have tissues! (p. 50)

In this research, we wanted to ensure that rural families were not disadvantaged and that the words included in the inventory were equally familiar to urban and rural families. Questions routinely used in CDI studies, such as "What did your child say this morning?" and "What sentence did your child say last?", were viewed as problematic by some urban parents who had to leave their homes very early to travel to work each day, reporting that every morning their child would cry: "S'undishiya!" "Don't leave me!" Parents in such situations advised about better questions to ask and suggested that it was important to ask other family members these questions. In many South African families, children do not live with their parents for much of the year and are raised by grandparents or other family members while the parents focus on working away from home to provide for the extended family.

Speech-language pathologists have an important role in supporting parents of young children at risk for communication difficulties and mitigating such risks through early intervention. Pascoe et al. (2016) and Van Schalkwyk and Gerber (2021) focused on premature infants at risk for communication difficulties, interviewing their mothers for detailed insights into their experiences around early communication and early feeding. These interviews focused on mothers from a range of language and sociocultural backgrounds, giving insights into the different perceptions, experiences, and needs of these mothers—much needed for planning intervention services. Many of the mothers described their difficulties with breastfeeding and their disappointment with the lack of support. For example, Abigail (an 18-year-old mother of a premature infant) commented:

> I wanted [nurses] to show me how to breastfeed, and they didn't. I had to do it by myself. When I got discharged, my family helped me with feeding, and they told me how to breastfeed him. (Pascoe et al., 2016)

Such accounts from mothers shed light on their experiences in the healthcare system and provide clear examples of ways to improve services based on the mother's feedback and lived experiences.

How Has Listening to Professionals Informed Our Research and Practice?

The CDI studies have included focus groups with professionals experienced in working with young children. For the CDI translation into Xitsonga, the researcher met with a professor (an expert in Xitsonga) and a colleague to resolve identified word discrepancies. They explored the lexical and grammatical items in the translated tool to determine cultural relevance of the words and discuss possible alternatives. The experts advised against using borrowed words from other languages,

advocating that the use of borrowed words contributes to diminishing the marginalised minority languages. Our Xitsonga CDI preparation also included focus groups with speech-language pathologists and early childhood educators experienced with young children. The discussions were wide-ranging, including, for example, heated debates on the inclusion of words seen as culturally inappropriate. In Vatsonga culture (macrosystem), using anatomical terms like "vagina" and "penis" is taboo. It was ultimately resolved that these items would be included along with the option to use more "polite" alternatives, that is, each family could indicate the word/s they use.

The Intelligibility in Context Scale (ICS) is a screening questionnaire that focuses on parents' perceptions of children's speech. Pascoe and McLeod (2016) worked with professionals to adapt the ICS in all South Africa's official languages. Twenty-five participants translated the ICS into ten official languages of South Africa using forward and back translation and community checking. Next, they undertook a survey of 23 speech-language pathologists practising across South Africa and semi-structured interviews with five speech-language pathologists working in the city of Cape Town. The conceptual and linguistic equivalence of the adapted materials for each language were considered. Concepts that were challenging to translate from English into many local languages included those relating to immediate/extended family, acquaintances, strangers, and hearing/understanding. Linguistic challenges in translation related to dialectal differences and the use of pronouns. The speech-language pathologists in the sample found the ICS easy to use and saw it as a useful assessment component, especially when working with families who do not share a language with the professional.

How Has Listening to Children Informed Our Research and Practice?

We have piloted our speech and language assessment tools with young children and collected data directly from them. Thus, they have participated directly in the process in several of our studies (Mahura & Pascoe, 2016; Maphalala et al., 2014; Pascoe & Jeggo, 2019). However, we have engaged less at a meta-level with children themselves—seldom asking them for their views on their communication and what they feel about the assessment or intervention process. Pascoe et al. (2006) complemented an intervention study and its objective evaluation of outcomes with a qualitative interview with the child participant, Katy (aged 6;5). Questions in the interview probed her views about the therapy process, her perceptions about her speech, and her views about communication more generally. This interview was the final part of a research study undertaken with a monolingual child in the UK, but the questions can be used with any child to elicit information about their views on speech therapy and their attitudes to communication and communication challenges. Katy was honest with the interviewer, a

Table 11.1 Summary of findings from Katy's semi-structured interview following intervention

Area of questioning	Main findings	Examples of Katy's responses
Katy's experience of speech therapy Present	Enjoyed therapy despite initial reservations	"When I met you I said to myself I don't really want to go to her. And now I really want to go to you."
	Particularly enjoys games, stickers, toys, and being video/ audio-taped	"I don't want to go… back to class"
	Does not enjoy hard work, e.g. writing and practising words	"hard work… I don't really like hard work"
	Therapy helps children to improve their speech through hard work	(do you know how their speech gets better?) "Because it all hard work"
Past	Remembers previous therapy and therapists	"drawing, doing painting"
Katy's perception and awareness of own speech	Speech has improved a lot as she has grown older	"at first… no. And then, got better because I'm a big girl."
	Talking is fun and easy when she talks to certain people (e.g. her mother, her teacher) but is hard and makes her frustrated when people don't understand	"If my mommy were here I can talk to her then. (You like talking to her) "yeah" (And who don't you like talking to?) "other people, horrid people… sometimes I go away. I say I don't want to talk to you"
	A lot of the time people don't understand her and she feels frustrated	"it happens to me over and over again" "(I feel) a bit grumpy…. because I might go away, and other people say come back. And I won't come back because they won't listen to me"
Katy's perceptions of communication more generally	Talking and listening are generally positive. She likes listening to her teacher, therapists and mother	"talking is nice; listening is nice"
	When communication breaks down you should just walk away	"I just walk away"

speech-language pathologist with whom she had built a close and trusting relationship over many months. The interview (summarised in Table 11.1) illustrates the child's struggles with many aspects of communication and her keen sense of self and insights into the therapy process.

Kaplan (2014) undertook pilot reading intervention studies with young primary school aged children, interviewing participants following intervention to help develop the interventions further. An excerpt from a conversation reported by Kaplan shows that children value a challenge, especially in the context of a game—which was helpful for planning future versions of the iPad-based intervention.

Researcher	What could we do to make this better?
Child F	A bit more harder.
Researcher	Ahh.
Child F	'Cos it's fun for me to make it more harder. Sort of. (pause) But then I can try harder. See?

Interviews with children with communication difficulties are not routinely included in clinical outcomes studies. Yet they provide important windows into the value of speech and language therapy intervention and how children experience the intervention. In future, questions relating to children's lives in the Speech Participation and Activity Assessment of Children (SPAA-C) (McLeod, 2004) may be used, given that it has been translated into Afrikaans (Charles Sturt University, 2012) and includes questions for the children themselves, their siblings, friends, parents, teachers, and others involved in their daily lives.

As Speech-Language Pathologists, How Can We Improve Our Ability to Listen to and Incorporate These Voices in Our Research and Practice?

Listening to families, professionals, and children has informed our research in several ways. Families have been considered experts, able to provide accurate and ecologically valid information about their child to inform our development of tools and interventions, and the experiences of parents led to deeper consideration of the services and supports offered. Listening to professionals—speech-language pathologists, educators, and others—has also encouraged us to reflect on the services we offer, how people view the relationship between languages, and the type of research we need to do to ensure relevance to the people we serve.

Although children themselves lie at the heart of Bronfenbrenner's (1979) model, as researchers, we have listened to children less often and less carefully than families and professionals. Authors (e.g. Markham et al., 2009; McCormack et al., 2019; Roulstone & McLeod, 2011) have undertaken child-centred studies of children with speech-language and communication needs that provide detailed insights into the experiences of children, but there are few detailed investigations of the perspectives of children with speech and language difficulties in South Africa. This is a gap in the literature and is much-needed work. Where our group has documented young children's perspectives on intervention, we have done so using individual semi-structured interviews typically after intervention. Other methodologies should be considered. For example, young children or those with severe speech difficulties may prefer to communicate using pictures they have drawn (e.g. McCormack et al., 2022), or tools such as charts, booklets, puppets, and photography that enable children to clarify their needs explicitly, ask questions, get attention or comfort, express their feelings, and accept or reject interventions (Roulstone & McLeod, 2011).

Small group discussions may also be valuable as children may feel more able to speak openly in the presence of their peers or in peer-mediated sessions. When giving feedback to adults on interventions, many children will not want to appear critical, especially if they have been brought up to respect those older than them and that to criticise an adult is wrong—part of the child's cultural values or macrosystem. The *South African Child Gauge* (2011) acknowledges that ensuring children's participation can be challenging and provides guidelines to encourage children's participation (Kruger & Coetzee, 2011). The authors urge children's involvement as early as possible. When we have included children's voices, we have tended to get children's perspectives after intervention. Although such feedback is important, we would do better to involve children from the start of intervention. Further, when researchers or clinicians invite children to give input, we must be ready to listen carefully to their suggestions and be open to changing things and practising differently (see Lundy, 2007 and McCormack et al., 2018 for further consideration of this issue).

Changing attitudes is a good place to start. If professionals such as speech-language pathologists start by acknowledging the important place of children in society—and at the very heart of Bronfenbrenner's concentric circles—then we will surely want to include them in every step of the planning and implementation of our research and practice. Speech-language pathologists are professionals who have expertise and experience with children and detailed knowledge of communication—how to facilitate it and how it can break down. Armed with this specific skill set, we should be at the forefront of professionals involving children and listening to their voices in our daily practice. In a country like South Africa, speech-language pathologists have a very important and as yet unfulfilled role in advocating that children's voices be heard in many more spaces and providing practical support to ensure that process occurs.

While children's participation should be encouraged, we need to balance children's participation with protecting their rights (Bray, 2011). Protective steps may include ensuring their confidentiality and that the abuse of power by adults does not occur. Children should also have the right to necessary information and an environment conducive to their participation and expression of their views. In our research studies with children, we ensure that ethical approval is obtained from our local Human Research Ethics committee, and as part of that process, we develop detailed information for the participants in an age-appropriate way and in the child's home language. We use detailed protocols to ensure that children can indicate if they do not want to take part or if they want to stop at any time (see Merrick (2011) for more detailed discussion on consent and assent when working with children with speech, language, and communication needs). For young children, this can mean the careful observation of body language, and studies where an adult, ideally familiar with the child's speech community, can participate are generally more successful than those where unfamiliar adults try to engage with young children. We also always obtain informed consent from parents or carers, ensure that children are not coerced into participating, and focus on balancing child-adult power relations. Our multilingual team is essential, and without the diverse languages and backgrounds of our team,

our work would be impossible. Distributive justice is also an important ethical principle. We want to make sure that our research benefits the children of South Africa in a way that is fair. Given the great shortage of resources for children acquiring indigenous languages in our country, our projects focus on local languages and aim to build resources that will be important for these children and their families.

Conclusion

The underlying rationale for our group's research is that every member of society—irrespective of age or the languages spoken—should have equal opportunities and a voice that is heard. Children are the focus of our work, but we acknowledge that they are embedded in specific contexts, as depicted in Bronfenbrenner's model. Children should be able to make their wishes known and express themselves freely, in line with the Convention on the Rights of the Child (United Nations, 1989). However, a child's family, broader environment, and available opportunities may make these rights difficult to realise. SLPs have a role to play in ensuring that children have a voice and are heard, irrespective of their circumstances. SLPs can support this process in many ways—through their research, clinical practice, and advocacy work. In this chapter we described our research focusing on children acquiring under-resourced languages in South Africa and how we aim to help children use their voices to communicate in their home languages. We also described the value of listening to the perspectives of children, families, and professionals about our research and its relevance to their lives. To date our research journey aligns with several of the Sustainable Development Goals (United Nations, 2015—SDG 3, good health and well-being; SDG 4, quality education; and SDG 10, reduced inequality). We will strive to strengthen these links in our future endeavours.

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Michelle Pascoe, PhD is a speech-language pathologist and researcher at the University of Cape Town, South Africa. Her research focuses on children's speech and language acquisition in the languages of Southern Africa.

Mikateko Ndhambi is a speech-language pathologist, lecturer and researcher based in Pretoria, and a PhD candidate at the University of Cape Town, South Africa. She is interested in child language development in the indigenous languages of South Africa. Her PhD focuses on children's acquisition of Xitsonga.

Olebeng Mahura, PhD is a speech-language pathologist whose masters and doctoral studies at the University of Cape Town, South Africa, focused on children's Setswana acquisition. She is now an Adjunct Research Fellow at Charles Sturt University, Australia.

Nomfundo Peaceful Buthelezi is a PhD candidate at the University of Cape Town and a lecturer at the University of KwaZulu-Natal in Durban, South Africa. She is an experienced speech-language pathologist whose PhD focuses on children's acquisition of isiZulu.

Nicole Husselmann is a speech-language pathologist whose master's degree focused on children's early acquisition of South African English and Afrikaans.

Babalwa Ludidi is a speech-language pathologist working in the Eastern Cape region of South Africa and a postgraduate student at the University of Cape Town. Her research focuses on children's acquisition of isiXhosa.

Chapter 12
When Are Speech Sounds Learned and Why Is This Important for Children to Be Heard?

Sharynne McLeod, Kathryn Crowe, and Jane McCormack

Abstract Children's communication development is a remarkable achievement that enables children to realise their right to receive information and express their views freely (United Nations, 1989). Until recently, limited information has been available about communication expectations for children, especially in languages other than English. In this chapter, we draw together and elaborate on three large-scale reviews of children's consonant and intelligibility development across more than 30 languages encompassing data from thousands of children worldwide. Understanding the developmental trajectory of children's communication enables us to recognise when children have difficulties, which can lead to children's voices being misinterpreted or silenced. Our analysis concludes that across the world, almost all 4- to 5-year-old children are intelligible to family members, friends, and strangers, have acquired most consonants within their ambient language, and can produce consonants correctly more than 90% of the time. By understanding children's developmental trajectory for communication, parents, educators, and health professionals can advocate for and make timely referrals to communication specialists (e.g. speech-language pathologists) who can support the development of communication, improve participation of children, and reduce inequalities (SDG 10), including the impact of communication difficulties on literacy, numeracy, socialisation, behaviour, and inclusion.

S. McLeod (✉)
Charles Sturt University, Bathurst, NSW, Australia
e-mail: smcleod@csu.edu.au

K. Crowe
Charles Sturt University, Bathurst, NSW, Australia

University of Iceland, Reykjavík, Iceland
e-mail: kcrowe@csu.edu.au

J. McCormack
Australian Catholic University, North Sydney, NSW, Australia
e-mail: jane.mccormack@acu.edu.au

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Introduction

Our ability to communicate is established in early childhood. It impacts our identity, relationships, ongoing education, future employment, and engagement in community social and civic life and is strongly associated with literacy outcomes (cf. McCormack et al., 2009; McLeod et al., 2019). While many people consider children's communication skills at the time of transition to school and the beginning of literacy (McAllister et al., 2011), infants communicate long before they correctly articulate spoken words, and they do so for particular reasons. That is, their communication serves a function. For instance, infants use eye gaze to communicate interest, point to make requests, and vocalise to communicate contentment, discomfort, or displeasure. For most children, the development of speech and language around the age of 12 months increases communication functions dramatically. Beyond their first year, as children's vocabulary expands, speech becomes more articulate, longer utterances emerge, and their language includes grammatical elements. These expansions allow children to share ideas, play, tell stories, recall events, request help, ask questions, demand attention, and more (McCormack & McLeod, 2024).

Indeed, children have shared the many functions enabled by communication through drawings and descriptions of themselves "talking to someone" (McCormack et al., 2022). Their portrayals of "talking" include images of a wide range of communication partners with whom they communicate (e.g. family members and friends) as well as a wide range of contexts in which they communicate (e.g. home, parks, at the beach, in the garden, at pre-school). Furthermore, they illustrate a variety of purposes of communication, including telling stories, asking questions, and showing affection. In these images, children show their own communication as an important element of their identity and that their voice is an important tool for interacting with their world.

Communication enables the building of social relationships, the demonstration of knowledge and participation in educational experiences, and the expression of self-identity and assertion of autonomy, all of which are recognised as important aspects of childhood and embedded within the Convention on the Rights of the Child (CRC) (United Nations, 1989). The CRC recognises the rights of children to enjoy their own culture and use their own language (Article 30) and to express their views in matters that concern them (Article 12) and through their chosen media (Article 13). It recognises the rights of children to receive education that will enable the development of the child's abilities to reach their fullest potential (Articles 28 and 29) and the rights of children to engage in leisure, play, and recreation (Article 31). Thus, the CRC explicitly recognises the rights of children to communicate and

implicitly recognises the need for communication if other rights are to be fulfilled (i.e. education and recreation). The communication rights included in the CRC are echoed throughout other declarations and conventions of the United Nations (McLeod, 2018). The first time this was articulated was in Article 19 of the Universal Declaration of Human Rights (UDHR, United Nations, 1948): "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers". For children with typically developing speech, language, and communication skills, it is likely that the rights listed within the CRC will be upheld as their skills will enable them to engage in their chosen life activities. For children with speech, language, and communication needs (SLCN), this is less certain. The impact of SLCN on communicative functions can impact participation in a wide range of life activities. For example, unclear or unintelligible speech can decrease a child's ability to share ideas, engage in play, tell stories, recall events, request help, ask questions, and so on, which can then affect their ability to engage in social and educational activities (McCormack et al., 2009).

The United Nations has established the Sustainable Development Goals, which provide a "shared blueprint for peace and prosperity for people and the planet, now and into the future" (United Nations, 2015). Communication is central to all 17 SDGs (McLeod & Marshall, 2023). For example, SDG 4 is focused on quality education, recognising the need for all children to have access to quality early childhood education, primary and secondary education leading to effective learning (Target 4.1, 4.2); for vulnerable children including those with disabilities to have equal access (4.5); that all youth achieve literacy and numeracy (4.6); and that global citizenship and appreciation of cultural diversity is promoted (4.7). Implicit within SDG 4 is the need for effective communication skills; beyond this, other goals are dependent on effective communication in order to be achieved. For instance, successful communication skills are required for participation in employment (SDG 8 – decent work and economic growth) and financial sustainability (SDG 1 – no poverty) and for reducing inequalities (SDG 10).

Without the ability to communicate and without communication difficulties being accurately identified and remediated, children's voices can be ignored, misinterpreted, or silent. The achievement of a number of SDGs is related to fostering and supporting the ability of children to have a voice, and this requires parents and professionals who can identify challenges children experience in expressing themselves. Across the world there are over 7000 languages (Eberhard et al., 2022). Knowledge about communication expectations across languages is important for parents, educators, and communication specialists (e.g. speech-language pathologists). Timely referral for communication support improves the participation of children who are having difficulty making themselves understood and reduces the impact of communication difficulties on literacy, numeracy, socialisation, behaviour, and inclusion. This, in turn, addresses goals and aspirations highlighted in the Sustainable Development Goals, the Convention on the Rights of the Child, and other key international conventions.

This chapter presents data regarding three large-scale reviews of children's speech acquisition. Review 1 presents consonant acquisition of 26,007 children speaking 27 languages (McLeod & Crowe, 2018). Review 2 presents consonant acquisition of 18,907 children acquiring English in the United States (Crowe & McLeod, 2020). Review 3 presents intelligibility of 4235 children speaking 14 languages (McLeod, 2020). To summarise the knowledge about communication expectations across languages from the three studies, 5-year-old children:

- Are usually to always intelligible, even to strangers.
- Can pronounce about 93% of their consonants correctly and 98% of their vowels correctly.

These studies also provide information about children of other ages; however, in this chapter we focus on the age where children around the world often transition to formal education, an age when children and educators consider children's communicative capacity to participate in a broad range of situations. There are only a few difficult consonants (e.g. English "r" and "th") that children master after the age of 5; around the time that they are beginning to learn to read and spell. Awareness of the developmental trajectory of children's communication enables the celebration of their achievements and recognition of when support may be required to assist children's communication growth and promote their participation in education and other life activities.

It is important to reduce inequalities (SDG 10) by understanding the developmental trajectory of children's communication across the world's languages because most of this knowledge has been focused on English. Indeed Henrich et al. (2010) famously stated "Behavioral scientists routinely publish broad claims about human psychology and behavior in the world's top journals based on samples drawn entirely from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies" (p. 61). There has been a call to promote communication for all, not just for English (Moss, 2010), by drawing on knowledge from across the world (Stenius et al., 2017), including studies that have not been published in English. Every country in the world has official or majority languages, and many studies have been undertaken that are not published in English (Meneghini & Packer, 2007). Mastery of consonants and intelligibility are the most widely used metrics of typical speech development and for identifying speech sound disorder (Edwards & Beckman, 2008). However, within a given context, parents, speech-language pathologists, and educators usually only have access to information describing typical speech development in the dominant language of the context, for example, English in Australia. A lack of knowledge about speech development in other languages means that multilingual children's skills in their home languages are often discounted. The identification of speech sound disorder needs to be based on a consideration of whether children have typical/atypical skills in all the languages they speak. When only the skills in the language used in education and the wider community are considered, multilingual children may (a) be incorrectly diagnosed with a speech sound disorder because their typical skills in their home language were not considered, or (b) be

incorrectly considered not to have a speech sound disorder because their difficulties in their home language were not considered (Margetson et al., 2024). By examining cross-linguistic patterns in speech development, general rules can be created about the rate and age of children's acquisition of speech sounds and their accuracy of speech production. The benefit of this would be more accurate referral for support for children who need this help to develop and use their voice and to participate in SDGs, such as good health and wellbeing (SDG 3), quality education (SDG 4), and reduced inequality (SDG 10). Each of the three reviews has drawn on expertise from across the world, in a range of languages, and will be described below.

Review 1: Consonant Acquisition in 27 Languages (McLeod & Crowe, 2018)

McLeod and Crowe (2018) conducted a comprehensive review of children's acquisition of consonants across 27 languages. Three sources were used to identify eligible studies: (1) a systematic search of 13 databases that yielded 1684 hits with 623 unique citations; (2) a database collated by the first author over 10+ years that yielded 40 additional papers; and (3) consultation with the International Expert Panel on Multilingual Children's Speech yielded five additional papers. To be included in the review, the paper had to present research data to describe typical speech and language development for singleton consonant acquisition and be a journal article, book chapter, or dissertation reporting on 10 or more child participants. Papers were excluded if they assessed an incomplete phonemic repertoire of the target language, if data were not in a usable form or inconsistent (e.g. information in a table was different from information in the text), if the only criterion for acquisition was <75%, or if monolingual and multilingual participants' data were combined. Therefore, the review was conducted on 60 papers that described 64 studies and were published in 12 different languages. Overall, the papers described a total data set of 26,007 children who were acquiring one of 27 languages: Afrikaans, Arabic, Cantonese, Danish, Dutch, English, French, German, Greek, Haitian Creole, Hebrew, Hungarian, Icelandic, Italian, Jamaican Creole, Japanese, Korean, Malay, Maltese, Portuguese, Putonghua/Mandarin, Setswana, Slovenian, Spanish, Swahili, Turkish, and isiXhosa. Each study ranged in size from 10, which was the minimum cut off, up to one study of 7602 children. Multiple variables were considered across the data, so inter-rater reliability of 10% of data taken across the 60 papers was undertaken revealing 96.7% agreement across all variables.

One of the main variables that was considered in the review was the age of acquisition for individual consonants. All the consonants that can be produced by the mouth (and are used in the world's languages) are documented in the International Phonetic Alphabet (International Phonetic Association, 1999) using unique symbols for each sound (e.g. 's' = /s/; 'sh' = /ʃ/, 'ch' = /ʧ/). Most of the world's consonants are pulmonic (produced by air from the lungs) and some are non-pulmonic (airflow

does not come from the lungs, such as clicks and ejectives). Each language uses a unique set of consonants. For example, English has 24 pulmonic consonants: /p, b, t, d, k, g, m, n, ŋ, f, v, θ, ð, s, z, ʃ, ʒ, h, ɹ, j, l, w, ʧ, ʤ/ (Ladefoged, 2005). Cantonese has 19 pulmonic consonants, including consonants that contrast aspiration (increased airflow indicated by /ʰ/) and labialisation (increased lip rounding indicated by /ʷ/): /p, pʰ, t, tʰ, k, kʰ, m, n, ŋ, f, s, h, j, l, w, ts, tsʰ, kʷ, kʷʰ/ (Zee, 1999). isiXhosa has 41 consonants: 30 pulmonic consonants /pʰ, b, tʰ, d, cʰ, ɟ, kʰ, g, m, n, ɲ, ŋ, r, f, v, s, z, ʃ, x, ɣ, ɦ, ɬ, ɮ, j, ɭ, w, tsʰ, dz, ʧʰ, ʤ/ and 11 non-pulmonic /ɓ, p', t', k', c', ts', ʧ', kx', ǀ, ǁ, !/ (Mowrer & Burger, 1991). For each of the 64 studies, the age of acquisition for every consonant was recorded according to whether the researchers studied 75–85% criteria or 90–100% criteria or both.

On average, across the 27 languages, almost every consonant was produced correctly by five years of age. Specifically, children produced the majority of the world's consonants (pulmonic and non-pulmonic) by 3;0 to 3;11 years applying the 75–85% criteria and by 4;0–4;11 years applying the 90–100% criteria. Acquisition of consonants is gradual, and only a few consonants were difficult for children over four years of age. A few consonants were acquired between 5;0–5;11 /ʒ, cç, ɹ, χ, r, θ/ and /β, ʍ/ were acquired by 7;6 (McLeod & Crowe, 2018). Therefore, communication specialists can consider that 5-year-old children who cannot produce consonants in their home language my need specialist support to become intelligible and have foundational skills to transition to school and learn to read (McLeod et al., 2019).

There were more studies undertaken in English than in the other languages documented in McLeod and Crowe (2018). When the studies of English consonant acquisition were examined, 14 papers that included 15 studies reported children's age of acquisition of English consonants in the following dialects: Australian, African-American, General American, Midwestern American, British, Cape Town, Irish, and Malaysian. Eight of these studies of English used the 90–100% criteria for acquisition, so the following consonants could be classified as being acquired early, middle, and late (cf. Shriberg, 1993):

- English consonants that are early to acquire (2;0–3;11) /p, b, m, d, n, h, t, k, g, w, ŋ, f, j/ (equivalent English orthography = p, b, m, d, n, h, t, g, w, ng, f, y).
- English consonants that are next (middle) to acquire (4;0–4;11) /l, ʤ, ʧ, s, v, ʃ, z/ (=l, j, ch, s, v, sh, z).
- English consonants that are late to acquire (5;0–6;11) /ɹ, ʒ, ð, θ/ (= r, zh, voiced th, voiceless th).

Figure 12.1 is a pictorial representation of the acquisition of the age of acquisition of English consonants using the 90–100% criteria (Charles Sturt University, 2012c).

Other variables that were considered in the review were percentage of consonants correct (PCC) and percentage of vowels correct (PVC). PCC is often used as a metric to describe severity of childhood speech sound disorder (SSD) and was

Fig. 12.1 Average age of acquisition of English consonants across the world (90–100% criteria) based on the review by McLeod and Crowe (2018) (Reprinted with permission from Sharynne McLeod and Kathryn Crowe)

originally calculated by Shriberg and Kwiatkowski (1982) as the division of the number of consonants produced correctly by the total number of consonants in a child's connected speech sample. On average, most consonants and vowels were produced correctly by five years of age when the average PCC was 93.80 (across 15 studies of 12 languages) and the average PVC was 98.02 (across seven studies of five languages). Since publication, additional studies have been published demonstrating similar findings. For example, there have been studies of children's consonant acquisition in languages as diverse as Icelandic (Másdóttir et al., 2021), Fiji English (McAlister et al., 2022), Persian (Zarifian & Fotuhi 2020), and Vietnamese (Le et al., 2022; McLeod et al., 2023; Phạm & McLeod, 2019) that echo the finding that consonant acquisition is mastered by most children by their fifth birthday.

Review 2: Consonant Acquisition in the United States (Crowe & McLeod, 2020)

SLPs in the United States inform their diagnostic decision-making, eligibility for funding, and intervention strategies on published evidence, including information about children's speech development (Ireland et al., 2020). Consequently, a review was undertaken to specifically study children's acquisition of English consonants in the United States (Crowe & McLeod, 2020). Four sources were used to identify eligible studies: (1) studies described in McLeod and Crowe (2018) were included in the review (excluding the study of US children that analysed data using the 100% criterion); (2) a systematic search of 12 databases that yielded 807 studies with 399 unique citations, but no unique relevant studies were added; (3) a systematic search of Google Scholar yielded 161,000 studies, but no unique relevant studies were added; (4) a systematic search of articulation/phonology assessments yielded 57 speech assessments, and six additional studies were identified in assessment manuals, so were included in the review.

Therefore, the review was conducted on 15 studies (six articles and nine assessments). Overall, the papers described a total data set of 18,907 children acquiring English in the United States. Each study ranged in size from 147 up to one study of 5515 children. Multiple variables were considered across the data, so inter-rater reliability of 33.33% of data was undertaken revealing 95.7% agreement across 258 data points from all variables.

Similar to the findings from McLeod and Crowe (2018), on average, almost every consonant was produced correctly by five years of age. Ten of these studies of US English used the 90% criteria, and specific data were as follows:

- US English consonants that are early to acquire (2;0–3;11) /b, n, m, p, h, w, d, ɡ, k, f, t, ŋ, j/ (equivalent English orthography = b, n, m, p, h, w, d, g, k, f, t, ng, y).
- US English consonants that are next (middle) to acquire (4;0–4;11) /v, ʤ, s, ʧ, l, ʃ, z/ (= v, j, s, ch, l, sh, z).
- US English consonants that are late to acquire (5;0–6;11) /ɹ, ð, ʒ, θ/ (= r, voiced th, zh, voiceless th). Note, only /θ/ (voiceless 'th') was acquired after 5;11 years.

Similar results were found between the two reviews regarding the order and age of acquisition of consonants (Crowe & McLeod, 2020; McLeod & Crowe, 2018). The main difference was that in the review of children speaking English in the United States, the age of acquisition was younger (2;0–2;11) for some of the consonants. A comparison between PCC and PVC data across the reviews cannot be made since PCC and PVC were not included in any of the studies from the review of typical English consonant acquisition in the United States. To summarise the two reviews of consonant acquisition: consonant acquisition is gradual. Most children acquire consonants in their ambient language by five years of age. This knowledge is important for ensuring timely referral for communication support, reducing inequalities (SDG 10) and enabling children's voices to be heard (United Nations,

1989). When making decisions about children's speech and language capacity, this information is one part of understanding the whole child in context. A comprehensive summary of additional speech acquisition information can be found in McLeod (2022).

Review 3: Intelligibility in 14 Languages (McLeod, 2020)

The third review (McLeod, 2020) considered children's intelligibility across 14 languages using the Intelligibility in Context Scale (ICS, McLeod et al., 2012). The ICS is a parent report measure that has seven questions to determine children's perceived intelligibility with different conversational partners (parents, friends, teachers, strangers) on a 5-point Likert scale (*always – never*). The ICS is available for free in over 60 languages (Charles Sturt University, 2012b) and can be used by education and health practitioners to consider whether children may benefit from support to realise their ability to communicate effectively and have their voice heard. The third review analysed ICS data from the 18 studies that had been published at the time. These studies included ICS data from 4235 children from 14 countries speaking 14 different languages: Cantonese, Croatian, Dutch, English, Fijian, Fiji-Hindi, German, Italian, Jamaican Creole, Korean, Portuguese, Slovenian, Swedish, and Vietnamese. Across these studies, 4- to 5-year-old children were *usually* to *always* intelligible when talking to others, even to strangers. Analysis of the psychometric properties across the 18 studies provided cross-linguistic evidence for using the Intelligibility in Context Scale as a primary screening tool to identify which children require additional assessment. Since this review, one study has demonstrated a significant relationship between transcription intelligibility scores and ICS scores (Soriano et al., 2021), adding to the evidence for the usefulness of this measure. Since the publication of this review, there have been studies of children's intelligibility using the ICS in languages such as Indonesian (Natalia et al., 2022), Persian (Aghaz et al., 2022), Tamil (Bathina et al., 2022), Turkish (Şanlı & Evci, 2022), and American English (Soriano et al., 2023).

Resources

The Multilingual Children's Speech website (Charles Sturt University, 2012a) has links to over 200 speech acquisition studies in more than 50 languages to support the exploration of data from individual languages, rather than relying on combined data. The website also includes an additional child-focused assessment, called the Speech Participation and Activity Assessment (SPAA-C) where children are asked how they feel about speaking. Furthermore, the International Expert Panel on Multilingual Children's Speech has written a tutorial (McLeod et al., 2017) on how

to assess children and families who don't speak the same language and how to use data such as included in the reviews described above. Children who have unintelligible speech (speech sound disorder) who do not speak the dominant language of their community are among the most marginalised and unheard people on the planet (McLeod, Verdon & Crowe, 2023). Knowledge that all children should have the capacity to communicate effectively by five years of age ensures they receive appropriate and timely communication support essential to reduce inequalities (SDG 10) and enable children to receive and impart information (United Nations, 1989).

Conclusion

Young children are competent language learners and can be understood by their fifth birthdays, which is around the time many children begin formal schooling. Competency in producing speech sounds in the ambient language enables young children to be intelligible, facilitating their right to communicate, and to use this knowledge to learn to read and spell, to make friends, socialise, participate, and grow to be citizens of the world.

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Sharynne McLeod, PhD is distinguished professor of speech and language acquisition at Charles Sturt University, Australia. She is an elected Fellow of the Academy of the Social Sciences in Australia and has been an Australian Research Council Future Fellow. She was the first international recipient of the Honors of the American Speech-Language-Hearing Association and is a Life Member of Speech Pathology Australia. Her research focuses on children's speech and foregrounds the right of everyone to participate in society. She presented a speech about communication rights at the United Nations and has provided expertise for the World Health Organization.

Kathryn Crowe, PhD is an adjunct researcher at the University of Iceland, adjunct associate professor in the School of Education, Charles Sturt University, Australia, an affiliate of the Center for Education Research Partnerships at the National Technical Institute for the Deaf, Rochester Institute of Technology, USA where she was a Fulbright Scholar. She has worked as a speech-language pathologist, academic, and researcher and holds degrees in speech pathology, linguistics, special education, and interpreting. Her research has focused on cultural and linguistic diversity in children, particularly children with hearing loss, their families, and the professionals who work with them.

Jane McCormack, PhD is an associate professor and head of speech pathology at the Australian Catholic University, Australia. She is a certified practising member of Speech Pathology Australia and has worked in community health clinics, schools, early intervention settings, and brain injury rehabilitation services with children with speech, language, and communication needs (SLCN). She researches the life experiences of children with SLCN and their families, the application of the International Classification of Functioning, Disability and Health (ICF; WHO, 2001) in speech pathology, collaborative practice, and alternative models of speech pathology education and service delivery.

Part III
Listening to Children During Challenging Times

Chapter 13
Giving Voice to Young Children Navigating Complex Life Challenges Through a Strengths Approach

Linda Mahony and Angela Fenton

Abstract Numerous experiences may be traumatic for children, such as parental separation and divorce, parental incarceration, abuse and neglect, natural disasters, experiencing unrest and wars, and life-threatening illness. Even though social and natural disasters are becoming increasingly prevalent, research investigating and offering practical advice to early childhood educators about supporting children during and after these events is limited. In this chapter, we use a Strengths Approach. The term *Strengths Approach* is sometimes used interchangeably to refer to both the specific approach developed by St. Luke's, Australia (McCashen, 2005, 2017), and, as a descriptive term for broader strengths-based practices. In this paper, we use the upper-case naming convention to differentiate a specific "Strengths Approach" (McCashen, 2005) and lower case for other "strengths-based approaches". We use a Strengths Approach as a framework to explore two vignettes illustrating how early childhood teachers listen to young children experiencing challenging events and respond by applying the Convention on the Rights of the Child (CRC) and the United Nations Sustainable Development Goals (SDGs). In these vignettes, the early childhood educators listened to young children's stories about parental separation and divorce and child abuse and responded by prompting children to activate their own resources to enact positive change. This analysis adds to knowledge about how early childhood educators can listen to and give children a voice about sensitive life experiences that impact their lives. Educators and other professionals should recognise the multitude of ways in which children can communicate about sensitive topics, such as parental separation and divorce, and child abuse, and the myriad ways to

L. Mahony (✉)
University of the Sunshine Coast, Sippy Downs, QLD, Australia
e-mail: lmahony@usc.edu.au

A. Fenton
Charles Sturt University, Albury, NSW, Australia
e-mail: afenton@csu.edu.au

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encourage young children to have a voice and support the enactment of the CRC and SDGs.

Keywords Children's voice · Strengths Approach · Parental separation · Parental divorce · Child abuse

Introduction

Complex life challenges can have traumatic effects on young children. Researchers have shown that well-being and learning are hindered when children are exposed to trauma (Barr, 2018; McKay et al., 2023). While social and natural disasters are becoming more prevalent, research providing practical advice for early childhood educators when working with young children (birth to eight) and their families during and after these events is limited. The existing research with early childhood educators and teachers reported actions focused on constructing emotional, behavioural, and academic support for young children and forming partnerships with parents, school personnel, and community members (Mahony et al., 2015b). Early childhood educators are in an ideal position to support children during these unsettled times to promote well-being and learning.

Strengths Approaches emerged from social work and psychology research and practice in the 1960s and 1970s in the United States as a response to complicated societal challenges experienced by families. Strengths Approaches developed in contrast to what was perceived as a disempowering, deficit-based culture of clinical treatment of such issues (see, for example, Glicken, 2004; McMillen et al., 2004; Saleebey, 1996, 2009; Weick et al., 1989). Positive psychology (Seligman, 2002; Seligman et al., 1995) provided further influence and social service research defined the principles and applications of a strengths perspective (Saleebey, 1996) when working with complex family issues, particularly in therapeutic intervention work. In Australia, founders of the Strengths Approach, most particularly McCashen (2005, 2017), drew upon international strengths perspectives, as well as those used in Solutions-Focused and Narrative approaches to individual and family therapy (McCashen, 2005; Scott & O'Neil, 2003) and community capacity building models (Beilharz, 2002; Scott, 2000) to articulate the Strengths Approach (McCashen, 2005). Strengths Approaches have more recently developed to present a potentially beneficial collaborative, social justice practice model and theoretical framework (Joseph et al., 2022) for contemporary education contexts, including early childhood (Bone & Fenton, 2015; Fenton & McFarland-Piazza, 2014; Fenton et al., 2015). Indeed, internationally, early childhood educators are repeatedly tasked to work in strengths-based ways to "support the access and participation of all children and families, especially those with complex needs" (Fenton et al., 2015, p. 27). In Australia, the Early Years Learning Framework (Australian Government Department of Education, 2022) and the National Quality Framework and Standards (Australian Children's Education and Care Quality Authority, 2023) both promote

Strengths-based Approaches. Guidance or examples of how this is achieved in practice are, however, limited.

In this chapter, we explore the ways early childhood educators listen to young children to inform how they help them adjust to their changing circumstances and promote well-being and learning. Through vignettes, we focus on two challenging life events: parental separation and divorce and child abuse. A Strengths Approach is used to explore how early childhood educators listening to young children enact the Convention on the Rights of the Child (CRC) (United Nations, 1989) and Sustainable Development Goals (SDGs) (United Nations, 2015).

Impact of Traumatic Life Events on Young Children

Many traumatic life events may impact young children's well-being and development, such as parental separation and divorce, parental incarceration, abuse and neglect, natural disasters, experiencing unrest and wars, and life-threatening illnesses. Throughout their careers, the authors have researched two traumatic life events that can impact young children – parental separation and divorce and child abuse, which are the focus of this chapter. Viewing these challenging life events through Bronfenbrenner's (1979) ecological systems theory highlights the interconnecting relationship between these social influences on young children's social, emotional, and academic development. Bronfenbrenner (1979) views the child at the centre of a nested system which, in turn, has multiple levels affecting the child (Bowes & Hayes, 2004; Bronfenbrenner, 1977, 1979). Of importance in this chapter is the micro system, that is, the immediate settings, such as family, schools and early childhood education and care services, and community that each influence the others to provide (or fail to provide) a healthy system. In this sense, a well-functioning system provides for the needs of children, who are at the centre of the system.

Parental separation and divorce affect a substantial proportion of children. Recent statistics indicate that divorce rates are relatively consistent across countries in the Western world, with almost one-half of marriages ending in divorce (Australian Bureau of Statistics, 2021; Gähler et al., 2009; Office for National Statistics, 2022; Statistics New Zealand, 2022; United States Census Bureau, 2021). For many young children, parental separation and divorce are traumatic events affecting their social and emotional well-being and learning (Amato, 2000; Amato & Keith, 1991; Anthony et al., 2014; Eriksen et al., 2017), yet other children are resilient (Pedro-Carroll, 2005). Parental separation and divorce can have short-term or long-term effects on children, which can be detrimental to their social, emotional, and academic development.

Child abuse has been defined as:

> All forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship or responsibility, trust or power (World Health Organization, 2006, p. 9).

Child abuse is a worldwide issue that causes serious trauma to children and families, with estimates that up to one billion children (2–17 years) experience physical, sexual, or emotional neglect each year (World Health Organization, 2020). UNICEF provided interventions to 4.4 million children who had experienced violence in 129 countries in 2019 (UNICEF, 2020). The impacts of child abuse and maltreatment are profound and can include impairment to cognitive processes and flexibility as well as a lack of inhibitory control and self-regulation (Demers et al., 2022; van der Bij et al., 2020) with negative impacts on education success (Fry et al., 2018; Romano et al., 2015). Additional challenges include a higher likelihood for children who have been abused to experience anxiety, difficulties forming friendships, lower academic achievement, and mental health challenges (Vilariño et al., 2022). According to Fry et al. (2018), the result for children who have been abused is a high risk of extended educational disadvantage and social inequality. While most affluent countries have child protection laws and mandatory reporting requirements for early childhood educators, there are huge gaps in the consistency of legislation and protection provisions internationally, especially for children living in impoverished conditions (ISPCAN, 2023; UNICEF, 2020).

Convention on the Rights of the Child

Article 7 of the CRC (United Nations, 1989) includes the right for children to grow up safely within families and be guided and nurtured by their parents; however, those rights can diminish when the process of separation and divorce results in an escalation of parental conflict, or when a parent is absent from raising their child. Indeed, the CRC realises that children have the right to be informed and should be free to express their opinions. As such, children are viewed as active participants in the divorce process rather than victims of their parents' divorce.

With child abuse, Article 36 of the CRC provides that "children should be protected from any activities that could harm their development", and Article 39 further identifies the need to help restore self-respect to neglected and abused children. Articles 34 and 35 additionally highlight that sexual abuse, child abduction, and slavery are of worldwide governmental protection concern. Article 12 provides for children to be able to express their views freely on all matters affecting their lives, and their views are given due consideration in accordance with the age and maturity of the child.

Sustainable Development Goals

The Sustainable Development Goals (United Nations, 2015) are a call to action to end poverty and inequality, protect the planet, and ensure that people enjoy health, justice, and prosperity. Parental separation and divorce and child abuse can pose

barriers to young children growing to fully realise the aspirations of the SDGs. SDG 3 promotes health and well-being for all. Relevant to this chapter is promoting social and emotional well-being and learning of young children experiencing parental separation and divorce or child abuse. Early childhood educators can play a part in meeting SDG 3. For example, when educators act on child abuse concerns by adhering to mandatory reporting legislation and drawing on the many resources available in Australian schools and early childhood education and care services, including learning and support teams, counsellors, and psychologists who also provide strengths-based support, they help meet SDG Target 3.2 "by 2030, [to] end preventable deaths of … children under 5 years of age" (United Nations Department of Economic and Social Affairs, 2023).

SDG 4 promotes quality education and lifelong learning opportunities for all. Young children exposed to complex life challenges, such as parental separation and divorce and child abuse, often experience stress factors, such as parental conflict, parental absence, economic disadvantage, and sexual, physical, or emotional abuse that may pose barriers to fully accessing and engaging in education. Early childhood educators can provide a protective buffer by promoting children's positive adjustment, well-being, learning, and development (Mahony et al., 2015b). Additionally, early childhood educators can provide timely identification and positive responses to cases of child abuse and in many jurisdictions are mandated to report child abuse and neglect. In this way, a teacher's everyday work can contribute to meeting SDG Target 4.7 in providing education that promotes "human rights … [and] a culture of peace and non-violence …" (United Nations Department of Economic and Social Affairs, 2023). In the context of this chapter, the authors posit that quality education refers to empowering young children to break through barriers they experience in their daily lives preventing them from realising their full potential. Children experiencing life challenges require a holistic approach where early childhood educators are focused on empowering children to use their resources to break through the barriers and promote social and emotional well-being (SDG 3) as well as academic learning and development (SDG 4).

Early Childhood Educators Listening to Young Children

Early childhood educators have an important role in facilitating positive adjustment for children experiencing challenging life events such as parental separation and divorce (Mahony et al., 2015b) and child abuse issues (Walsh et al., 2019). Early childhood educators have daily contact with children and can refer children for specialised care as well as implement trauma-informed approaches in the classroom (Townsend et al., 2020). They see children for more time than any other adult or professional, apart from children's parents or carers. Early childhood educators are in an ideal position, therefore, to assist children and make sure their well-being, learning, and development are maintained, regardless of what adverse circumstance they are experiencing (Walsh et al., 2023).

While there is much research on the effects of separation and divorce on young children, and child abuse in general, there is little research relating to their experiences in early childhood education and care services and formal schooling. Of the studies conducted, many early childhood educators were aware of children's needs and helped them adjust to their changed circumstances. They were confident in their work so that they could contribute to children's positive adjustment (Øverland et al., 2013). Early childhood educators can play a vital child protection role in identifying, reporting, and supporting parents to develop new parenting skills (Briggs, 2020). Others showed that early childhood educators' interaction with children could influence their well-being, learning, and development, allowing for the possibility that early childhood educators may assist children in making positive adjustments during their parents' separation and divorce (Pianta et al., 2003).

Children construct their own reality in response to their parents' separation and divorce and their experiences with child abuse; therefore, it is imperative for early childhood educators to listen to young children and not jump to conclusions. Listening to children can take many forms: both explicit and implicit conversations, as well as observing their physical cues to deduce knowledge of the context and the child's unique experiences. Yoon and Templeton (2019) implore educators to practice listening carefully to children in what is an "adult-regulated world" not simply "for curricular purposes" but to "understand the creativity and intelligence of young children whose social worlds are meaningful" (p. 55). Listening to children strengthens the capacity of early childhood educators to respond appropriately to their needs.

In explicit conversations, there is a deliberate exchange of knowledge between teacher and child. For example, a child might say "My dad is going away", or "My mum is going away", or "Dad doesn't live with us anymore". Similarly, a teacher may be privy to an unambiguous statement from a child identifying that abuse or neglect has occurred such as, "Oh now I'm going to get another flogging" (Fenton, 2012, p. 148) or physical evidence where "the student had so many lice they were falling onto her uniform" (p. 142).

In implicit conversations, the teacher is not a participant in the dialogue; rather, the teacher may overhear a conversation the child had with someone else or during play. These implicit conversations inform educators' understanding of the child's experience within their family context and may signal issues of child abuse.

With sensitive topics, such as parental separation and divorce, or child abuse, children may not want to talk (Hill, 2015) and early childhood educators need to respect children's choice of silence. Very young children may have difficulty expressing themselves verbally. This means educators need to listen to young children in other ways. All children might communicate through externalising and internalising behaviours. Young children experiencing parental separation and divorce might display angry feelings, frustration, aggression, a short temper, attention-seeking behaviours, have high energy levels, throw tantrums, or refuse to participate in learning experiences. Similarly, for children who have experienced

abuse and neglect, these behaviours may be displayed to varying degrees (Anderson et al., 2022). Early childhood educators might also notice young children appearing sad, lonely, depressed, distressed, or withdrawn. Children might also exhibit behaviours that suggest separation anxiety, lethargy, and reduced self-worth, or have difficulty following routines. It is important for early childhood educators to understand what children might be communicating to them through their physical cues so that they can address their needs.

When early childhood educators listen carefully to young children, they know them well and understand that the children might be fragile. Good educators realise if they make the wrong judgement, it could have an adverse effect (Mahony et al., 2015a). Early childhood educators can be intuitive and may foresee problems that may arise with particular children based on their careful listening and the knowledge they have built of individual children. When early childhood educators listen carefully, they develop an understanding of the child's unique characteristics, family circumstances, and any child abuse issues to inform their pedagogical decisions and actions to promote well-being and learning.

Strengths Approach as a Practice Model

Practitioners who implement a Strengths Approach aim to facilitate the empowerment of individuals to appreciate their own strengths and resources to enact positive change (McCashen, 2017). A Strengths Approach rejects a deficit viewpoint to adversity; rather it aims for a positive outcome for children and takes a collaborative approach to finding solutions to complex issues. This, in turn, informs teachers' unique actions when interacting with children (Mahony et al., 2015a) rather than applying a one-size-fits-all approach.

As a practical guide for enacting a Strengths Approach to complex issues in educational contexts, McCashen (2017) suggests using six stages for reflection, planning, and action:

1. Listening to peoples' stories [children's voices] to explore core issues
2. Developing a picture of the future [visioning] and setting goals
3. Identifying and highlighting strengths and exceptions to problems
4. Identifying additional resources needed to move towards a picture of the future
5. Mobilising strengths and resources through a plan of action
6. Reviewing and evaluating progress and change.

The stages can be used for single incidents or ongoing group issues and can cycle through multiple times as well as overlapping and returning to a previous stage if required. Contrary to criticisms of Strengths Approaches that they are merely positive thinking "quick fix" or "glass half full" approaches (Glicken, 2004, pp. 9–14) that are dismissive of the reality of significant problems in people's lives (Schott et al., 2004), the Strengths Approach demands that issues be fully considered before considering positive strengths and possible solutions.

Vignettes

We use vignettes from interviews constructed with early childhood educators to illustrate how early childhood educators can listen to young children experiencing complex life challenges and how this knowledge informs strengths-based interactions to promote well-being and learning. Vignette 1 highlights how early childhood educators listen to children experiencing parental separation and divorce. Vignette 2 explores how early childhood educators listen to young children experiencing child abuse. The vignettes are presented as small snapshots to provide an "in-depth understanding of a single or small number of 'cases,' set in their real-world contexts" and to encourage "new learning about real-world behaviour and its meaning" (Yin, 2014, p. 4).

The research studies from which the vignettes' data were drawn were conducted according to the National Statement on Ethical Conduct in Human Research (NHMR) and received approval from the Queensland University of Technology (approval number 1000000668) and the Victorian Department of Education and Early Childhood Development (approval number 2010_000749) (Vignette 1) and James Cook University, Queensland Experimentation Ethics Review Committee (approval number H2567) (Vignette 2). Participants received a detailed participant information sheet. Prior to commencement of the study, participants completed a consent form confirming they fully understood the purpose of the study and their role. If participants wished, they could withdraw at any time without consent. In these research studies, sensitive information was shared. While children were not direct participants in these research studies, they were the subject of the interviews with teachers. The researchers ensured confidentiality and privacy of research participants, children, and families were safeguarded.

Vignette 1: Listening to Children About Parental Separation and Divorce

> One of the children in my class usually lived with her mother. Whenever she had to go to her dad, she got stressed. Her behaviour in the class used to be affected, even like energy levels and things like that. I could see that she was not happy, not interacting on that day, crying, teary. When I noticed this, I would be a bit more empathetic towards that child to give them a sense of security, supporting them, boosting their confidence and self-esteem. When I found out what the reason was or what they needed, I changed my strategies accordingly because I think a highly anxious child that is worried about things; I don't think they really take it in. Then you've really got to change tack with them and try and make them feel safe and secure and happy at school and almost forget about the learning or pushing them too much there.

Vignette 1: Analysis and Discussion Through a Strengths Approach This vignette shows how the educator listened and responded to the child. While the child did not engage in a verbal conversation with their educator, the educator

observed changes in behaviour each time the child returned from their non-resident parent's home. Importantly, the educator demonstrated awareness of how these recurring stressful events impacted the child and their emotional well-being and learning. The educator was intuitive and concluded that the child was having a difficult time adjusting to the transition between their two parents' homes (Strengths Approach [SA] Stage 1).

Intuition does not just happen. Rather, it is the unconscious workings of a prepared mind; that is, an educator is only intuitive when they have a deep background understanding of the situation (Benner, 1984). Intuitive early childhood educators know and understand the children in their care. They know as soon as children arrive if they are having a good day or might need extra nurturing and modifications. Such nurturing and modifications might take the form of showing empathy, enhancing continuity, and making adjustments (SA Stage 2). The conclusions of the educator in Vignette 1 informed their interaction with the child and they were empathetic to empower the child to boost their confidence and self-esteem (SA Stage 3). The educator realised this child did not want to verbally discuss their family situation and honoured their choice. The educator listened to the needs of the child and that they were, in their unique way, expressing their views on the matter of their parents' separation and divorce that was affecting their life (SA Stage 1). The educator gave the child's views due consideration as they adjusted their practice to the child's needs (CRC Article 12) (SA Stage 5). In this instance, the educator's actions were focused on promoting well-being (SDG 3) (SA Stage 5) and realised that the child needed to be well-adjusted emotionally before they could learn (SA Stage 2). The educator provided a quality education experience for the child and acted as a buffer or mediator between the stressful homelife circumstance and empowered the child to break through the emotional barriers that were preventing them from taking full advantage of the educational program (SDG 4) (SA Stage 5).

Vignette 2: Listening to Children About Child Abuse

Context Regular occurrences of neglect and abuse were evident in a school where an early childhood educator had co-taught a Year 1 class for a term. The teachers and principal had followed their school child protection policy and where appropriate submitted a child protection notification according to the state mandatory reporting requirements for individual cases. The issue was ongoing, however, and thus involved continuous cycles of a six-stage Strengths Approach. This vignette was captured as the early childhood educator was in the sixth stage of reflection/review.

> A lot of the children didn't come to school to start off with. Of the 14 students in the Year 1 class, less than half would be present. The educator said this was very normal. Children would come to school without shoes on, you could just see that they were being neglected, things like personal hygiene, not having enough food, not having any sleep and not having their messes [toileting] looked after. Unfortunately, a student going to school without lunch

> was common, it seemed as though a lot of the children at the school were neglected. The school was very good though, if students did not have lunch, arrangements were made through the tuck-shop [canteen]. The school also helped families by having a nurse at school that the children could go and see if they were sick, and the school's bus would go and pick up students from their house/residence and then after school would drop them off at their doorstep. This was done to make sure that the children would go to school.

Vignette 2: Analysis and Discussion Through a Strengths Approach This vignette shows how the educator observed the body language and physical needs of the children in her Year 1 class (SA Stage 1). While the children did not verbally express that they were neglected, the educator observed multiple indicators of maltreatment and consistent patterns of neglect factors. Importantly, the educator demonstrated awareness of how child neglect factors can contribute to school absenteeism and children's emotional well-being and ability to thrive and learn. Implicit in this vignette was the acknowledgment of the goal for a positive change (SA Stage 2). The educator was part of a school community that both recognised and prioritised their strengths and available solutions-focused child protection strategies (SA Stage 3). The educator and school were able to identify a range of school and community resources to assist children and families (SA Stage 4). As such, the educator enacted a Strengths Approach (McCashen, 2017) to the care and education of the children in her class. Each challenge was identified separately with a plan of action including personal hygiene, lack of sleep, school attendance, transport, and food needs, and (with collaborative effort) children were given the resources needed to succeed at school (SA Stage 5). In this vignette, there are multiple continuing challenges for the educator, the school, and the children and families to reflect upon and restart the cycle (SA Stage 6). It is important to note when considering this vignette that identifying the layers of stress factors and contextual elements is crucial before early childhood educators and school leaders apply a Strengths Approach. The school community worked together with stakeholders using a *power with* rather than *power over* focus (McCashen, 2017) to implement effective strategies for each identified issue over a period of time. The educator was empathetic to the children's situations, did not require explicit verbal accounts of neglect, and used evidence-based practice to identify solutions. They avoided a stigmatised victim-approach to child protection where adults (perhaps well-meaning) aim to rescue children (Maithreyi et al., 2022) but disempower rather than increase confidence and self-esteem. The educator adjusted her practice to ensure children were protected from activities that caused them stress when in the care of school (CRC Article 36) and crucially the school community, by providing regular support to children, helped restore dignity and self-respect (CRC Article 39). The educator's actions were focused on promoting well-being (SDG 3) as she realised the children needed their physical and emotional needs met to be able to fully engage and learn from the educational program. These challenging factors were a barrier to school attendance, and the strategies the school put in place helped mitigate stress factors and allowed the children to more easily access and engage in a learning context where their human rights were prioritised (SDG 4).

Conclusion

This chapter has explored practical issues of how early childhood educators explicitly and implicitly listen to children to support those experiencing parental separation, divorce, and/or child abuse to inform the practices of early childhood educators to promote well-being, learning, and development. Bronfenbrenner's (1979) ecological systems theory has provided a way to conceptualise the importance of early childhood educators, schools, and services to promote adjustment by developing social competence, increasing bonding between children and caring adults, and creating partnerships with families and community resources (Brooks, 2006). Listening to children was explored through the practical application of the SDGs in the context of the CRC. The vignettes presented in this chapter showed how early childhood educators can be an important part of the community that upholds the rights of children by listening to their unique needs to inform their interactions.

Listening to young children experiencing sensitive life experiences is not always via a traditional conversation. Early childhood educators listening to children and giving children a voice can be enacted directly through consultation with the child, or indirectly through incidental conversations or by observing their behaviour or physicality. When early childhood educators develop an understanding of children's experiences through listening to young children, they can empower them to activate their own resources to enact positive change and link them and their families to other support.

The limited nature of the vignettes and their distinctive contexts, of course, prevents universal generalisability or the identical replication of results, but the vignettes were chosen intentionally to provide a nuanced snapshot of early childhood educators grappling with important issues. This exploration adds to the knowledge base about how early childhood educators can listen to and give children a voice about sensitive life experiences that impact their lives. Educators and other professionals should recognise the multitude of ways in which children and young people can communicate about issues such as parental separation, divorce, and child abuse.

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Linda Mahony, EdD, is a senior lecturer in professional experience at the University of the Sunshine Coast, Australia. Linda has over 30 years' experience in early years education. This has given her insight into the lived experiences of teachers and their important work with young children and their families. Linda's research focuses on the nexus between early childhood education and care service or school, and family to explore teachers' pedagogical practices for promoting social and emotional well-being and learning for young children experiencing parental separation and divorce and other complex life challenges.

Angela Fenton, PhD, is an associate professor at Charles Sturt University, NSW, Australia. Angela has worked in schools and education services for over 35 years as a teacher, director, project officer and academic. In the tertiary sector of education, Angela has undertaken lecturing and leadership roles for over 20 years. Angela's research focuses on the potential use of a Strengths Approach to a diverse range of complex social justice issues in educational and community contexts.

Chapter 14
After the Disaster: Facilitating Children to Talk of Their Feeling and Experiences

Sarah Eagland, Michael Curtin, and Tracey Parnell

Abstract The Black Summer bushfires of 2019/2020 were unprecedented in their scale and impact on children, families, and communities across Australia. Experiencing a disaster of this nature can have an ongoing impact on a child's emotional well-being and development. However, young children are often invisible in the urgent context of disasters such as bushfires and floods, and their needs can be overlooked. Recognising this gap, the Royal Far West Bushfire Recovery Program was developed to support the well-being and resilience of young children impacted by the bushfires and to reduce the likelihood of long-term adverse effects. This chapter describes the Program, its delivery and evaluation, and provides a practical example of applying the United Nations Sustainable Development Goal 3 of good health and well-being for all ages. The impact of climate change has increased the frequency and intensity of disasters, which puts at risk the most basic of children's rights enshrined in the Rights of the Child, including the right to life, health, education, play, and decent living conditions. To protect these rights, post-disaster interventions must support children to learn about their emotional reactions and enable them to talk about their feelings and experiences. Listening to children will facilitate the development of post-disaster policy, research, practice, and interventions that focus on and address their needs.

Keywords Bushfire · Children · Health · Well-being · Resilience

S. Eagland
Royal Far West, Sydney, NSW, Australia
e-mail: sarahe@royalfarwest.org.au

M. Curtin (✉) · T. Parnell
Charles Sturt University, Albury, NSW, Australia
e-mail: mcurtin@csu.edu.au; tparnell@csu.edu.au

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Introduction

The Convention on the Rights of the Child (United Nations, 1989) was established to protect the fundamental rights of children. The climate crisis and the increasing frequency of disasters are a significant threat to children's fundamental right to survival and development (Article 6), health (Article 24), an adequate standard of living (Article 27), education (Article 28), and recreation and play (Article 31). The Sustainable Development Goals (SDGs) are a "universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity" and were adopted by the United Nations (United Nations, 2015). Recognising the importance of the climate crisis, Sustainable Development Goal 13 prioritised urgent action to combat climate change and its impacts. Sustainable Development Goal 3 prioritised good health and well-being for all ages. This chapter, in part, addresses Sustainable Development Goals 3 and 13 by describing a program designed to support young children's recovery following a disaster.

The Threat to Children's Rights

The Australian Black Summer bushfires of 2019/2020 were unprecedented in their scale, being noted as the worst recorded fires in Australia. It was the most severe bushfire season on record (Australian Institute of Disaster Resilience, n.d.-a). Tragically, in New South Wales, 26 people died, 2448 homes were destroyed, and 5.5 million hectares of land were burnt. The fires occurred during the driest and hottest year on record and followed a prolonged drought. Extreme flooding and storms followed in some areas. Within months of the bushfires, the COVID-19 pandemic spread across Australia, further disrupting children's lives and significantly delaying the bushfire recovery efforts. The Royal Commission into National Natural Disaster Arrangements (Commonwealth of Australia, 2020) reported that climate change had exacerbated the extreme conditions and warned that Australia must prepare for an "alarming" future of simultaneous and worsening disasters. With climate change accelerating, there is an increased risk of young children experiencing the devasting impact of disasters, such as bushfires and floods in Australia. With the risk of death and physical injury, the loss of homes and valued possessions, the disruption of repeated evacuations, missed learning, damage to the natural environment and recreation spaces, family financial stress, and the loss of supportive social networks, children's recovery following disaster can take months and sometimes years (Curtin et al., 2020).

Children under eight years of age are especially vulnerable to the increasing frequency and intensity of disasters due to their reduced capacity to reason, understand, and appraise, emotionally process, and respond to the perceived threats. Children aged 0–3 years generally rely on adults to meet their everyday needs and

thrive in a predictable and routine environment (McLean, 2020a). Events that cause loss of routines can impact children in this age group—although they may not understand what is happening, they will be aware of the changes and sense the impact of the event on the adults who meet their everyday needs. The "loss of adult reliability and responsiveness that is experienced as frightening" may impact the child more directly than the event itself (McLean, 2020a, p. 2). Children between the ages of 3–5 years are "likely to create an internalised narrative of events, in which they blame themselves for bad things happening" (McLean, 2020b, p. 2). As their memory of events may not be clear, children within this age group may focus on bodily sensations such that traumatic events may "become internalised and confused with bad feelings" (McLean, 2020b, p. 2). Furthermore, children in this age group often have difficulty understanding permanence and the nature of changes and, as a result, often need to repeatedly ask questions about the events to assist them in processing what occurred. Although children between the ages of five and eight years are forming friendships, their family remains influential in their lives such that any event that impacts the structure and dynamics of the family can significantly impact children (McLean, 2020c). These children may experience strong feelings of sadness and loss in response to events that impact their family and, as a result, experience somatic symptoms such as stomach aches and headaches. This is exacerbated by the children's increased ability to imagine what happened or could happen and develop anxieties about the uncertainty of their family circumstances. They also have a developing capacity for logical thinking and seek details about the event and its impact; unlike younger children, this group of children generally understand the permanence of loss.

In their study of the impact of Hurricane Katrina on young children, Fothergill and Peek (2015, p. 21) found that "When disasters occur, children may experience a range of vulnerabilities: psychological, physical and educational. These vulnerabilities tend to be interconnected and mutually reinforcing".

Curtin et al.'s (2020) rapid review investigating the impact of bushfires on the well-being of children living in rural and remote Australia found the consequences of bushfires can alter the trajectory of children's lives, detrimentally impacting educational, employment, and psychosocial outcomes both in the short- and medium-term and throughout their lives. Children from more vulnerable backgrounds were found to be particularly at risk, including young children and those living in rural and remote areas who may be disproportionately impacted given the other disadvantages they face, such as limited access to healthcare, and a higher likelihood of having developmental vulnerabilities (Royal Far West and Charles Sturt University, 2020). This finding is supported by Fothergill and Peek (2015), who found children's post-hurricane trajectories were partly shaped by their pre-disaster circumstances. They indicated the hurricane was not their only traumatic, stressful, dangerous, or life-threatening experience. In fact, tens of thousands of those children had experienced "daily disasters" associated with poverty, violence, failing schools, and other associated social problems well before Katrina (p. 7).

The Invisibility of Children's Needs

Young children cope with distressing experiences in various ways, and their responses will differ greatly depending on their age, developmental stage, and previous history (McLean, 2019, 2020a, b, c). Their specific experience of the disaster and the extent of ongoing disruptions are of particular importance. However, in times of crisis, despite best intentions, the experience and needs of children are often overlooked or misunderstood by the adults and systems around them (Brown et al., 2019; Caruana, 2010; Gibbs et al., 2016; Yule et al., 2013). Although images of children being affected by a disaster may be used as a tool to increase attention and encourage financial support for disaster relief, there appears to be little sustained attention regarding their ongoing needs. Fothergill and Peek (2015, p. 5) found that "adults consistently underreport children's levels of post-disaster distress and underestimate children's preparedness levels and recovery needs". Following a disaster, adults may prioritise providing life's necessities, such as finding safety, repairing the home, and securing financial support. With competing pressures for their time and energy, it is not surprising that they may have limited capacity to support their children as much as they would like. Children may also be less likely, or may not have the language, to express and share their worries or concerns, especially if they sense that the adults around them are having difficulties coping.

In addition to, or maybe because of, children's needs after disasters not being prioritised, there is little information to guide how to meet their needs. Gibbs et al. (2014, p. 69) observed, "a critical shortage of evidence for post-disaster intervention effectiveness for all ages, due to the ethical and pragmatic challenges of conducting research in post-traumatic settings". This finding was supported by Curtin et al.'s (2020) rapid review in which three important guiding principles for interventions for children were highlighted:

- Recovery needs are long-term, so programs must include short-, medium-, and long-term strategies.
- Interventions should be multidimensional and community-based, including children, in addition to families, schools, and community organisations.
- The approaches to recovery should be strengths-based to promote opportunities for children to develop a sense of self-efficacy and citizenship in disaster contexts.

Royal Far West Bushfire Recovery Program

A priority of SDG 3 is to ensure healthy lives and promote well-being for all. Climate change has increased the frequency and severity of bushfires and other disasters with significant consequences for vulnerable and at-risk communities,

particularly children (Curtin et al., 2020). As a result, high-quality, community-based, tailored interventions are needed to support children's well-being in the aftermath of climate-related disasters (McGill et al., 2023). The Royal Far West Bushfire Recovery Program (the Program)[1] was developed in 2020, with support from UNICEF Australia, in response to the lack of services dedicated to young children's recovery after the devastating bushfires.

Development of the Royal Far West Bushfire Recovery Program

In 2020, an initial needs assessment of children who lived in areas of New South Wales impacted by the 2019/2020 bushfires was conducted by Royal Far West and UNICEF Australia (2021a). The needs assessment considered factors such as the scale of the bushfires, socio-economic disadvantage, and the percentage of vulnerable children in the impacted communities. It found multiple domains of young children's lives were affected by the disaster, including education, housing, play, mental health, physical health, and safety. Furthermore, the young children in the selected areas were found to have much higher than the national average levels of developmental vulnerability. The information gathered from the needs assessment was used to develop the Program.

The five essential elements for intervention following mass trauma proposed by Hobfoll et al. (2007) were fundamental to the development of the Program to promote a sense of (1) safety, (2) calming, (3) self and collective efficacy, (4) connectedness, and (5) hope. In informing the development of the Program, these elements were interpreted as helping children to feel safe and calm, have control over what was occurring around them, feel connected to others, and be hopeful about the future. It was anticipated that using these elements to underpin the Program would contribute to the outcomes of children recovering and thriving post-disaster.

The development of the Program was also informed by the Australian *National Principles for Disaster Recovery* (Australian Institute of Disaster Resilience, n.d.-b): (1) understand the local and broader context, (2) recognise complexity, (3) use community-led approaches, (4) communicate effectively, and (5) recognise and build capacity.

[1] The Program was awarded the 2021 Resilient Australia National Community Award (Australian Institute of Disaster Resilience). The Program was developed so that it could be adapted to support children after other disasters and large-scale emergencies such as floods, cyclones, storms, and droughts.

Components of the Royal Far West Bushfire Recovery Program

The Program began six months following the bushfires and was delivered to children who attended 34 primary schools and 12 pre-schools in 11 regions in New South Wales (NSW); communities were selected based on the previously outlined needs assessment. The Program is multidisciplinary and community-based and provides psychosocial support to children and key adults supporting children (parents, carers, teachers, and professionals). Based on the philosophy that communities are the experts of their own needs, communities are provided with a 'menu' of support options, thereby empowering them to inform the Program's direction, components, and focus. The Program options include school-based psycho-education groups and individual occupational therapy, psychology and speech-language telecare sessions with children, and individual and group sessions with teachers and parents (Table 14.1). The allied health professionals delivering the Program include occupational therapists, psychologists, social workers, and speech-language pathologists. The Program has been designed to be flexible to meet specific community needs and to respond to trauma resulting from various disasters or large-scale emergencies such as floods, cyclones, storms, and droughts (Royal Far West & UNICEF, 2021b).

Outcomes of the RFW Bushfire Recovery Program

The Program has been independently evaluated by a research team from Charles Sturt University (Curtin et al., 2021). The evaluation was conducted according to the National Statement on Ethical Conduct in Human Research. Ethics approval for the evaluation was granted by Charles Sturt University Human Research Ethics Committee—Protocol Number H20373. Parents consented for their children to participate in the children's group and telecare services. An aspect of this consent included permission to use deidentified data from surveys of children, parents, teachers, and group facilitators on their perspectives of the impact of the children's groups and telecare services and the outcomes of pre- and post- clinical assessments of children who attended telecare services to assist with program evaluation.

In addition, the evaluation team provided information sheets for children and adults who participated in interviews. The information sheet acknowledged the potential for residual impacts from their bushfire experience and asked participants to decide for themselves if they wished to participate, or to decline if they felt it may be distressing. A distress protocol was outlined in the information sheet and contact details for support services were provided. Consent (from adults) and assent (from children) were obtained prior to interviews commencing to confirm participants understood the purpose of the evaluation, their participation was voluntary, and they could withdraw at any time. The Royal Far West staff who delivered the Program reported that for many children it was their first opportunity to talk about their

Table 14.1 Overview of support options in the Royal Far West Bushfire Recovery Program

Children's groups	Teacher support	Parent/carer support	Individual assessment and/or therapy
Week-long, in-school groups that include daily sessions where children have an opportunity to share their stories and experiences with each other. Children learn about their feelings and develop strategies to help them. Delivered by a multidisciplinary team and tailored to meet the needs of each school and individual children. Programs use existing disaster response programs and resources, such as Stormbirds[a], Seasons for Growth[b], and Birdie's Tree.[c]	Trauma-informed education and well-being workshops and individual sessions delivered by multidisciplinary health professionals, building the capacity of teachers to support children in primary schools and pre-schools throughout all the phases of a disaster (preparedness, response, and recovery), as well as addressing any underlying developmental, learning, and behavioural concerns. This can also include class observations by occupational therapists to support the creation of a trauma-sensitive classroom environment to promote regulation.	A range of trauma informed education and support sessions delivered by health professionals that focus on building the capacity of parents/carers to support their children and themselves throughout all the phases of a disaster (preparedness, response, and recovery), as well as addressing underlying developmental, learning, and behavioural concerns. These sessions can be provided as a mixture of individual and group sessions based on the preference of the parent/carer.	Online telecare occupational therapy psychology, and/or speech-language pathology sessions relevant to the child's area of need—all therapy has a trauma informed approach. Screening or assessment for specific mental health concerns (e.g. anxiety), and developmental delays/disabilities (e.g. intellectual disabilities, learning disorders, attention difficulties, speech and language disorders, and motor skill, sensory or functional difficulties). These screenings/assessments are delivered by a multidisciplinary team of health professionals.

[a]Stormbirds is program designed to support young people to understand and manage changes they experience because of being impacted by a disaster. Further information is available: https://www.mackillopinstitute.org.au/programs/stormbirds

[b]Seasons for Growth is a program designed to support children and young people who experience grief and loss. Further information is available: https://www.mackillopinstitute.org.au/programs/seasons-for-growth/

[c]Birdie's Tree is a program designed for young children to assist them to understand and cope with the impact of disasters. Further information is available: https://www.childrens.health.qld.gov.au/natural-disaster-recovery/

personal experiences and the ongoing impact of the bushfires (Royal Far West & UNICEF, 2021a, b). The staff found that many of the children reflected on the positive benefit in being able to share their feelings with other children who were similarly affected. The children spoke of their terrifying experiences during the fires. They talked about their homes being damaged or destroyed, physical injuries they sustained, being impacted by smoke inhalation, being separated from their parents, their responsibility to evacuate their pets and livestock, being unable to play outside, and the loss of their recreation areas.

Children also spoke of a range of difficulties they were experiencing, such as disturbed sleep, separation anxiety, nightmares, intrusive memories, low mood, anxiety, loss of interest in activities, poor concentration, stomach pains, headaches, increased irritability, friendship difficulties, struggling with schoolwork, and increased family conflict. This is consistent with Caruana's (2010) findings that post-disaster children can present with depression, separation anxiety, nightmares, repetitive play enactment, avoidant behaviours, recurrence fears, and concern for the safety of others.

Parents indicated their children were significantly impacted by the bushfires as illustrated in the following reflections (Curtin et al., 2021):

> I had to walk him into school, he had been quite teary, was taking his teddy bear in his bag every day, that sort of thing.
>
> Being quite hysterical and you know run to his room and almost get into a foetal position and shake. He had some bizarre I don't know turns […] Quite upsetting frightening to watch.
>
> You hear the sirens, like even those would trigger. I mean they trigger me.
>
> He got quite bad after the fires. I couldn't go to the toilet without him sitting outside the door.

Pre-school and primary school teachers highlighted the many ways the young children were showing their distress. One pre-school teacher said:

> We have had four families lose their homes in the fires and one staff member. Most of the other families and staff had to evacuate during that time. Parents are still telling us that their children wake up with nightmares about the fires, and they still talk about packing up and leaving their homes.

Similarly, teachers of children in the early primary school years indicated they noticed a significant change in children's behaviour with increased reactivity, loss of skills, and heightened anxiety levels since the bushfires. Several triggers appeared to increase anxiety levels, including helicopter sounds, sirens, windy days, the smell of smoke, and separation from parents or siblings. Teachers noted that students were demonstrating less engagement in school and were struggling to concentrate and participate in the learning activities (Curtin et al., 2021).

The evaluation (Curtin et al., 2021) found that the Program had an overall positive impact on children, assisting them to understand and manage the changes and the reactions they experienced in response to the bushfires. A pre-school educator

indicated that the group format encouraged the children to talk about and share their experiences and gave the following example:

> Even children that hadn't spoken about the fire before, all of a sudden this little person who very rarely talked at all just blurted out the whole big story. We all just went, 'Oh my gosh. Wow.' Because you know he's a very quiet little mouse and he just felt that it was a comfortable space and he just let it all come out.

Another pre-school teacher provided an example of a child who very rarely spoke, who after being involved in the Program had, "just gone whoosh [and] for us that was fantastic". She went on to say that he started, "telling us how they were at the beach, and you know there's lots of smoke and he had to get in the water, and we were just like goodness me, yep". She felt that because this child was part of the Program that used "stories and the other conversation he just felt really comfortable to be able to do that".

It was also noted that participation in the Program and using resources such as the Birdie's Tree book provided children with the opportunity, "space" and a "fun way" to talk about their situation. It was felt that children related to the story as they could see that things have "now grown back and [they will] know people are getting their houses back". A pre-school teacher specifically indicated that the Birdie's Tree book:

> Turn[ed] that negative [the impact of the bushfire] into a positive and doing it in a fun way and listening to Birdie and doing the activities, that was a really big benefit for the children. To know that, yes, we're all going through it together and it was a difficult time, but now we look at it, as not so much a celebration, but in a positive way.

The children were noted to demonstrate a positive "change in [their] behaviour" being able to deal with their emotions more effectively. This was illustrated by the comment of one parent talking about how her child was aware of being able to "cope with his emotions better":

> He actually told me that himself that's what they've learnt about in, you know it's alright to be sad or angry or that sort of thing with his emotions and that and that you I think you know that bad things do happen to people.

A pre-school teacher said the children learnt "more around feelings, talking about feelings". She said the children set up dramatic play experiences that involved building a fire truck and putting on firefighting outfits. She stressed this dramatic plan was not about re-enacting the event, but an opportunity for the children "to talk about it and do all this replay".

A primary school teacher stated that through sharing feelings and experiences, children learnt how to identify their emotions and understand that something "happened to them [that was] out of their control […] that they can control what's happening now and how they react to that". This teacher felt that this learning was important for the children, not just in relation to the impact of the bushfires but also for the "other ongoing traumas that happen […] in their family around divorces and domestic violence and all sorts of things that are happening in the community". She felt that it was a:

> Really powerful message for them to learn that you know that trauma is something that happens to anybody at any time, and that you know that's okay it's just out of our control. But there are things we can do to cope with that better. And they've learnt that. It's quite normal to have these feelings. [The children know that] it's okay to talk about things when they're happening to you […] the capacity to just realise that it's okay to talk about when you're not okay, and to reach out and identify those people around you.

Parents provided examples to illustrate that their children understood it was important to share their feelings and experiences to better understand their own and other people's emotions. One parent said her son "would even tell my husband and I you know it's alright to be sad about something". Another parent talked of how her son felt a sense of pride in talking about the trauma and illustrated this by explaining that:

> He said, 'Oh mum I've been selected to represent my class. Do this and teach them all about the Stormbirds program you know about fires and earthquakes and different fires and floods and things like that. So they picked me out of all the kids mum. So, to go back and tell the other kids.' He was actually proud instead of starting to become embarrassed by it.

The evaluation findings identified that children learnt self-awareness, resilience, and emotional regulation strategies that enabled them to deal with the impact of the bushfires more effectively. It was also noted that children recognised the importance of talking about their feelings with others as a strategy for maintaining their well-being. Children learnt to talk about and share thoughts and experiences with others, recognise they were not alone in their experiences, build connections with peers, understand and manage feelings, and implement strategies to cope with change. These outcomes were possible as participating in the Program, including engaging with the activities and resources such as storybooks and journals, supported children to understand and talk of their experiences and feelings about bushfires.

The Program promoted recovery through support, education, and advice on strategies that increased children's "resilience and understanding", enhanced their "capacity to identify their emotions and identify strategies to cope with change and uncertainty", and enabled them to "speak freely and be heard". Children indicated that they felt listened to, enjoyed participating and learned new ways to feel better.

Conclusion

Disasters, such as bushfires, can have devastating long-term impacts on children's emotional well-being, development, and educational outcomes (Curtin et al., 2020). These impacts can be exacerbated if children are not provided with adequate support to process what they have experienced in the short-, medium- and long-term following a disaster. As children's well-being and the ability to communicate are inextricably linked (Gillett-Swan & Sargeant, 2018; McGill et al., 2023), it is essential that post-disaster recovery programs, such as the Royal Far West Bushfire Recovery Program, focus on supporting children to learn about their emotional reactions and enabling them to talk about their feelings and experiences. An

advantage of enabling children to share their feelings and experiences is that more will be learnt about post-disaster recovery from the perspectives of children. Listening to the voices of children about their experiences of the fires, the impact on their lives, their resilience, and their longer-term recovery needs will facilitate the development of post-disaster policy, research, practice, and interventions that focus on and address their needs and reduce the long-term negative impacts of disasters on their mental health and well-being.

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Sarah Eagland is a social worker who has worked with children and families for the past 30 years and now specialises in supporting children impacted by disasters in Australia. As Head of Community Recovery at Royal Far West, she has designed and led an innovative multidisciplinary service model to help children and their families recover from the devastating impact of the 2019/20 bushfires and the 2022 floods. In 2021, the Program was awarded the Resilient Australia National Community Award (Australian Institute of Disaster Resilience) and continues to be delivered in 60 disaster-impacted communities in NSW and Queensland.

Michael Curtin is an occupational therapist who has worked in several countries with people who have an illness, injury, or impairment that impacts the occupations they want, need, or have to do. He has been an academic at the University of Southampton, England, and Charles Sturt University, Australia. He is currently the Head of the School of Allied Health, Exercise and Sports Sciences at Charles Sturt University. Over recent years he has worked with the team evaluating the Royal Far West Bushfire Recovery Program.

Tracey Parnell is an occupational therapist who works at Charles Sturt University in the School of Allied Health, Exercise and Sports Sciences. Tracey grew up in rural Australia and has continued her commitment to regional and rural communities through her clinical and academic work. Her research has largely focused on understanding lived and living experiences and exploring the impact of occupational participation on health and well-being. Tracey is involved in the evaluation of the Royal Far West Bushfire Recovery Program and is committed to exploring the impact allied health professionals can have in disaster preparedness, response, and recovery.

Chapter 15
Peep in the Pandemic: Peep Practitioners Listening to Parents and Families

Hannah Hale, Elspeth McCartney, and Muriel MacKenzie

Abstract The Peep Learning Together Program (Peep), developed by the charity Peeple, aims to enhance parents' skills in promoting their child's early learning by offering opportunities for interaction in everyday settings, recognising and valuing a child's efforts and achievements, interacting about what a child is doing and feeling, and modelling positive attitudes towards learning and interacting. This chapter discusses the rapid changes required to alter the delivery pattern from parent group meetings within their child's nursery and learning alongside their child supported by Peeple-trained early years practitioners (EYPs), towards online communication in response to restrictions caused by the worldwide coronavirus (COVID-19) pandemic. With appropriate ethical clearance, Peep-trained EYPs in one Scottish local authority completed surveys on the impact on families when Peep was working well: the challenges inherent in online delivery regarding relationship building, gaining trust and choosing suitable resources available in family homes, and issues of recruitment and attendance of families. EYPs considered that moving online accommodated some parental work patterns, and some parents participated more confidently online. However, it also reduced interaction among parents and play opportunities for children. EYPs' confidence in using technology varied, and parental access to information technology (IT) was often limited, creating ethical issues and inequalities. As restrictions eased, EYPs considered plans, including moves to blended approaches and new models with an increased focus on listening to the voices of children and parents.

Keywords Early years development · Family support · Online approaches to childcare · Parent-led · Early years professionals

H. Hale (✉) · E. McCartney
University of Stirling, Stirling, Scotland, UK
e-mail: hannah.hale@open.ac.uk; Elspeth.mccartney@stir.ac.uk

M. MacKenzie
Stirling Council, Stirling, Scotland, UK
e-mail: mackenziem@stirling.gov.uk

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Introduction and the Early Years Context

This study is based in Scotland, one of four nations comprising the United Kingdom of Great Britain and Northern Ireland. The Scottish Government is responsible for education, including early learning and childcare policy and provision. This chapter reports data from a research study funded by the Scottish Government 'Parental Engagement: Equalities and Equity Small-scale Projects Fund' and looks at one aspect of nursery provision, the Peep Learning Together Program (Peep) (https://www.peeple.org.uk/fls).

In Scotland, up to 1,140 h of non-statutory, free, pre-school provision is offered to parents for all children aged three and four years and some younger children. This provision aims to benefit children and families, promoting well-being in children who receive high-quality education and learning opportunities in gender-equal settings from an early age. Scotland's 32 local authorities (LAs) are responsible for ensuring this funded pre-school provision is available for families within their area. The study discussed here took place in one LA, which serves a population of around 94,000. It has approximately 31 LA-run pre-school settings (hereafter called nurseries) within the council area, based either on a primary school campus or community premises and also works with private partner nurseries.

Comprehensive provision of affordable early education supports the implementation of Sustainable Development goals (SDGs) (United Nations, 2015), particularly SDG 3, to ensure healthy lives and promote well-being for all at all ages; SDG 4, to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; and SDG 5, to achieve gender equality and empower all women and girls. Further, parents may choose to use their childcare time to engage in personal learning or undertake employment, relevant to SDG 1, which aims to end poverty in all its forms; SDG 8, which aims to promote sustained, inclusive, and sustainable economic growth with full and productive employment and decent work for all; and SDG 10, which aims to reduce inequality within and among countries.

A key approach across Scotland to achieve these goals is to link home and school learning in policies and approaches that impact the whole family, with goals that stress the centrality of the home learning environment and family learning for success throughout a child's educational career. The Family Learning Framework (Education Scotland, 2018) and the Scottish Government Learning Together National Action Plan 2018–21 (Scottish Government, 2018) support the SDGs. The Education Scotland document *Review of Learning at Home* (Education Scotland, 2018) details how parents and carers may be supported to use approaches that help children learn at home, with language and literacy development as priorities, to lessen current inequalities in health and economic reward.

The Peep Program

A key approach by which parental engagement and home learning are fostered is using the Peep Learning Together Program (Peep), a family learning program developed by the charity Peeple. This is used in early learning and childcare settings across Scottish LAs and the United Kingdom. Peeple currently holds a contract with the Scottish Government to provide online training and support in the use of the Peep Learning Together Program (Peep) for over 400 EYPs across all Scottish LA areas, with the number trained within each authority determined by the number of nurseries that lie within the 20% most deprived areas of the country (https://www.peeple.org.uk/fls). Some trained Peep practitioners also complete Peep-related qualifications with UK learning accreditation. The Peep Learning Together Program was developed by the charity Peeple based on evidence of effective home learning practices and ways that families support their children.

Practices are codified by the acronym ORIM (cf. Nutbrown et al., 2015), where parents and carers develop:

Opportunities—using everyday life experiences to interact with children: listening, talking, singing, playing, encouraging, and giving them time and attention;
Recognition—overtly valuing a child's efforts and achievements—and valuing children just for who they are;
Interaction—listening and talking with children about what they are doing and how they are feeling, involving them in everyday tasks, explaining or demonstrating how to do something, reassuring them and encouraging exploration, helping them manage frustration, and chatting about what they are seeing on television;
Modelling—including showing positive attitudes towards learning and how to interact with others and how literacy and numeracy are used in day-to-day life, such as shopping.

Peep groups are usually offered in a child's nursery setting, with parents and children joining together in a series of weekly small-group sessions run by a Peep-trained EYP. The number of sessions varies. The Peep practitioner explains, demonstrates, and discusses with parents how parents and others can interact to support the child's learning and development of language, literacy, and numeracy skills. Peep derives from earlier parental engagement studies, including quasi-experimental studies of the approach that showed positive impacts on children's educational attainment and parental learning (Evangelou & Sylva, 2007; Sylva et al., 2004). It underwent a full-scale randomised controlled trial in England (Miller et al., 2020) funded by the Educational Endowment Foundation, which reported very limited differential child progress in language or literacy and low parental attendance.

Qualitative analyses of participant parents' views showed, however, that some parents self-reported benefits to their interactions with their child. Similar parent-reported benefits are reported by Smart (2020). Some parents who had completed Peep programs in the study LA also reported that engagement with their children had increased in activities such as reading books, mark making, singing, and

number play, which they attributed to attendance at a Peep group. However, here too parental uptake and attendance had been disappointing. Groups had frequently run with fewer than six participants, and parents had started but not completed the sessions, so the reach of the Peep model was limited. Research was needed to explore how to make groups more accessible and valuable to families.

Coronavirus (COVID-19) Disruption

The research project described here was planned before the COVID-19 outbreak, but as it began, COVID-19 public health precautions were introduced. Mandated social isolation saw the delivery of Peep groups suddenly cease. Protective sanitisation procedures and social distancing among adults became normal practice. Most schools closed, although most nurseries remained open, and some services remained open for children of essential workers. Children were met by staff at the nursery entrance, but parents and other adults were not allowed to enter. EYPs' training on how to deliver Peep programs by Peeple moved online, and the researchers' communication with EYPs and other participants used written and electronic media. This also precipitated dramatic changes to Peep delivery options, as EYPs of necessity began to pivot towards communicating with parents using electronic media and telephone, including advising on how to support their child's learning using Peep ORIM principles. This chapter shares the views of practitioners on moving, at least partially, to deliver home support using Peep principles by electronic communication in response to COVID-19 restrictions and considers possible future developments to the program.

Collecting Peep Practitioners' Views

Peep-trained EYPs from the LA were invited to complete an electronic questionnaire about their experiences and views of delivering Peep, both before the COVID-19 outbreak and during it, including a question about moving Peep interactions with parents to online delivery. In order to ensure we adhered fully to ethical guidelines, the anonymity and confidentiality of participants was maintained with measures such as providing information sheets, gaining written consent and anonymizing all participants in all forms of dissemination.

A key question we are discussing in this chapter is: What are the opportunities and challenges practitioners anticipated or experienced in undertaking online delivery of the Peep approach and what would help practitioners remain confident in offering online delivery of Peep?

Twenty EYPs completed the questionnaire, and nine were also interviewed online on similar topics, with interviews recorded, anonymised, and professionally transcribed. A second questionnaire delivered six months later, when precautions

remained, asked further about online delivery. The responses were thematically analysed (Braun & Clarke, 2021), and factors relevant to moving to online delivery emerged.

We summarise and discuss the questionnaire and interview responses relevant to this research question. Initially, we present an overview of the impact of Peep when it is working well. Then we consider the challenge of building relationships and gaining parents' trust online; the need to choose resources that are likely available to families in their homes; and the recruitment, attendance, and retention challenges when working online. In the following extracts from practitioner interviews and survey data, EYPs' interview responses are given pseudonyms. The questionnaire respondents were anonymous. Extracts have been edited slightly for readability.

What Is the Impact When Peep Is Working Well?

Impact of Peep

We gained a strong sense from the practitioners in this study that parents bring experience, expertise, and skills to the Peep sessions. They conveyed that the practitioner's role was to respond according to what parents bring with them to the groups and build on these qualities to support the child's learning at home, and that when this is achieved in the context of Peep, positive outcomes ensue.

> Nobody comes as an empty vessel. There'll be really wonderful things that families do, and [we] let them know that actually, 'What you're doing, that's brilliant, because have you noticed how [your child's] got better at numbers because you do such and such?' So, for an example, one parent mentioned something she learned from Peep. She mentioned that we counted everything in the books. There was a page and it had dogs; we'd see how many dogs were on it. Or if we were sharing out things, we would count them out. So, she started doing that at home and then the nursery said to her, 'Oh, we can't get over how good your wee boy is with his numbers.' And she felt really proud of that sort of understanding, of actually doing that. [Questionnaire response]

Practitioners also reported that parents felt empowered to support their children's learning. This practitioner said that:

> The Peep groups have helped me understand more the value of these groups for parents/carers, when they can access them at the right time in their lives for them and their family. This has been indicated both in their commitment to attend and in the examples of self-efficacy. [Questionnaire response]

The Peep approach enables parents to feel more confident about how they can, or already do, support their children with forms of learning at home. Parents told practitioners that Peep had enabled more singing, sensory activity, and numeracy at home. Practitioners said:

> I think for a lot of parents, when they put their child into nursery, they think that the nursery staff are doing all these wild and wonderful things that they could never replicate at home. Then they come to a group, and they think, 'Oh, actually, I could really be doing that' and it just really simplifies it for them. (Gina)

> Parents all fed back that they had increased singing and that they were more aware about how to incorporate learning into everyday activities. (Practitioner survey response)
>
> For some parents when I had set up kind of picture frames or homework challenges or ideas for home, I think that's what I had put on it, I heard a few of the parents saying, 'Oh, I never thought of doing that' or, 'Oh, that's a great idea, you know'. And I suppose that was my way in for a starting point. But it was very positive. (Delia)

It was also apparent that Peep made a difference particularly in circumstances where families found themselves isolated during the pandemic. The interviewer asked: "Do you think there's a need for things like Peep given what we're going through at the moment [COVID-19]?"

Gina responded:

> Yes, definitely. I think anything that gives parents a feeling that what they're doing is right and that they're doing okay is really important. Also just having time for parents to be with their children to play and to understand the importance of it, I think that that could really easily get lost when everybody's so stressed. Now is maybe a good time to be doing it when people aren't needing to do commutes or they are spending so much time together, it maybe is the ideal time for people to be just seeing that actually spending some quality time together is really going to make a big difference. So, I think it's really important, especially now, and I think it could have a big impact if parents come.

What Factors Were Required to Be Considered When Applying the Peep Approach Online?

Adapting to an online platform presented advantages and disadvantages for families and Peep practitioners. We will now outline the key factors reported by practitioners using online methods to continue to offer Peep provision. Delivering Peep online allowed some parents who lived further away to access the program and could help them access information at a suitable time, with practitioner review and follow-up later. Problems arose for practitioners in producing materials usable on technology that had limited capacity, contacting parents at pre-arranged times, and finding the time required for practitioners to follow up with parents individually. Another major challenge of working online was that no group interaction among parents could take place without technology.

Overcoming COVID-19 Restrictions

Beattie spoke about the challenge of undertaking confidential discussions and maintaining parents' privacy in schools during the pandemic, when parents were not allowed into the nursery, saying:

> Even at the (nursery) door, the parents aren't coming into the building just now, so you're not really able to kind of … well you can speak to them at a door but … it's really hard. They have got the children there at the same time, so it's really difficult to have these conversations as well.

Privacy may be secured online, but relationship building could suffer due to misunderstandings. Being limited to online, written interaction, the practitioner in this excerpt reflected on the difficulties she experienced trying to build relationships:

> No, no, it's not the same. I've had texts from very good friends and you're, like, 'What, are they in the huff with me or something?' Because you read it differently. It just shows you how much language, face-to-face spoken word and facial expressions, body expressions are so important because [of] all those visual clues and cues that you've not got within a message, definitely not. And as I say I, kind of, make a … depending on the person, I try to make them more relaxed. (Eva)

Time Savings

Practitioners also identified potential benefits of running Peep online. For example, parents will not need to travel or lose as much time in the day when taking part in online rather than nursery-based Peep sessions. Gina also noted that the reach of Peep to family members is wider due to the reduction in travel pressures. She said:

> So, I think it's tricky. It's definitely going to have its challenges, but I think that the reach is just so much more with doing it online because they're not needing to travel. Nobody's needing to travel or take huge chunks out of their day. It's just a matter of switching on whatever it is that they've got so it feels like a bit less hassle for them, but I guess we'll see. We'll see when it actually happens.

The flexibility of an online platform also makes the program potentially more available to family members who are not all available at the same time due to differing work schedules.

Choosing Resources That Are Likely to Be Available to Families in Their Homes

Reflecting on Beatrice's account below, we were made aware that families differ considerably in terms of the resources they can access to participate in Peep activities online. Practitioners are faced with the challenge of pre-empting this variety of circumstances and employing approaches that include as many families as possible.

> Well, we were talking about this on an online thing a couple of days ago, and one of the things we're thinking about moving forward is we've got some money to spend. So, normally for me the biggest barrier is if it is going to home learning and the parents having the resources, because quite often we know some of our families don't have books in the house or maybe don't have the stuff to maybe carry out Peep at home, and there's no point making these videos or doing these things if they can't [access them]. So, we are maybe going to sit down and plan a Peep block and it's difficult. What I want to do is send like a box home so that they can then have the stuff to be able to do the Peep.

Recruitment and Attendance of Families

Limitations pertaining to recruitment and attendance of families were reported by practitioners.

Recruitment

Pre-pandemic, some practitioners had put considerable effort into recruiting parents before a Peep course started. A number of recruitment methods had been used to encourage families to attend Peep sessions provided within communities, including posters, leaflets, chats, consultation on times, phone calls from known staff working with the parents, and phone call and text reminders to attend sessions once they have expressed an interest in attending. Sessions had been promoted universally within a setting with some additional discrete targeting for some families. However, the families who may benefit most often do not attend and it was considered tricky to get to the bottom of the real reason for this.

Recruitment in the context of working online proved challenging. Pre-pandemic, parents were recruited by practitioners building knowledge of parents' and children's needs and relationships with families through in-person contact and interaction. When practitioners could not build on this knowledge and relationships, recruitment proved especially difficult. Gina said:

> I think for recruitment as well, recruitment might be trickier online. Normally we would have got our numbers from the nursery staff really promoting it and catching parents that they know have that certain day off or they know that the topic that's getting covered relates to them in some way. They would be really speaking to the parents about it before the session started, whereas online and the fact that the children aren't in nurseries just now, there's just not that contact so not sure how that'll go for recruiting.

Attendance

Practitioners explained that the recruitment of parents needs to take place over a couple of weeks with time allocated to fully explain the session's purpose and what that looked like in practice, and that recruitment could still be difficult.

> While we were given enough resources—time, venue, etc.—and target establishments were proactive in promoting the group, we still found recruitment to be an issue. Our group was very small and dwindled to one parent. (Questionnaire response)

Gina highlighted some of the recruitment challenges that came about when Peep was not online. Reflecting on this, she was unsure how recruitment could be achieved online. Gina said:

> Yes, it was when I was doing my groups anyway. We passed information on to the key workers and the key workers spoke to the children's parents or carers when they came in for drop-off or pick-up. Then there were display boards in the entrance and just email reminders and things put up on the nursery Facebook pages and things like that. It was a kind of a multiprong approach, but it seemed to work well. So, because that's not really going to be there for the ones that are coming up now, I'm not sure how that'll look for numbers.

Practitioners were presented with some notable limitations on attempting to recruit without in-person contact with families. As we will discuss, it is no surprise that added difficulties arose when attempting to maintain attendance once Peep sessions were operating.

Further reflecting on Beatrice's account above, we were made aware that families can differ considerably in terms of the resources they can access to participate in Peep activities online. Practitioners are faced with the challenge of pre-empting this variety of circumstances and employing approaches that included as many families as possible. All practitioners commented on low attendance with participants 'dropping off' during pre-pandemic programs (which had various numbers of sessions). The reasons given were emergencies; other competing engagements; fears of, or experience of, child non-engagement during the group sessions; tensions between group members (due at times to pre-existing factors); and difficulties finding time to attend due to family and work demands. These practitioners explained:

> There are other commitments which affect parents having the time to participate and engage in regular planned Peep sessions, e.g., life in general, work. (Questionnaire response)
>
> Where some parents have not started it can be because they are working, in two cases because they were involved in other opportunities for parental involvement in the nursery and also had other commitments to siblings too. (Questionnaire response)

Other reasons for not attending included low confidence and anxiety about programs of this nature, ambivalence about their child's behaviour in a social situation of this kind, and feeling as though the session content was not relevant. However, if children told their parents that they would like their parents to attend, this could encourage participation. Practitioners also mentioned that parents might not reveal to them the 'real reason' for discontinuing attendance.

Conclusions

Despite the disruption, shortages, and indeed health dangers caused by the COVID-pandemic, EYPs responded by becoming more adept at working online with parents, and flexibly used other means, such as meeting with families outdoors. They were thinking creatively about how to deliver the Peep ORIM message beyond the group-in-nursery approach. Aspects that currently distinguish the Peep 'package'—a group of parents with their children meeting in the children's nursery, sharing activities tailored to particular needs/situations, and discussing with other parent

members—might become less prominent as other approaches to family learning develop.

Online and blended delivery and feedback approaches were being developed creatively. This involves risks and might not have been attempted without the pandemic emergency. They have intrinsic problems: pre-prepared materials may be less well adapted to individual needs, there is inequitable distribution of IT equipment in children's homes, and potentially difficult issues surrounding privacy and sharing recordings of children. These are, however, set against more flexible delivery times if materials and contact with the practitioner may be accessed on individually suitable schedules, and once recorded, material can be preserved and revisited. Less confident parents may indeed benefit from individual options and less social pressure.

This study was agile in gaining information on this sudden, unhappy, phenomenon, and uncovered resilient and caring EYPs who took parental learning seriously and adapted to support children and families. The major issues identified for working online were ensuring that parents and nursery staff shared appropriate technology to engage with Peep, that there was sufficient flexibility and capacity within EYPs' timetables to engage with parents at mutually convenient times, and that child protection and online security issues were dealt with. This particularly exemplifies SDG 4, Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, and SDG 8, Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. These may be sustained by developing convenient, flexible, and helpful ways of supporting parents. Early years Peep practitioners, with the encouragement of their managers, had moved forward confidently and imaginatively in the face of pandemic disruption to develop new approaches which could prove highly effective and solve some of the problems of forming real-time groups and a stretched workforce.

Given that this study captured insights while pandemic restrictions were at their height in the United Kingdom, post-pandemic there is a need for further research that is broader in scope, gleaning perspectives of parents and especially of families from minority backgrounds. The aim would be to consider key questions such as: What are the views of families who do and do not attend Peep groups? What are the views of children? How could Peep improve its reach? Further research should also identify how the Peep approach can fit into a changed landscape for EYPs, and the goal of meeting Peep aims with as much inclusivity as possible remains.

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Hannah Hale is a research psychologist at the Open University. Hannah researches in child wellbeing, organisations, mental health, and gender. The current project she is working on aims to consider an alternative model of low-threshold family support for parents with children aged 0–3 years of age—The Open Kindergarten. Other research Hannah is currently involved in concerns the mental health of the Police workforce, domestic abuse, military masculinities, and psychotherapeutic approaches online. Hannah practices also as a Pluralistic Counsellor, specialising in trauma, anxieties in context (particularly workplace strains), and depression.

Elspeth McCartney is qualified and has practiced as both a speech and language pathologist and an early-years teacher and is a Fellow of the UK Royal College of Speech and Language Therapists (FRCSLT). She has managed qualifying degree courses for SLTs and is currently an honorary chair in the Faculty of Social Sciences, University of Stirling, Scotland. Her research and publications concern assessment, intervention, and co-professional working, mostly in the field of childhood speech and language impairment. Recent key collaborative papers include studies of terminology; evidence-based pathways to intervention; measurement, and cross-disciplinary practitioner relationships.

Muriel MacKenzie is employed as a chartered educational psychologist, having previously trained and been employed as a social worker. Her doctorate was on the promotion of resilience and prevention of depression, and she continues to have an interest in early intervention to support children and young people's learning and wellbeing.

Part IV
Professionals Learning from Listening to Children

Chapter 16
Sustainable Leadership Approaches to Retain Early Childhood Educators

Belinda Downey, Will Letts, and Sharynne McLeod

Abstract The research presented in this chapter aimed to understand what enabled or constrained early childhood educator retention, with leadership identified as both a support and a challenge for retention. Leadership styles can influence organisational cultures, educational practices, and educators' responses within early childhood services. Early childhood leaders who supported retention were those who expanded the traditional boundaries of independent and hierarchical leadership by encompassing approaches that were relational, collaborative, and democratic, better positioning the leaders and educators to support and uphold the rights of children and families in their services. The research found that early childhood leaders who pushed past traditional leadership boundaries were better positioned to retain educators through providing sustainable leadership approaches that improved educator well-being and working conditions. This chapter highlights the leadership approaches that supported educators' and children's well-being and encouraged high-quality early childhood education practices, which included practices of social justice, well-being, equity, and inclusion. Due to the limited retention research available in the Northern Territory, Australia, it was chosen as the research context. As Australia currently faces critical staff shortages in early childhood education, the leadership strategies discussed in this chapter supported educators' retention and increased high-quality equity and inclusion practices for children and families that align with the Convention of the Rights of the Child and the Sustainable Development Goals 4 and 8.

Keywords Early childhood education · Leadership · Educators · Values · Retention · Northern Territory

B. Downey (✉) · W. Letts · S. McLeod
Charles Sturt University, Bathurst, NSW, Australia
e-mail: bdowney@csu.edu.au; wletts@csu.edu.au; smcleod@csu.edu.au

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Introduction

Traditionally, leadership and leadership styles have been defined within masculine terms, where leadership has been considered as independent, authoritative, hierarchical, and competitive (Hard & Jónsdóttir, 2013). However, 92.1% of all early childhood educators are female (The Social Research Group, 2022) making early childhood education (ECE) a highly feminised profession. Therefore, non-traditional leadership styles, such as inclusive, intentional, distributive, reflective, and emotional leadership, are often more prevalent (Waniganayake et al., 2017). Leadership approaches in ECE require collaboration and consideration to multiple perspectives due to the complexity of building relationships and working with colleagues (Fasoli et al., 2007; Hard & Jónsdóttir, 2013), children, and families, all of whom hold diverse backgrounds and experiences (Fasoli et al., 2007). The Australian ECE sector faces major ongoing problems attracting and retaining its workforce. Some key factors identified as supports for retaining a sustainable ECE workforce include ECE leadership and educators' well-being and satisfaction (ACECQA, 2020).

Inclusive and collaborative leadership can support the sustainable retention of educators through fostering respectful and collaborative relationships. These relationships can then enable the ethical consideration and inclusion of children, families, and colleagues as the consideration of multiple perspectives would be encouraged (Early Childhood Australia [ECA], 2016; Thorpe et al., 2020). Leadership approaches that consider the multiple perspectives and knowledge systems that children and families can hold are vital in supporting the rights of the child (CRC) (United Nations, 1989), especially practices and approaches that foster respect for children's and families' culture and cultural practices. Understanding and respecting culture and cultural practices can further support children's freedom of thought and opinions while meeting their right to quality education (United Nations, 1989). Leadership practices can also support Goal 4 of the Sustainable Development Goals (SDG) (United Nations, 2015), equity and inclusion, which can be met through quality ECE. Additionally, leadership practices that foster educators' well-being and retention encourage economic growth and decent work (SDG 8) (United Nations, 2015). In the Northern Territory, the context of this research, the importance of leadership approaches that were inclusive and respectful of different knowledge systems and perspectives was paramount as an estimated 26.3% of people identify as First Nations people in the Northern Territory. Conversely, the Australian average in other states and territories of First Nations people per population is approximately 3.2% (Australian Bureau of Statistics, 2022).

Common ECE leadership styles that focus on the importance of inclusion and relationships while supporting ECE retention include, intentional, distributive, reflective, and emotional leadership styles (Thorpe et al., 2020). *Intentional* leaders embody courage in decision-making and when moving their organisations forward via their willingness to learn, collaborate with, and inform others (Waniganayake

et al., 2017). Intentional leadership occurs when leaders engage with their responsibilities in ethical, positive, purposeful, respectful, compassionate, and caring ways. *Distributive* leadership models require shared knowledge and a decentralised approach to leadership where the educators holding the specialist knowledge are responsible for guiding other educators in that specialist focus (i.e. sustainability, risky play, emotional regulation; Ebbeck & Waniganayake, 2003). *Reflective* leaders enact open (Nicholson & Maniates, 2015), reflective conversations about aspects of early childhood practice, including change management within early childhood services. Reflective conversations can provide space to reflect, grow, and develop, which assists in building the service and the team's future direction. *Emotional* leadership, which can push the boundaries of traditional leadership understanding, encompasses caring for others to build and maintain relationships (Fasoli et al., 2007). Emotional leadership has become prominent in healthcare (Leach et al., 2021) and is an essential skill for building connections with children and families in the early childhood field (Fasoli et al., 2007). While these different leadership styles may be approached independently or as a collaborative set of skills and techniques, the leadership styles presented in this chapter were found, in the research, to increase the probability of educator retention.

Aim

The aim of the research presented in this chapter was to understand what enabled and/or constrained educators' retention. Leadership was identified as a factor that held the potential to either support retention or increase attrition. This chapter is focused on the leadership approaches that enabled educators' retention, subsequently supporting children's rights (United Nations, 1989) and fostering the SDGs focused on providing equitable, inclusive education, and workforce growth (United Nations, 2015).

Theoretical Framework

A qualitative constructivist grounded theory approach was chosen for this research because it acknowledges that prior knowledge, understandings, and experience can shape the meaning of an experience for participants (Charmaz, 2017a, b). Constructivist grounded theory aims to explain a phenomenon, in an under-researched area, by generating a constructed theory grounded in the analysed data (Birks & Mills, 2015; Saldaña, 2015). At the time this research was undertaken, no ECE retention research focused solely on the Northern Territory could be found which identified an under-researched area, suggesting the suitability of this approach

(Industry Skills Advisory Council NT, 2021). Grounded theory generation occurs through a process of constant comparison of data (Birks & Mills, 2015). Overarching categories were developed, refined, and tested through continued comparative data analysis to ensure a logical pattern existed between the data and the category. Continued comparative data analysis and testing pushed the analysis towards theoretical integration until a substantive grounded theory was generated (Birks & Mills, 2015).

Participants

Ethical approval was obtained and a purposive random sample of 34 early childhood educators ranging in age from 16 to 60 years self-selected to participate. The participants spanned across eight workplaces located in and around Darwin, the capital city of the Northern Territory, Australia. The participants had various experience working as educators ranging from six weeks to 35 years, with their tenure at their current ECE service ranging from six weeks to seven years. The term *educators* has been used as an all-encompassing term, and participants held various qualifications ranging from tertiary degree teachers through to unqualified trainees. Six participants' data were selected for this chapter as these participants specifically discussed leadership and leaders in their interviews.

Data Collection and Analysis

Data were collected through semi-structured interviews to create an unhurried conversational space, providing the consenting participants with control over what they wanted to share. A constructivist grounded theory approach uses an active process of reflexivity, ensuring that questions developed during the conversational interviews are followed, guided by the knowledge participants introduce (Birks & Mills, 2015). The process for interviewing was iterative as what was identified as enabling or constraining in previous participant interviews guided questions in future interviews when similar points were raised.

Transcribed data were analysed and compared using constructivist grounded theory constant comparative analysis with categories generated as a result of analysis (Charmaz, 2015). The categories were then refined and tested for logical patterns until one overarching core category, a basic social process, and a substantive constructed grounded theory were generated, with all three integral to the research aim (Birks & Mills, 2015; Saldaña, 2015). A basic social process is a pattern of social behaviours that occur due to a situation or event (Glaser & Holton, 2005). In this research, a three-stage basic social process of retention and attrition was generated through the constant comparative data analysis. The basic social process involved participants moving through: stage 1, becoming a

professional; stage 2, belonging in an organisation; and stage 3, engaging with early childhood policy and legislation. The social behaviours, interactions, and access to resources that occurred in each of these three stages led to the participants' choice of attrition or retention.

Ethical Consideration

Ethical consideration of participants' confidentiality and privacy, the participant–participant relationship, and the participant–researcher relationship were necessary to ensure that participants voices were researched and reported on in a way that was rigorous, honest, and sincere. Researcher reflexivity was a technique that assisted the researcher to consider how bias may influence interpretations of the data (Birks & Mills, 2015). Participants were also invited to member check the analysed data to correct, expand, or discuss the interpreted information (Iivari, 2018). The final ethical consideration was to ensure the research was culturally sensitive and to reduce stress on the participants in terms of time and burden wherever possible.

Results

The overarching core category that was generated from the data analysis, *adjusting practices and accommodating values*, influenced the social behaviours associated with participants' basic social process of retention and attrition. Leadership approaches that fostered either attrition or retention were evident in the basic social process in connection to the core category. Throughout the data analysis, the categories and patterns that were generated continued to return to the core category, which had two properties, *struggle* and *hope*. As participants moved through each stage of the basic social process of retention and attrition, the requirement to adjust their practices or accommodate their values or others' values led them to either struggle or find hope in the adjustments and accommodations. The participants who struggled either left their service to move to another (turnover) or had an increased probability of attrition. The participants who found hope indicated the probability of their retention in ECE. The results presented in this chapter are focused on the leadership approaches that fostered hope for the participants, increasing their retention probability through supporting adjustments to practices or accommodating values. The data analysis identified that the participants' struggle and hope with leadership predominately occurred when they were moving through the second stage of the basic social process, belonging in an organisation. The results are presented in vignette form and a discussion follows. The two leadership styles identified as providing hope for educators through the stage of belonging in an organisation, and supporting their retention, were values-based leadership and leading through robust conversations.

Values-Based Leadership

Four participants discussed aspects of what was interpreted as values-based leadership either in their teaching and leading with children or in relation to leading and leadership amongst colleagues. Values-based leadership was interpreted as practices of teaching and leading that provided a gentle guidance approach and reflected the participants' philosophies and pedagogical values.

Maree and Sophie described teaching within their pedagogical philosophies and values through gentle guidance approaches with the children. The approaches described appeared to assist the well-being of the educators and children.

Maree recalled events that occurred with a colleague during a challenging time working with a group of 15 toddlers (2–3 years). Maree and her colleague were not enjoying coming to work because the toddlers were biting, fighting, and not sharing. While this behaviour was developmentally appropriate for the children's age range, Maree and her colleague found the behaviour more frequent and challenging than usual. They discussed role-playing empathy with the children to try to positively guide the children's behaviour. Together the educators began to create an environment that encouraged a values-based foundation in empathy. The role-playing occurred whenever "one of the children got hurt, we [Maree and her colleague] went over the top in making sure they [the child] were comforted, and [we] invited other children to come and help [comfort]". When Maree and her colleague were serving morning tea, she stated they would exaggerate "serving [each other] a biscuit …[and] saying thank you". Maree noted that within three weeks' of starting to use this gentle approach, the whole room had calmed, and it was "a different group [of children]". Maree attributed her ability to guide and lead the children to the support of her colleague. Maree stated that the "greatest asset" a service has "is its' people, without the people [you work with] you've got nothing". Therefore, for Maree leadership was as much about the team of people she was working with, including the children, as it was the leader leading it. Maree's strong collegial relationship and her ability to teach in a way that aligned with her pedagogical values supported Maree's hope and connection within her organisation, increasing the likelihood of her retention.

Another participant, Sophie, recalled a situation where she created an environment that seemingly held a values-based foundation in gratitude. Sophie noted, "there were things … that I'd do with the children like … we'd just say thank you for the lovely day we had today … [it was] just about gratitude … [and it] aligned with my values and my … philosophy". Sophie used this gentle approach to guide the children and support their mindfulness and presence in the moment while acknowledging her own pedagogical values. Similarly to Maree, Sophie described a connection to her organisation because of her ability to teach the children in a way that aligned with her pedagogical values which increased the likelihood of her retention.

According to Maree and Sophie, these experiences supported the children's understanding of empathy, acceptance, mindfulness, and awareness of daily positive experiences. By encouraging inclusion via empathy, quality education which

promotes lifelong learning was supported (SDG 4) (United Nations, 2015) as were the rights of the child (United Nations, 1989). The two educators described how the organisational culture and leadership supported their pedagogy and their professional autonomy. The educators described a feeling of belonging in their service that these practices assisted. Furthermore, the educators explained that the environment supported the children which provided them with hope and increased the probability of their retention.

Alternatively, two other participants described their experiences of values-based leadership in relation to leading colleagues and leadership that guided inclusion, professional autonomy, and respect. The first participant Erin discussed that she felt professional agency and autonomy were important in ECE. She discussed how her leadership style included creating an organisational culture that supported the agency and autonomy of educators. Erin described staff agency as benefitting both the educators she led and the children. Erin created a professional agency foundation through ensuring the consideration of the educational philosophies and values of all staff within the program. Erin noted that by establishing a shared cohesive vision that aligned with the educators' educational philosophies, the team had built a consistent, core, "stable work[force]". As a result of this inclusive and supportive organisational culture, educators from other services were also inspired to want to work with the team. Erin identified that these educators were willing to wait to gain employment in the service she managed as they felt "philosophically aligned" with the service. Erin felt that her collaborative approach of aligning educators' educational philosophies and values assisted retention by keeping the educators engaged and motivated.

Erin reflected on how she entrusted educators to create projects of interest that educationally aligned with their philosophies stating:

> allowing staff to have some control [over their programming] … journey [assists in keeping them motivated in their programming], because if they're not interested [in their job], well they just don't do it [create engaging programs for the children]. Then you just get a dull workforce, where you're just going through the motions.

This values-based leadership approach focused on educators' agency and autonomy, encouraged the inclusion of individual educational philosophies and values and assisted the creation of a cohesive, engaged, and motivated team. Erin's approach increased educators' probability of retention and created engaging programs for children that optimised their learning, helping fulfil their right to education (United Nations, 1989, Article 28).

While Erin discussed her own leadership approaches, Shaye discussed the leadership approach of her director, Lorraine. Shaye recounted how Lorraine had created an organisational culture that was interpreted as a values-based foundation grounded in strong, respectful, and empathetic relationships. Shaye identified the educators' retention at her service was due to Lorraine's "relationships with her staff … she [Lorraine] treats her staff so well, they stay", which was also the reason for Shaye's retention. Shaye specified that her colleagues worked well together due to the supportive culture Lorraine created and encouraged from them. Shaye stated

that Lorraine was selective about which educators she employed to ensure they would complement the skills and expertise of existing staff. The team Shaye worked with had "all worked together for nearly seven years … that really makes a difference [in the relationships that had developed]". Shaye felt this support made staff "want to stay" and work to create a high-quality service, which encouraged economic growth, decent work (SDG 8) (United Nations, 2015), and quality education (United Nations, 2015).

Leading Through Robust Conversations

Similar to values-based leadership, hope was found for educators through leadership encouraging robust collegial conversations in the ECE team. Robust conversations were interpreted as conversations that invited and encouraged the consideration of multiple perspectives (Murray, 2009; Nicholson & Maniates, 2015) while encouraging reflective discussions on topics of tension or contradiction that existed within the ECE team (Carroll-Lind et al., 2016). Four participants, Erin, Olivia, Julie, and Sophie, discussed how leading robust conversations supported professional agency amongst their colleagues and reflection on their pedagogical practices as an individual and a team which increased the probability of retention.

Erin discussed the importance of critical questioning and reflection in pedagogical practice as a leader at the service she felt these approaches should be role modelled by her to mentor and guide other educators. However, she clarified that while critical conversations with educators were an important part of leadership, the conversations did not need to be offensive or confrontational. Instead, Erin referred to these critical conversations as discussions, where collaboration was encouraged. Erin framed the discussions as a way to say to educators, "let's have a look [together at] it [the program], let's talk about it before this goes on the wall". Erin identified that "in some services that's never [happened]…some people, I've noticed, have never been held accountable". A lack of accountability concerned Erin because as a leader she strongly believed that educators should be encouraged to ask each other "what are you doing and why are you doing it". Erin's view on the importance of robust conversations to improve professional practice also connects with the ethical responsibilities of educators and the principles of upholding the rights of the child (ECA, 2016; United Nations, 1989). Erin felt that part of her role as a leader was assisting educators to make the learning occurring in the program visible and intentional, requiring educators to be able to speak about what learning is happening in their program.

Leading intentional and critically reflective discussions with educators was one way Erin identified she supported the children's learning process. Erin described the discussions as particularly important for newer educators who needed mentoring from someone they trusted but someone who could "…actually

say, can I look at your program? Let's talk about your program". While Erin found that initially these types of critically reflective discussions could feel "very confronting" for educators, she pointed out that as the leader "you've got a pretty large responsibility for it [asking the questions]", to ensure educators' professional and ethical responsibility to children's quality education and rights are being upheld (ECA, 2016; United Nations, 1989, 2015). As these critical pedagogical discussions became more commonplace in the service, Erin noted that the educators became more relaxed in having the conversations as they realised it was about supporting them, not discouraging or judging them. The robust conversations encouraged consideration of different educators' perspectives, fostering a more inclusive organisational climate and increasing educators' hope and likelihood of retention.

Mentoring was also discussed by Olivia, who indicated that mentoring was beneficial for newer educators. Olivia described leading professional conversations with her mentees and how the mentees' professional knowledge and skills "benefit[ed] in so many ways" from this form of mentoring. Olivia expressed that it wasn't only the mentees who benefitted but "the children are going to get so much because of the mentors [who are] … showing her [the mentee] the reasons why they do what they do". Through supporting educators who were newer to ECE, Olivia's mentoring again upholds children's right to quality education while fostering hope and retention through the support offered to mentees (United Nations 1989, 2015). Julie also discussed the importance of good mentoring correlating mentoring with strong pedagogical leadership. Julie said that having a mentor who held conversations "about environments and what we do in them" had really taught her much about what quality education and quality environments were in early childhood. Julie felt fortunate to have been mentored and shown how environments can support children's play-based learning and uphold their rights (United Nations, 1989, Article 31).

Pedagogical leadership in relation to mentoring was an area Sophie explained was part of her role, specifically supporting educators through conversations that supported them in identifying their strengths. Furthermore, she noted that a "part b" was needed after this, which was to support educators in practically applying these strengths in their ECE services and contexts. Sophie used the term "follow-up meetings"; noting that these follow-ups were necessary for consolidating learning to ensure high-quality education and educators committed to supporting and valuing children (United Nations, 1989, 2015). Sophie identified that mentoring was not "someone coming out to the service and [stating this is] how we are going to put that into practice"; rather mentoring required re-visiting the learning again and again through professional conversations. The ongoing conversations ensured that the pedagogy gained from the mentoring became engrained within the educational program and practice and that it was suited to the ECE service, the context and the educators who taught there, ensuring higher probabilities of retention.

Discussion

While leadership can impact an organisational culture and vice versa in ECE, an organisation's culture has also been linked to the quality of the educational program, the educators' attitudes, and workplace behaviours (Gibbs, 2022; Hewett & La Paro Karen, 2020). The research reported in this chapter identifies specific approaches that assisted in supporting the overall well-being of Australian educators and their retention prospects. Additionally, the approaches identified encouraged educators' reflective pedagogical practices supporting higher-quality education for children. These approaches and leadership styles encouraged inclusion and well-being which supported quality education (SDG 4) (United Nations, 2015) and decent working conditions for educators. The working conditions may have supported educators and economic growth via the retention of educators (United Nations, 2015). The value of children's rights (United Nations, 1989) was considered through the provision of high-quality programs and positive organisational climates that encouraged play-based learning.

Values-Based Leadership

The teaching and leading approaches of the values-based leadership that were used with the children benefited them in the present and provided the potential to benefit them into the future. Children taught with holistic approaches that support well-being, such as values-based leadership, are more likely to reach adulthood with increased life satisfaction. Life satisfaction provides a protective factor against depression and produces a higher likelihood of creative thinkers and learners (Uusiautti & Määttä, 2013). Furthermore, the values-based leadership approaches simultaneously supported the professional agency and hope of the participants assisting them to feel more connected to their organisation and increasing the likelihood of their retention. Therefore, values-based leadership encouraged quality education (SDG 4) (United Nations, 2015) and decent working conditions, thus possible economic growth (SDG 8) (United Nations, 2015), by encouraging inclusive practices. The values-based leadership approaches also fostered the well-being of educators and children in the present while increasing the likelihood of higher well-being for children in the future (United Nations, 2015).

Values-based leadership fosters children's self-worth, well-being, and trust in themselves by gently guiding children towards a goal or ability, supporting their well-being holistically via an environment that is conducive to upholding children's rights (United Nations, 1989; Uusiautti & Määttä, 2013) and encouraging educators' ethical responsibilities in supporting this commitment to uphold and respect children's rights (ECA, 2016). The organisational climate that was fostered by the values-based leadership approach encouraged professional agency and autonomy which has been found to support educator retention (Thorpe et al., 2020). Therefore,

a values-based leadership approach could be a pedagogical tool that benefitted children, but also a leadership approach that encourages educators' retention.

Erin and Shaye both discussed how the creation of an organisational culture where the educators feel valued and trusted could support educators' well-being. The examples Erin and Shaye provided indicated that when the social and psychosocial needs of educators were prioritised though educators' working conditions and organisational climate, the educators' well-being and retention was supported (Cumming et al., 2021; Thorpe et al., 2020). Utilising a leadership approach such as a values-based approach interconnects multiple leadership styles (Waniganayake et al., 2017), encouraging educators and leaders to identify shared goals. The organisational climate that values-based leadership fostered highlights the importance of leadership intentionality and the value and trust needed between leaders and ECE teams.

Leading Through Robust Conversations

Leadership as a concept within ECE has often been understood, developed, and enacted by educators through interaction and engagement with others (Bøe & Hognestad, 2017; Heikka & Hujala, 2013). Part of a collaborative approach to leadership includes questioning and constructive critical reflection on ECE practice. Questioning, role modelling, and supporting educators to critically reflect can be connected with pedagogical leadership and mentoring. Pedagogical leadership encompasses a leadership approach that guides staff by encouraging them to consider all aspects of children's learning, including the resources available and how the learning can engage the children and their families (Waniganayake et al., 2017). Leading through robust conversations encouraged critical professional reflection and supported pedagogical practice changes, ensuring the rights of the child were upheld through the provision of quality education (United Nations, 1989, 2015). Additionally, leading through robust conversations fostered educators' ethical responsibilities with their colleagues through encouraging collegiality, professionalism, trust, honesty, respect (ECA, 2016), and ultimately retention in ECE via increased professional autonomy and agency (Thorpe et al., 2020).

Mentoring requires effective communication and collaborative practices (Heikka & Waniganayake, 2011), which these educators associated with the professional conversations they held as mentors or mentees. As Erin highlighted, the provision of space to reflect, grow, and develop can foster team building. Erin stepped the educators through the reflective process around programming with robust conversations that were not confrontational but involved critical questioning, illustrating reflective supervisory leadership in practice. Erin advocated for the need to have robust conversations and leaders' accountability to encourage these conversations, even when educators do not initially enjoy it. As pedagogy and pedagogical leadership are relational, pedagogical leadership requires all educators' contributions and sharing (Moss, 2006).

The educators in this research achieved collaborative practice through robust conversations that invited multiple dynamic views and negotiations. Robust conversations assisted in reconstructing an understanding of educators' roles, responsibilities, and expectations, assisting to foster a safer organisational climate by inviting and encouraging the consideration of multiple perspectives through the robust conversations that were supported (Murray, 2009; Nicholson & Maniates, 2015). Discussions that identify tension and contradiction can propel pedagogical practice forward by encouraging constructive critical reflection (Carroll-Lind et al., 2016) and the active practice of making considered and contextual decisions (Nicholson & Maniates, 2015). The active practice of robust conversations encouraged growth and reflection for the ECE team as a whole, increasing the probability of retention while supporting quality education and decent working conditions for educators (Murray, 2009; Nicholson & Maniates, 2015; United Nations, 2015).

Conclusion

Educator retention can be supported through leadership approaches that encourage ethical practices which uphold the rights of the child, and support the provision of quality education and care (ECA, 2016; United Nations, 1989, 2015). The leadership strategies described by these educators offer insight into how children's and educators' well-being can be supported in sustainable ways and encouraged in educational programs and practices. The programs and practices that were reflected upon, and the decisions that were made were based on sustainable, supportive, holistic approaches aimed towards high quality education and care of children, and the retention of educators. These approaches and practices ensured children's rights for quality education were met while working towards decent working conditions for educators to support economic growth (United Nations, 2015).

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Belinda Downey, PhD, is a lecturer in early childhood education at Charles Sturt University, Australia. She has worked as part of a team on large Australian Government funded research projects focusing on early childhood education. Specifically, the Early Childhood Education Workforce Capacity Project (2009–2011), the Indigenous Childcare Choices Project (2008), and the Strong Foundations of Literacy and Numeracy Pilot Project (2010) for very remote Indigenous preschool children.

Will Letts, PhD, is an associate professor and the head of school, School of Education in the Faculty of Arts and Education at Charles Sturt University, Australia. He was awarded a Senior Fellowship of the Higher Education Academy. His research interests include the cultural studies of science (education), especially with respect to sex, gender, and sexuality. Associate Professor Letts has also undertaken extensive research in employability in education.

Sharynne McLeod, PhD, is a speech-language pathologist and distinguished professor of Speech and Language Acquisition. She is a Fellow of the Academy of the Social Sciences in Australia, has received Honors of the American Speech-Language-Hearing Association, is a Life Member of Speech Pathology Australia, and is a Fellow of the Royal Society of New South Wales. Professor McLeod's research foregrounds the right of everyone (particularly children) to participate fully in society, and she presented a paper about communication rights to the United Nations. Her research focuses on monolingual and multilingual children's speech acquisition. She also researches the prevalence and impact of childhood speech sound disorders and links this to policy and service delivery issues.

Chapter 17
Multimodal Analyses of Children's Voices as a Means for Critical Teachers' Education

Fernanda Liberali, Emilia Cipriano Sanches, and Sandra Cavaletti Toquetão

Abstract This chapter discusses the role of multimodal analysis in the critical understanding of the meanings of childhood by early childhood educators in the city of São Paulo, Brazil, before and during the COVID-19 pandemic. During the pandemic, impoverished children suffered due to the lack of infrastructure that limited their access to school. In this sense, this work aims to present the importance of multimodal analysis in teacher education to invoke (new) possible ways of fighting the unfair conditions of children's lives. This study is theoretically based on a sociocultural-historical perspective and uses a multimodal approach to understand different childhood perspectives. Methodologically, it works within the critical collaborative perspective, which aims to create a safe space for researchers, teachers, and children to collaborate in the data's production, selection, and analysis. For this chapter, the analysis focused on data from a group of 4- to 6-year-old children at a public pre-school in an impoverished area of São Paulo. The data refers to activities organised by teachers before and during the pandemic. The multimodal analyses of the verbal-visual material presented children silencing and voicing their positions, mediated by their situated contexts. The results indicate that, before the pandemic, children had more opportunities to voice different positions unveiling omissions of discursive practices. This multimodal analysis, developed in collaboration with educators, allowed providing attention to children's experiences while simultaneously uncovering the need for educators, families, carers, and researchers to avoid imposing an adult-centric and one-truth-only narrative of life and devising (new) possibilities for children to develop their agencies.

Keywords Multimodality · Early childhood education · Teacher education · Pandemic

F. Liberali (✉) · E. C. Sanches · S. C. Toquetão
Pontifical Catholic University of São Paulo, São Paulo, Brazil

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Introduction

This chapter discusses the role of multimodal analysis in the critical understanding of the meanings of childhood by early childhood educators in the city of São Paulo, Brazil, before and during the current COVID-19 pandemic. Stemming from important reflections from children, portrayed by images of pedagogical records, it presents the proposal of multimodal digital narrative as a tool to construct possibilities of comprehending reality in a critical and engaged way. The analysis of scenes of face-to-face activities before the pandemic and during the period of remote learning aims to allow visualising practices to uncover and acknowledge the child's ability to create and reflect. This study contributes to recognising children's rights and their different childhoods. The critical education of teachers is supported by the observation and multimodal analysis of these images, which can indicate paths for necessary reflections with educators and the creation of new and more liberating practices.

During the pandemic, most Brazilian children were left without access to education and care. According to the analysis of reach of remote learning (United Nations Children's Fund, 2020), about 70% of children of early childhood education age did not have access to remote education during the pandemic, primarily due to the challenges and limitations of online learning for young children, the lack of remote learning programs for this phase of education, and the lack of household resources for remote learning. Even when children have the technology and tools at home, they might not be able to learn through these platforms due to other factors, including pressure to do household chores, an environment that is not conducive to learning, and a lack of support from parents and carers to follow the curriculum.

Changes in teacher practice were necessary in the context of uncertainties such as those generated by the COVID-19 pandemic. These changes followed the perspective of bringing the views, voices, gestures, and narratives of childhood as a right of children to be perceived in their individualities. Therefore, this chapter is organised to present the Convention on the Rights of the Child (CRC) (United Nations, 1989) and Sustainable Development Goals (SDGs) (United Nations, 2015) in relation to the Brazilian situation, the socio-cultural-historical approach to childhood and the role of multimodal narratives in early childhood education, the methodology for data production and analysis, the discussion of the data, and the final considerations concerning future possibilities.

The Convention on the Rights of the Child and Sustainable Development Goals

According to Sanches (2021, p. 21), "the child is a being of rights, powerful, capable, who experiences their first experience of citizenship in a situation of perplexity and extreme undefinition". Thus, we point out the need for a new ethical pact among

all those who believe in and defend children's rights, declared in the CRC (United Nations, 1989, Article 13):

> The child shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice.

During the COVID-19 pandemic, contrary to what was highlighted in the CRC, public policies for children reinforced school practices based on the ideals of families and students, disregarding the manifestations of children. The necropolitical scenario (Mbembe, 2003) has been aggravated by government decisions that contribute to the progressive worsening of the conditions of existence of those considered disposable—impoverished people, Black people, women, the LGBTQIAP+ community, Indigenous peoples, and older people, to name a few.

This scenario leads to a reflection on the SDGs, focusing on reducing inequalities (SDG 10) and ensuring that all children have access to quality early childhood development with equal opportunities to promote the social, economic, and political inclusion of all, regardless of age, gender, disability, race, ethnicity, origin, religion, economic state, or any other condition.

The report *Unfinished Democracy: A picture of Brazilian inequalities* (Oxfam Brazil, 2021) reveals that, in Brazil, in addition to the tragedy of the thousands of families who lost loved ones to the coronavirus, the pandemic has highlighted multiple inequalities in the economic, social, political, and sanitary spheres. In this context, some childhoods unfolded in a context strongly marked by extreme social inequalities, difficulties, and a lack of access to food, housing, security, and the Internet for many families. Few children could enjoy the advances of digital technology and virtual communication so present in times of remote and hybrid education and teaching. The UNICEF report (2021) reveals that the difficulty of remote access was reported more frequently among the most vulnerable segments of the population, such as in income ranges of up to two minimum wages and among Black or brown people.

Article 17 of the CRC (United Nations, 1989) establishes the obligation of states to ensure that the child has access to information and material from a diversity of national and international sources, especially those aimed at the promotion of their social, spiritual, and moral well-being and physical and mental health. In an increasingly globalised and nevertheless very exclusive society, reviewing the most accessible, critical, and collaborative digital education is a way to resist and talk back (Hooks, 1989), daring to voice and oppose oppressive contexts.

In this sense, there is a growing need to confront public policies in education that strengthen conservative and oppressive paradigms, segregate, and alienate children from an expansive childhood that enables more fulfilling conditions of life.

The Socio-cultural-historical Approach to Childhood and the Role of Multimodal Narratives in Early Childhood Education

In the socio-historical-cultural context to which this research is affiliated, based on the work of Vygotsky (1978, 1998), meanings are social productions and conventions that are relatively stable in nature from the set of possibilities that make up the senses of each subject, that is, the sum of all psychological events that a given word activates in the conscience (Vygotsky, 1978, 1998). Therefore, in the singularity of the practices represented by photos and videos, this work aims to retrieve the multiple meanings produced about childhoods to think about ever more expansive forms of childhoods.

Thus, in the school context, these multiple meaning-making practices in early childhood education become resources recreated to achieve different purposes, such as for the professional development of educators emerging from the meanings of their practices. These varied meaning-making ways express the multiple cultural possibilities that are pervasive in the school space. The challenge is to find, in these multimodal productions from educators, what is described as the "limit situations" and create the "viable unheard of" (Freire, 1995) understandings to provide educators with critical-formative actions. The discussion aims to show how these resources can instrumentalise the actions that drive social change with the production of multimodal digital narratives, which are digital pedagogical records that combine different media and narrate educational processes as well as the understanding and transformation of the meanings produced with them (Toquetão & Liberali, 2018).

The production of multimodal digital narratives is not neutral. These records, which combine different media and multimodal resources, narrate educational processes and their political and pedagogical conceptions of teaching, allowing educators to perceive historically constructed meanings (Toquetão & Liberali, 2018). In a similar perspective on digital narratives and technology in teacher education, Valente and Almeida (2014, p. 37) consider them as a meaningful process based on the exercise of authorship that can record "the epistemological trajectory and organise the ways of thinking about experiences", through the construction, analysis, and reconstruction of stories, with possible collaboration of peers to establish relationships with themselves and the world. In multimodal digital narratives, the voices of the various participants can be intertwined to construct broad meanings about childhoods circulating in school. As discussed by Toquetão and Liberali (2018), the challenge has been to include the silenced voices of children and family members in these narratives.

Thus, the multiple media found in multimodal digital narratives are the basis for understanding that many artefacts exist to transmit, recreate, and produce meanings in modern society. Multimodality (Bezemer & Kress, 2010; Jewitt, 2009; Kress & van Leeuwen, 2006) may refer to the most diverse forms of representation used in the linguistic construction of a message. Multimodal features enhance the narrative through varied forms, such as typography, image, writing, gestures, postures,

expressions, environments, or other possible combinations. The relationship between the mediums, modes, and projected meanings in society is fundamental for selecting materials to be used and produced.

Therefore, the role of multimodality in human activities assumes a particular function because, in a socio-historical-cultural view, an activity is understood as the way subjects master the use of different instruments, in this case, the multiple ways used to perform it (Liberali, 2016). Therefore, the critical analysis of multimodality, with the identification and interpretation of its various elements, creates the possibility of recognising the conceptions of childhoods and denouncing the invisibility of some childhoods and necroeducation practices.

Thus, as observed in the next section, the multimodal digital narratives, used as digital pedagogical records, may have increasing meaningful relevance in early childhood education because they represent pedagogical practices and educators' specific interests since the choices of images for pedagogical documentation are related to their socio-historical-cultural context.

The Methodology for Data Production and Analysis

The present study discusses the various ways of making meaning of childhoods in the activities carried out with children of early childhood education before the pandemic (between 2017 and 2019) and during remote learning (between March 2020 and March 2021), and their implications for the critical education of educators. This chapter specifically uses scenes of face-to-face activities and remote work from digital media productions collected from a public school in an impoverished area of the city of São Paulo with the children who had some access to the activities proposed by the school.

The research was conducted in accordance with the Ethics Committee in the Plataforma Brasil for the ethical evaluation of the research project. Approval was received from the Ethics Committee at the Pontifical Catholic University of São Paulo (CAAE: 84987318.5.0000.5482). Prior to the commencement of the study, parents/carers completed a consent form, confirming their full understanding of the study's purpose and their role.

In the context of research, we emphasize our commitment to the National Health Council Resolution CNS/MS No. 466/2012 and its complementary resolution CNS/MS No. 510/2016, addressing potential risks to research participants. As the research involves children, parental and guardian authorization for the children's participation was obtained, and the children themselves also expressed their consent. Protecting participants from harm is a primary ethical concern for the researcher, encompassing physical and mental discomfort, harm, and potential danger arising from participation in the study. In the event of such circumstances, participants had the right to withdraw from the research and to receive support from the researchers to ensure the preservation of their rights.

The researchers took all necessary measures to protect children whose autonomy was diminished or who were subject to a relationship of authority or dependency that characterized a situation of limited autonomy, recognizing their unique vulnerability, regardless of the research's risk level.

Notably, it aims to investigate the multimodally produced meanings of childhoods via the multimodal digital narratives constructed by 15 educators in a public school of early childhood education and understand the potential of these narratives as a resource in teacher education from a critical perspective.

According to Kress (2010), multimodality can be understood as using multiple meaning-making modes: a set of socially and culturally formed resources to represent what the world is, how people relate, and how semiotic entities are connected. To this end, based on the work of Kress (2010), Kress and van Leeuwen (2006), and Bezemer and Kress (2010), a multimodal analysis of features such as facial expressions, body movements, colour choice, proximity, glances and stares, words, gestures, and drawings of a group of children aged four to five years was carried out.

The research was based on the theoretical-methodological approach of Critical Collaborative Research (Liberali, 2020; Liberali et al., 2021; Magalhães, 2011; Magalhães & Fidalgo, 2007), which aims to intervene and transform school contexts with discursive practices that allow participants to learn from each other in a permanent dialogue of co-elaboration and contradiction. This methodology considers the process of constructing multimodal digital narratives for the critical education of educators to foster observation, analysis, and transformation, enabling new ways of acting. Therefore, the child and educator participants were involved in this critical collaborative research through conversations that explained the objective and need for their participation.

The public school surveyed is in a peripheral neighbourhood of the west zone of the municipality of São Paulo. According to Brazilian Institute of Geography and Statistics (IBGE, 2010), the average income value of this community is one to two minimum wages (US$ 213.17 per month). In the data production phase, even before the pandemic, during the collective weekly training hours, the researchers suggested that the group of 15 early childhood education educators raise themes from the planned activities to produce multimodal digital narratives. From these encounters, a common axis of the processes experienced was established—the pedagogical practices to delve into and give visibility to understanding the children's experiences during formation. For the reflection of this chapter, scenes of classroom life that comprised the shared activities as a clipping to understand these practices were selected.

The data was produced in collaboration with the educators responsible for choosing the excerpts for discussions. The teachers made digital records to capture conceptions of childhood and the essence of the experiences they wanted to reflect upon, even if the photos did not have the desired quality from a technical point of view. It was assumed that the shared photograph was what the teacher considered best of their practice, which allowed them to reflect on social and political conceptions. From the description of the different moments of the same type of activity present in early childhood education, the researchers and teachers outlined possibilities to understand the constituted meanings of childhood.

Discussion of Multimodal Digital Narratives as an Instrument in Critical Education

In this section, the socio-historical-cultural theory and the multimodal narratives rationale for social justice purposes were used to allow early childhood voices to be heard and support teacher education. In this discussion of the data, the meanings constructed from multimodal digital narratives excerpts (before the pandemic and during the period of remote activity) are presented, following the role that the discussion of these multimodal digital narratives had as an instrument in the critical education of teachers. To conclude, considerations and paths to navigate are pointed out.

This section presents a selected piece of the multimodal digital narratives used as an object of analysis by the researchers and teachers. The formations based on multimodal analysis were founded on the theoretical approaches of early childhood education for later analysis of the videos produced. The data produced were relative to the activities carried out over the years, emphasising the activities before the pandemic and during remote learning lessons.

In their research report, Campos et al. (2013) point out that the pedagogical conception that still prevails in Brazilian municipalities comes from an adult-centric, expositive, and verbalist view. According to the researchers, some routines are reproduced indefinitely, often in an improvised and impoverished manner. Considering early childhood education and teacher education as part of the immersion and problematisation of practice and awareness of the proposition of new forms of action through a dialogical, critical, creative, and revealing process, the images portrayed of the practices questioned were made available in a frame to highlight more evident multimodal traits that characterise more generally the set of materials made available by teachers. The images below illustrate part of what was discussed with the group of teachers about the activities.

The distinct marks that resonate in the selected images about the children's expressions are observed in the analysed activities. It is possible to perceive, in Fig. 17.1, greater control of children's production, with repetitive exercises and activities that restrained their bodies' movement and interactions and that focused on the product. The excerpt refers to remote activities and shows children holding pencils with no signs of interaction or dialogue while the children seem to trace lines or paint pre-drawn figures. Their activity seems to occur from the silencing and controlling of their bodies tracing a previously made drawing over the action to explore.

Figure 17.1 comprises the activities during the pandemic, and it is possible to verify the control of the bodies that follow predefined and encapsulated actions based on the determinations of someone who established how to act and the possible choice of how to carry out the production. As Freire (1970) denounces, this activity implies a childhood view that disregards the child as a subject of desires and possibilities.

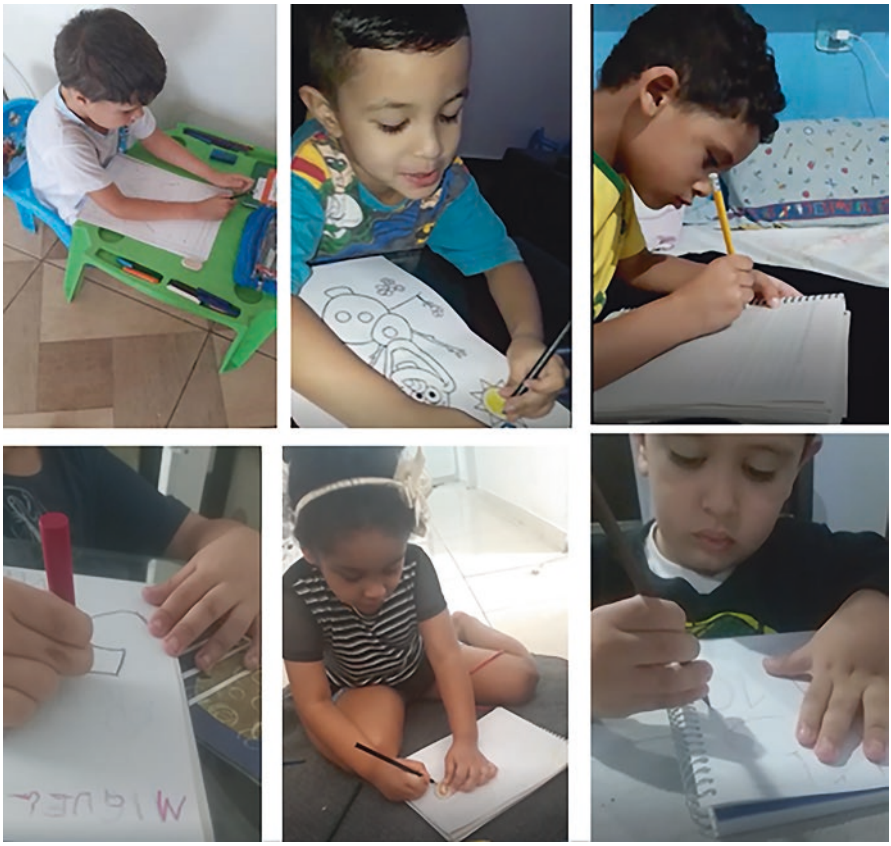

Fig. 17.1 Images recorded during the pandemic with remote learning activities

Figure 17.2 refers to face-to-face activities before the pandemic. It is striking the perspective that places the child as active and able to act and make themselves present. The perspective considers the importance of moving bodies, the children's histories with the materials around them, and their interactions with each other as a basis for carrying out the activities. In addition, it implies considering the relationships between peers and multiple contexts and how they influence the constitution of these childhoods. From a socio-historical-cultural perspective, visible activities refer to a creative process that, as Vygotsky explains, involves shared emotions and the transforming power of meaning-making, negotiated together (Vygotsky, 1978, 1998). According to Sanches et al. (2020), recognising that children have interests and building hypotheses about reality in their interactions allows the teacher to carefully plan experiences so that the children establish a deep connection with what is proposed.

Fig. 17.2 Images taken at school in face-to-face activities before the pandemic. (Source: Database of the school researched. Images authorised by the school and the families. Ethics Committee (CAAE:84987318.5.0000.5482))

The images in Fig. 17.2 show groups of children with different experiments, using their hands to smear themselves with paint, storytelling in a circle, dancing the samba in a Carnival festivity, and playing with elements of nature. Although the photos were taken by adults, the children are portrayed as joyful, tranquil, curious, and nature researchers. In the images of Fig. 17.2, a more unrestricted perspective is noted; children seem to have the possibility of creating productions from their experiences with the available materials and observations and conversations with the other mediated by the adult.

These marks refer to a childhood perspective that takes children as constituting themselves through their relationship with others and the environment. In addition, they are in accordance with the tenet that psychological and identity development is directly related to the socio-historical-cultural context in which they are inserted and exercise the possibility of creative transformation (Vygotsky, 1978, 1998).

The multimodal analysis of these images assumes a critical function in creating possibilities of critical understanding and expanding the ways of conceiving and acting with children by educators and researchers. The formative meetings for these multimodal discussions of the images with the group of teachers allowed a broader understanding of their practices. They generated the possibility of new constructions of proposals for action with the children towards greater creativity and freedom. For example, the ways of positioning bodies, gestures, directing drawings, and images from Fig. 17.1 were discussed as projecting meanings that recall a child's perception as incapable of decision-making, dependent on the action of adults, with no interaction with other children, and constrained by the context. These reflections,

together with most children's lack of Internet access, can be seen in the testimonials of the educators given during the production of multimodal narratives as follows:

> In mid-March 2020, we were hit by the pandemic and forced to be in quarantine, unable to go to school. We had a new challenge to maintain contact and bond with our children. The school was in constant movement to guide families so that children continued to receive affective, educational, and nutritional attention. The first virtual contact with the families was through Facebook and WhatsApp. Then, the Google classroom tool was institutionalised, but little accessed by families and children who did not have the technology. We decided to create printed scripts to guide families about important games and interactions in childhood. It was difficult to measure how many children accessed the different proposals, except when they shared with us some feedback, such as drawings, videos, or audios made by the children and sent by some of the virtual platforms, but these images were not of the proposed activities. Some images looked like spelling exercises applied by the families themselves that did not reveal the children's expressions. So, in November 2020, we started virtual meetings with the children, but participation was also very low (15%). We ended our activities this year with the certainty that we tried our best to maintain our bond. Unfortunately, some homes we couldn't get access to. School is sorely missed by these children! (Testimony of teacher Fabiane)

> Although we have used different resources and virtual platforms to reach our families and children, whether by printing or publishing activities, parent meetings, and online classes, keeping the focus on our pedagogical practice, unfortunately, we have not been able to reach a significant number of them. We are aware of the difficulties that our school community is facing at the moment and that prevent access to technologies, such as the lack of equipment, parents and guardians who worked outside their home and could not accompany their children who were with caregivers or with people who did not master the technology, among others. Even so, we positively evaluated the participation of those who managed to be with us since the joy and satisfaction were clear and noticeable behind the screens when they met teachers and colleagues again and carried out the proposed activities, showing a lot of interest and enthusiasm when executing them. This was also very evident in the videos and photos sent by the families. (Testimony of teacher Tatiana)

With the multimodal narratives, it became evident to the educators that the pandemic created further inequalities for many families that had a knock-on effect on children. These digital records promoted reflections for the educators, especially when children are in contexts of necroeducation with multiple invisibilities and segregations caused by various markers, as briefly discussed earlier in this chapter. This multimodal analysis shared among teachers could elicit a distancing from the registered object to understand their own and their colleague's practice, leading to rethinking their practice and the meaning of childhood present in the school and at home. As a result, the proposal of multimodal analysis contributed to the construction of new meanings by teachers, supported by the multiple resources that materialise the practices that permeate early childhood education.

Before the pandemic, according to the educators, children had more significant opportunities to engage in different games and learn beyond their home culture. It was possible to engage with spaces, experiences, and values beyond their family's culture. Moreover, with these experiences, the children brought these new values to their homes, rendering reflections, conflicts, and discoveries for the whole family.

Despite these enormous difficulties, many public schools of early childhood education in the city of São Paulo, in the context of this research, have found ways to

educate teachers, provide access to children and their families, and offer education, food, moral, and financial support. These schools organised with their communities to visit families in need, distributing basic-need groceries packages, school supplies, and literature books, even if sometimes with resources from teachers themselves or through actions implemented by school staff and partners and not by the government.

Final Research Considerations on Multimodal Analysis

This chapter revealed the perspectives and experiences of young children through multimodal analysis in the context of the challenges experienced during the COVID-19 pandemic, which allowed practitioners to reflect on and gain understanding from these to improve their practice. Particularly impacting young children was remote learning since it created further inequalities related to access to digital technology to engage in their education and revealed the challenge to act towards SDG 10, which focuses on reducing inequalities.

By performing the multimodal analysis of digital pedagogical records in early childhood education, educators and researchers could perceive the need to problematise conceptions, practices, and mediations since the schools and families still have much to progress in understanding children as active subjects in the learning process. Therefore, multimodal analysis shows the potential to inform pedagogical practices and construct possibilities for what the CRC (United Nations, 1989) proposes in terms of ensuring children's access to diverse information and material sources, to voice their ideas and participate in different activities, as well as assuring the promotion of social, spiritual, moral well-being, and physical and mental health.

Regarding the discussion in this chapter, based on critical collaboration, there is evidence that the images legitimise multiple discourses and reveal strong ideologies, opening a field of dialogue among early childhood education professionals. In difficult times such as what we experienced, with a crisis and isolation during the pandemic, the situation of children has only been aggravated by the absence of public policies that structure public education and foster collaborative discussions. Amid the challenges imposed by technology (or lack thereof), spaces with pedagogical dialogues and exchanges and where possibilities are created as the result of this dialectic between the possible and the restricted are fundamental.

In this relationship with contemporary necropolitics, controlling children's bodies reveals omissions and silences in the educational context. Therefore, it is necessary to think of an early childhood education that is legitimate for all children, with the opportunity to express themselves in varied ways and educational environments, whether digital or not. Thus, it was evidenced that this documentation, because it is the object of study in teacher education, in the discursive clash, enables reflection to reconstruct possible new practices.

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Fernanda Coelho Liberali is a teacher educator, researcher, and professor at the Pontifical Catholic University of São Paulo (PUC-SP), Brazil. She holds a master's and a doctorate in Applied Linguistics and Language Studies from PUC-SP and three postdoctoral degrees from the University of Helsinki, the Free University of Berlin, and Rutgers University. She holds a scholarship from CNPq, a Brazilian funding agency. Fernanda is a Brazilian representative of the international committee of the International Symposium BILINGLATAM, an associate with Eastside Institute, a member of the Global Network of the University of Leeds, the general coordinator of the Digitmed Program and the Brincada Project, co-founder of the Global Play Brigade, and a consultant for public and private institutions.

Emilia Cipriano Sanches has a PhD in education—curriculum (Pontifical Catholic University of São Paulo, Brazil) and is a full professor in the Faculty of Education and the Graduate Studies Program in Education: Education of Teacher Educator. She holds a Master's in Psychology of Education (PUC-SP) and degrees in social work and pedagogy. She is a specialist in design and management of public policies and social programs. She is the founder of the São Paulo Forum of Early Childhood Education and the Research Groups Childhood Public Policies (Creating) leader. She has been a president of the Municipal Council of Education of São Paulo (2020). She is a coordinator of the consulting and educational advisory of the Learn to Be Institute and Pedagogue and social worker.

Sandra Cavaletti Toquetão is a pedagogical coordinator at the city of São Paulo, Brazil. She is a PhD in social sciences at the Pontifical Catholic University of São Paulo; holds a master's in education at the Pontifical Catholic University of São Paulo (2018); and is a specialist in technologies, communication, and teaching techniques from the Federal Technical University of Paraná (2016). She is a researcher of the Research Groups Language in Activity Group in the School Context (LACE) and Childhood Public Policies (Creating), both from the Pontifical Catholic University of São Paulo. Sandra is a tutor in the Graduate Program in Education, Pontifical Catholic University of São Paulo.

Chapter 18
Refusing to Silence Early Childhood Voices: The Establishment of the Early Childhood Voices Conference

Sharynne McLeod, Carolyn Gregoric, Tamara Cumming, and Belinda Downey

Abstract Early in the COVID-19 pandemic, the voices of early childhood researchers and professionals became a whisper. To bring together interdisciplinary professionals who work with children, a global interdisciplinary virtual conference called the Early Childhood Voices Conference was first held in 2020 (ECV2020) and again in 2022 (ECV2022). Three values underpinning the conferences were: (a) children first; (b) interdisciplinary, international, and accessible participation; and (c) purposeful research mentoring. The conferences involved online national and international keynote and oral presentations that were viewed asynchronously. The conferences were free for presenters and attendees, drawing on Charles Sturt University's motto "for the public good". ECV2020 had a global reach beyond expectations, with 2847 registrations from 70 countries. ECV2022 had 1956 registrations from 72 countries and children's voices were a larger focus via the Children Draw Talking Global Online Gallery. ECV2022 introduced face-to-face synchronous conversations with five Yarning Circles. The Early Childhood Voices Conference is now bi-annual, providing a free international scientific platform to share research about innovative methods, theories, and partnerships with children, parents/carers, and professionals supporting social justice and the United Nations' Sustainable Development Goals (SDGs). This chapter describes the organisation, lessons learned, and future possibilities for the voices of children, early childhood researchers and professionals to be heard internationally.

Keywords Research · Early childhood professionals · Health professionals · Professional education · COVID-19 · Conference

S. McLeod (✉) · C. Gregoric · B. Downey
Charles Sturt University, Bathurst, NSW, Australia
e-mail: smcleod@csu.edu.au; cgregoric@csu.edu.au; bdowney@csu.edu.au

T. Cumming
Macquarie University, Sydney, NSW, Australia
e-mail: tamara.cumming@mq.edu.au

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Introduction

Early childhood is a foundation for life. Many professionals work to support, nurture, and educate young children and their parents/carers, including early childhood educators, teachers, speech-language pathologists, audiologists, nurses, psychologists, social workers, physiotherapists, doctors, librarians, lawyers, and policymakers. Traditionally, early childhood professionals and researchers come together at conferences to share research, knowledge, and practices, network, and learn from one another. Early in 2020, due to COVID-19 pandemic restrictions across the globe, national and international face-to-face conferences were postponed and cancelled. Early childhood professionals and researchers who had planned to attend conferences in 2020 did not meet in person, and their early childhood research was curtailed. In response, the Early Childhood Voices Conference (ECV2020) was initiated as a free, online, global, interdisciplinary conference. Its success encouraged the organisers, based at Charles Sturt University (CSU) in regional and rural Australia, to embed it in the early childhood research landscape as a bi-annual conference so hosted it again in 2022 (ECV2022) and are planning ECV2024. This chapter will describe ECV2020 and ECV2022, underpinning values, lessons learned, and future possibilities for a greater diversity of early childhood researchers' and professionals' voices to be heard at conferences throughout the world.

Early Childhood Voices Conference

Background Impetus

Early in 2020, early childhood researchers and professionals worldwide were planning to attend conferences to share their latest research and network with and learn from others as usual for research-focused professional development. Simultaneously, the CSU Early Childhood Research Group (ECRG) (Charles Sturt University, 2023a) was planning to host an event for group members to share their research. As the impact of the COVID-19 pandemic continued, national and international conferences and meetings were cancelled, postponed, or moved online. Many academics worked from home during this period which often negatively affected their productivity (AbuJarour et al., 2021). Consequently, places for discussion of early childhood research decreased. As the COVID-19 pandemic continued and CSU staff were working remotely (at home), Professor John McDonald, the Executive Dean of the Faculty of Arts and Education, challenged staff to think big with small budgets, especially due to the financial implications of the pandemic on Australian universities (Carnegie et al., 2022). This impetus inspired the leaders of the CSU Early

Childhood Research Group (ECRG) (TC, SM)[1] to expand the planned presentation day to an online conference focusing on early childhood voices. The online conference aimed to fill the silence created by the cancellation of conferences across the world by hosting the first Early Childhood Voices Conference (ECV2020) using existing university distance education infrastructure.

CSU was well positioned to initiate an online conference as it has been at the forefront of distance education for over 30 years in Australia and has multiple campuses across Australia and other countries (Charles Sturt University, 2023b). In 2020, all CSU staff were very familiar with undertaking research, teaching, and most meetings and administrative tasks in online and hybrid modes. CSU had been using its own online platform for teaching, research and meetings before 2019 but in 2020 transitioned to using Zoom software (Zoom Video Communications, Inc.) across the university. Therefore, the researchers had support from CSU's Division of Information Technology to use CSU's day-to-day infrastructure to host a global conference.

The ECV2020 conference co-chairs were the leaders of the ECRG (TC, SM), and another lecturer in early childhood (BD) volunteered to support ECV2020 by monitoring the purpose-built email (ecv2020@csu.edu.au) but quickly filled many other roles. All ECRG members volunteered to be part of one or more conference planning committees (see Appendix) and promoted the conference via social media and to their friends, colleagues, and students across the world. ECRG members (including early career researchers and higher degree students) were mentored to be a part of the Scientific Committee to understand and learn the processes involved for future career opportunities.

Values Underpinning the Early Childhood Voices Conference

The values underpinning the Early Childhood Voices Conferences were (a) children first; (b) interdisciplinary, international, and accessible participation; and (c) purposeful research mentoring.

Children First Children are the primary focus of the CSU ECRG (renamed Early Childhood Interdisciplinary Research (ECIR) Group in 2022), which aims to provide a transformative research program to promote social justice for children,

[1] *Note*. Charles Sturt University staff involved in the Early Childhood Voices Conference: AS, Dr. Andi Salamon (ECV2020; ECV2022); BD, Belinda Downey (ECV2020; ECV2022); CG, Dr. Carolyn Gregoric (ECV2022); EM, Dr. Elizabeth (Libbey) Murray (ECV2020; ECV2022); JD, Jenny Dwyer (ECV2020); JG, Professor Julian Grant (ECV2022); LM, Dr. Linda Mahony (ECV2020); SM, Professor Sharynne McLeod (ECV2020; ECV2022); SS, Dr. Shukla Sikder (ECV2020; ECV2022); SV, Associate Professor Sarah Verdon (ECV2020; ECV2022); TC, Dr. Tamara Cumming (ECV2020).

families, and practitioners within early childhood (Charles Sturt University, 2023a). The ECIR has two themes. Theme 1 is interdisciplinary practice in the early years, and Theme 2 is children's communication in the early years. The combination of these themes was the inspiration for naming the conference Early Childhood Voices, and both themes were emphasised through the conference.

Children's voices are enshrined within Articles 12 and 13 of the Convention on the Rights of the Child (United Nations, 1989), where children have the right to "freedom to seek, receive and impart information and ideas" including children's voices requires "space, voice, audience, and influence" (Lundy, 2007, p. 927). To begin the journey of faithfully incorporating children's voices into the Early Childhood Voices Conference, Professor Laura Lundy was invited to be the first keynote speaker for ECV2020. Her presentation was titled *'Voice is not enough': The Lundy model and early childhood* and was viewed more than any other presentation during ECV2020. The challenge for the Early Childhood Voices Conference was to develop respectful relationships with children to ensure authentic partnerships using the pathways to participation developed by Shier (2001): "1. Children are listened to. 2. Children are supported in expressing their views. 3. Children's views are taken into account. 4. Children are involved in decision-making processes. 5. Children share power and responsibility for decision-making" (p. 107).

Interdisciplinary, International, and Accessible Participation The Early Childhood Voices Conference aimed to be interdisciplinary and international. The focus was on children across the world, rather than on research being undertaken within disciplinary boundaries (e.g. education, health). One way to achieve this goal was to align with the Sustainable Development Goals (SDGs). For example, the abstract submission template specifically asked authors to nominate relevant SDGs and presentations on the conference website was organised according to SDGs. Using the SDG framework as conference themes unified submissions.

Additionally, the Early Childhood Voices Conference aimed to be accessible by being free, online, and asynchronous. As a result, anyone in any time zone could potentially be a presenter or attendee. In this way, virtual conferences are conveniently accessible from work, home, or the community so long as people can access a device and Internet coverage. Costs only relate to access to the device. Barriers, such as travel or visa requirements, are eliminated, which was identified as particularly beneficial by participants of some low- and middle-income countries.

Purposeful Research Mentoring The Early Childhood Voices Conference provided mentoring opportunities for CSU's early career researchers and research higher degree students who made up most of the members of the ECRG (later ECIR). Before ECV2020, many members had not submitted abstracts to or presented at conferences (some due to COVID-19 restrictions, cost, family commitments, career stage, etc). Most members had never served as conference chairs or on conference organising committees.

Early Childhood Voices 2020 (ECV2020)

Organisation of ECV2020

ECV2020 was designed as an interdisciplinary global online conference platform to share research about innovative methods, theories and partnerships with children, parents/carers, and professionals that supported social justice and promoted achievement of the Sustainable Development Goals (SDGs) (United Nations, 2015) during early childhood or within the early childhood sector. ECV2020 foregrounded the SDGs, with each presentation aligned with one or more goals. ECV2020 allowed researchers to present current research and/or work that responded to challenges during the pandemic when other forums had been cancelled or postponed due to the COVID-19 pandemic. Factors considered in the organisation of ECV2020 are aligned with literature about organising events during COVID-19 restrictions (e.g. Stefanoudis et al., 2021).

Researchers, postgraduate students, and professionals from across the world were invited and supported to submit abstracts to share their research that would improve the lives of children, parents/carers, and professionals during early childhood (generally birth–8 years) or within the early childhood sector. Papers employing qualitative and/or quantitative methods, reviews (e.g. scoping and systematic reviews), and scholarly theoretical papers were welcomed. All abstracts underwent peer review by the ECV2020 Scientific Committee which provided extensive support where required to ensure a diversity of early childhood research would be heard. The accepted abstracts were published online as well as in the 162-page conference proceedings book published with an ISBN (McLeod et al., 2020). Authors of accepted abstracts submitted video presentations that were available online from 16 to 20 November 2020 on the ECV2020 website (https://earlychildhoodresearch.csu.domains/early-childhood-voices-conference-2020/) and via the CSU YouTube channel. Most presenters agreed that their papers could remain online after the conference. Social media (especially Facebook and Twitter) and email correspondence were used to invite people to register for the conference via the Eventbrite registration platform. Registration was free, and registrants were provided with access to the website and emailed information. Additionally, CSU News ran three stories about the conference (see Appendix).

ECV2020: Statistics and Success

ECV2020 was held as an asynchronous conference available online (Table 18.1). There were eight national and international keynote presentations addressing children's voices, early literacy, early childhood education, school transition, and

Table 18.1 Statistics for ECV2020 and ECV2022

Dates	ECV2020 (16–20 November 2020)	ECV2022 (5–9 December 2022)
CSU Website	https://earlychildhoodresearch.csu.domains/early-childhood-voices-conference-2020/	https://earlychildhoodresearch.csu.domains/early-childhood-voices-conference-2022
Registrations	2847	1956
Countries of registered attendees	70: Albania, Argentina, Armenia, Australia, Bahrain, Bangladesh, Belgium, Bhutan, Bosnia & Herzegovina, Botswana, Brazil, Cambodia, Canada, Chile, China, Costa Rica, Croatia, Denmark, Fiji, Finland, France, Germany, Ghana, Greece, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Jordan, Kuwait, Latvia, Macau SAR China, Malaysia, Malta, Mexico, Moldova, Morocco, Myanmar (Burma), the Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Panama, Peru, the Philippines, Poland, Portugal, Russia, Samoa, Saudi Arabia, Serbia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Turkey, United Arab Emirates, the United Kingdom, the United States, Vietnam, Zambia, Zimbabwe	72: Argentina, Armenia, Australia, Bahrain, Bangladesh, Belgium, Bolivia, Botswana, Brazil, Cambodia, Canada, Chile, China, Cook Islands, Costa Rica, Croatia, Cyprus, Denmark, Ethiopia, Fiji, France, Germany, Ghana, Granada, Greece, Hong Kong, Hungary, Iceland, India, Indonesia, Iraq, Iran, Ireland, Israel, Italy, Jamaica, Korea, Latvia, Luxembourg, Malta, Mexico, Moldova, Myanmar, Nepal, the Netherlands, New Zealand, Nigeria, Oman, the Philippines, Poland, Portugal, Qatar, Réunion, Rwanda, Saudi Arabia, Singapore, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Tonga, Turkey, United Arab Emirates (UAE), the United Kingdom, the United States, Vanuatu, Vietnam, Zambia, Zimbabwe
Website statistics	9806 page views and 5736 sessions (during week of conference) The top 10 countries were Australia, the United States, the United Kingdom, New Zealand, Canada, Malaysia, Iceland, Finland, Norway, The Netherlands	6431 page views from 1358 users (during week of conference) The top 10 countries were Australia, the United Kingdom, the United States, Ireland, Bangladesh, Ghana, Canada, Croatia, Indonesia, New Zealand
YouTube statistics	During the week of the conference, there were over 11,500 views of ECV2020 generating 98.2% of the university's total YouTube traffic that week	During the week of the conference, there were over 3517 views of ECV2022 presentations and 243 hours of viewing
Profession or registered attendees	Early childhood education, speech-language pathology, audiology	Academic/researcher (53%), early childhood education (40%), education/teaching (30%), speech-language pathology (27%), psychology (5%), social work (5%), student, nursing, audiology, linguistics, consultant, educational policy development, health promotion, local government, medicine, occupational therapy, osteopathy, physiotherapy (multiple responses could be selected)

research innovations. The 86 pre-recorded oral presentations were received from 17 countries and were organised under the following topics: children's voices, communication, COVID-19, families' voices, indigenous voices, innovation, leadership, professional voices, rural communities, well-being, and workforce (Table 18.2). The papers aligned with the SDGs, especially good health and well-being (SDG 3), quality education (SDG 4), decent work and economic growth (SDG 8), reduced inequalities (SDG 10), and partnerships for the goals (SDG 17).

ECV2020 had a global reach beyond expectations: 2847 registrations were received from 70 countries (Fig. 18.1). People who traditionally could not attend international conferences engaged as presenters or attendees and sent unsolicited emails to indicate that they appreciated that ECV2020 was free and did not require the costs or complications of travel—such as visas. During the week of the conference (16–20 November 2020), there were over 11,500 views of ECV2020 content on the CSU YouTube channel; in fact, ECV 2020 generated 98.2% of the university's total YouTube traffic that week. Additionally, the ECV2020 website had 9806 page views, with the top 10 countries being Australia, the United States, the United Kingdom, New Zealand, Canada, Malaysia, Iceland, Finland, Norway, and the Netherlands. Most traffic came via Facebook and Twitter, followed by CSU News. People mostly viewed the website from their desktops (54%) or mobile device (43%).

After the conference, a proceedings book of abstracts was sent to each registrant (McLeod et al., 2020), and presentations remained online on the ECV2020 website. Members of the ECRG (LM, SM, AS, JD) decided to edit a book to capture learnings from the ECV2020 presentations. Consequently, Springer was engaged as the publisher of the book titled *Early Childhood Voices: Children, Families, Professionals* (Mahony et al., 2024). The international interdisciplinary book was designed to amplify research about the voices of children, families, early childhood educators, speech-language pathologists, psychologists, and interdisciplinary teams from countries as diverse as Australia, Bosnia and Herzegovina, Brazil, Canada, Iceland, the United Kingdom (Northern Ireland and Scotland), South Africa, Rwanda, Jamaica, and Vietnam. It also provided members of the ECRG with mentored opportunities to become book editors and book chapter authors, in many cases for the first time.

Early Childhood Voices 2022 (ECV2022)

Background Impetus for ECV2022

In 2022, the CSU ECRG were beneficiaries of CSU Sturt Scheme funding using evidence of the impact of ECV2020 and rebranded as the CSU Early Childhood Interdisciplinary Research (ECIR) Group (co-chaired by SM, JG, SV, EM). Given the success of ECV2020, the ECIR decided to hold another online conference in 2022 (ECV2022, https://earlychildhoodresearch.csu.domains/early-childhood-voices-conference-2022/) with the same motivations and goals as ECV2020. Even

Table 18.2 Presentations and publications from ECV2020 and ECV2022

Dates	ECV2020 (16–20 November 2020)	ECV2022 (5–9 December 2022)
Presentations	8 keynotes, 86 presentations from 17 countries	6 keynotes, 95 presentations from 25 countries
Presentations: topics	Children's voices, Communication, COVID-19, Families' voices, Indigenous voices, Innovation, Leadership, Professional voices, Rural communities, Well-being, Workforce	Children's voices, Communication, Families' voices, Indigenous voices, Innovation, Leadership, Professional voices, Rural communities, Well-being, Workforce
Presentations: Sustainable Development Goals	1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 16, 17	1, 2, 3, 4, 5, 8, 9, 10, 11, 13, 16, 17
Conference proceedings	McLeod, S., Cumming, T., Downey, B., & Mahony, L. (Eds.) (2020). *Early Childhood Voices 2020 Conference Proceedings*. Charles Sturt University. https://earlychildhoodresearch.csu.domains/early-childhood-voices-conference-2020/ ISBN 978-1-86-467381-4 162 pages	McLeod, S., Gregoric, C., & Sikder, S. (Eds.) (2022). *Early Childhood Voices 2022 Conference Proceedings*. Charles Sturt University. https://earlychildhoodresearch.csu.domains/early-childhood-voices-conference-2022/ ISBN Ebook: 9781864674309 164 pages
Book	Mahony, L., McLeod, S., Salamon, A., & Dwyer, A. (2024). (Eds.) *Early childhood voices: Children, families and professionals*. Springer.	Planned
Yarning circles	–	YC1 Families registrations—13/65 (attendees/registrations) YC2 communications registrations—23/67 YC3 professional registrations—13/50 YC4 Children registrations—15/50 YC5 SDGs registrations—12/47
Children draw talking global online gallery	–	200 drawings from 24 countries provided as YouTube videos across four online galleries

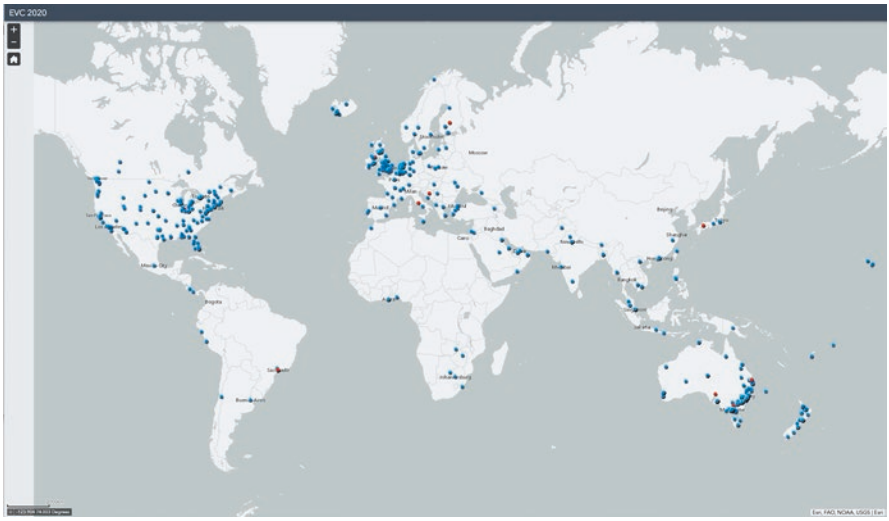

Fig. 18.1 Map of registrations for ECV2020 created by the CSU Spatial Analysis Unit

though there were more opportunities for face-to-face conferences in 2022, the benefits and accessibility of a free, online, asynchronous conference remained. The ECV2022 conference co-chairs were a leader of the ECIR (SM) and a lecturer in education (SS) who was a member of the ECIR. Again, all members of the ECIR volunteered to be part of one or more committees to plan the conference (see Appendix). The funding enabled a Research Officer (CG) to be employed part-time for two years from August 2022. The new Research Officer was nominated as ECV2022 conference secretary (Appendix). The paid employment of a conference secretary greatly reduced the additional workload for others on the committee. Additionally, there was greater involvement by members of the CSU Faculty of Arts and Education and the wider university compared with ECV2020 (see Appendix).

Organisation of ECV2022

ECV2022 was initiated, organised, held, and evaluated over four months (August to December 2022) in the same format as that devised for ECV2020. ECV2022 was expanded to include two new initiatives: The Children Draw Talking Global Online Gallery and scheduled live participant interaction (Yarning Circles). Again, all abstracts underwent peer review by the ECV2022 Scientific Committee made up of ECIR members (see Appendix). Again, social media, media, and email correspondence were used to promote the conference. All accepted abstracts were published online as well as in the 164-page conference proceedings book published with an ISBN (McLeod et al., 2022) that was available free online. Authors of accepted

abstracts submitted video presentations that were available online via YouTube on the ECV2022 website. All presenters were required to give permission for their papers to remain online after the conference. During and after ECV2020, BD, SM, and TC documented the processes and procedures in a conference compendium for future conference organisers, which was used and updated in 2022 by CG.

ECV2022: Statistics and Success

ECV2022 was held as an online asynchronous conference from 5th to 9th December, including six keynote presentations from education, psychology, speech-language pathology, linguistics, and occupational therapy, with the presenters speaking from the United States, Canada, Luxembourg, and Australia (Table 18.1). Additionally, 95 oral presentations (see Appendix) were presented by people from 25 countries and organised under the same topics as ECV2020, except the COVID-19 topic (Table 18.2). Again, papers were aligned with the SDGs, especially SDG 3, SDG 4, SDG 8, SDG 10, and SDG 17.

ECV2022 had a similar global reach (72 countries) to ECV2020 (70 countries) with 1956 registrations. During the week of the conference, there were over 3517 views of the presentations on the CSU YouTube channel that equated to 243 hours of viewing. Additionally, during the conference week, the ECV2022 website had 6431 page views from 1358 users. The top 10 countries were Australia, the United Kingdom, the United States, Ireland, Bangladesh, Ghana, Canada, Croatia, Indonesia, and New Zealand. ECV2022 had a greater impact with low- and middle-income nations than ECV2020, with the top 10 countries including Bangladesh, Ghana, and Indonesia because of connections with the ECIR committee. Most traffic came via social media and direct searches for ECV2022. People mostly viewed the website from web/mobile device (51%), web/desktop (47%) or web/tablet (2%)—similar to ECV2020.

The Children Draw Talking Global Online Gallery (Charles Sturt University, 2022) enabled children from across the globe to share images of themselves so attendees could hear/see children's voices. Children were invited to "draw themselves talking to someone" (McCormack et al., 2022) and answer a series of who, what, where, and why questions to explain their drawing. The 200 pictures and children's answers from 24 countries were compiled into four galleries: the world, Indonesia, and two from Australia. Viewing the galleries provided ECV2022 participants with a space to hear/see children's voices by reflecting on what children valued about talking.

Virtual Yarning Circles were facilitated by ECV2022 committee members to provide learning opportunities for professional reflection and an opportunity for participants to expand on their experiences of the presentations and to begin or grow networks and collaborations. Each of the five Yarning Circles (one per day) was generated by ECV2022 content and related to a conference theme: family voices and play-based learning, communications, professional voices, children's voices

and children's drawings, and collaborating for children's rights and sustainable development outcomes. During each Yarning Circle, a member of the ECV2022 committee provided skilful, gentle pacing and supported respectful willingness for all participants to have space to participate (cameras on/off) and communicate via a range of channels (oral conversations, chat, reactions, whiteboards).

After ECV2022, a Google survey was sent to all registrants and 131 responded. Overall, 88.6% of the anonymous respondents ranked the conference as 4–5/5 (1 = *poor* and 5 = *excellent*). Respondents said that they had participated in the online presentations, keynote speakers' presentations, Children Draw Talking Global Online Gallery, and Yarning Circles and had downloaded the ECV2022 Conference Proceedings Book. Respondents were also asked three open-ended questions. Question 1 asked: *What did you like about ECV2022? What was good?* There were 131 open-ended responses, including that it was free, online, asynchronous, interdisciplinary, multicultural, had high-quality content, included children's voices, and provided an opportunity for discussion (Yarning Circles). The second question asked *What areas could be improved? Please provide us feedback for future conferences*. While there were 96 responses, 24 (33%) indicated that nothing could be improved. Most of the responses related to the fact that it was a virtual/online conference (and people wanted more face-to-face contact), wanting more time for discussion, and navigation of the website/content. There were 97 responses to the third question, *What learnings from ECV2022 can you apply in your practice?* that embraced a wide range of topics. For example, "I got many fresh perspectives and ideas from the presentations and keynote speakers which I would definitely use or reflect in my practice". Many of the responses related to specific areas, including "innovative ideas about how to be more inclusive of children voices", "How to build relationships", "Building educator capacity", "lots of things about education, parenting, children's learning etc.". Some indicated they would use the presentations to inform aspects of their research, including "ethical and methodological considerations", "sociocultural theory of child development", and "children's voices in research". Some indicated they gained "a range" of support for their teaching "from effective presentation ideas as a lecturer to content to help with courseware development and overall practice".

Lessons Learned and Future Possibilities

The Early Childhood Voices Conferences are unique in that they were created as free global interdisciplinary virtual conferences in response to the COVID-19 pandemic and were not reimagined or transitioned from a pre-existing conference format. As a result, organising ECV2020 and ECV2022 provides a unique perspective on planning and executing international interdisciplinary virtual conferences with an inclusive social justice perspective.

Children First

While most of ECV2020 was *about* children, the voices of children were included in a number of ways. First, the website included welcome messages from children within the committee's families (Fig. 18.2) and a video that featured First Nations children presenting an acknowledgement of country (https://youtu.be/cEg2ga0VYus). The video was provided to the ECV2020 committee by a local First Nations early childhood education centre and was used again with permission for ECV2022. Drawings by children within the ECV2020 committee's families and a local community-based preschool were included in the ECV2020 conference proceedings and were used to create thank you cards mailed to the keynote speakers with an Australian gift. Each conference abstract explained the presentation content in a child-friendly format. For example, keynote speaker Professor Laura Lundy's abstract included: "Implications for children: What you think and feel should be listened to and taken seriously when adults are making decisions about you".

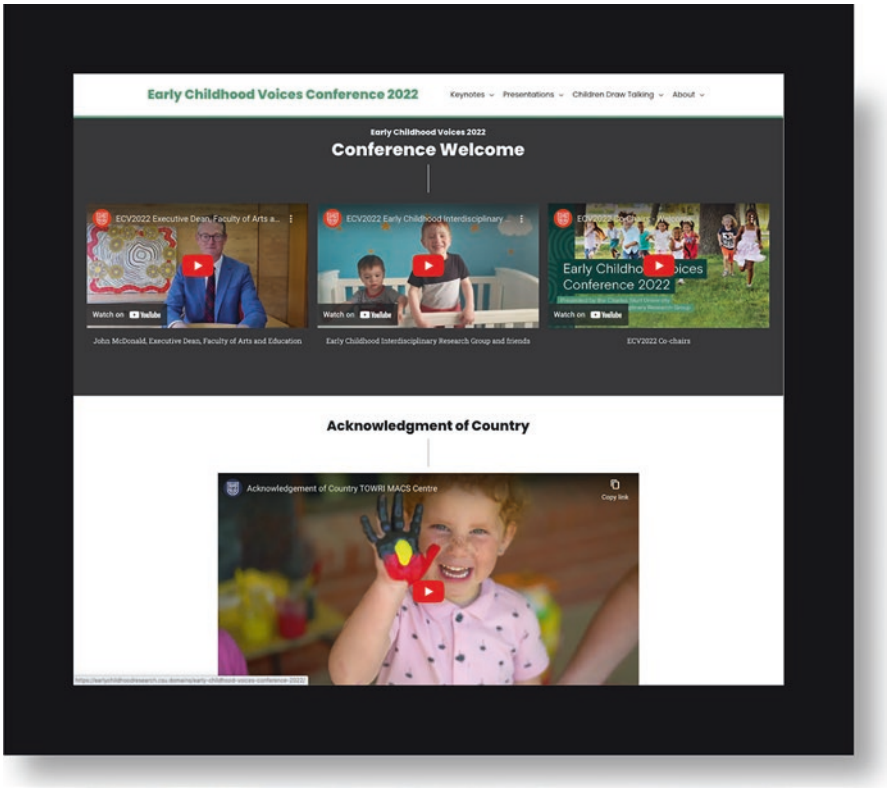

Fig. 18.2 Children featured on the ECV2022 website

Although valued, it was recognised that the input of young children into ECV2020 was limited. The ECV2022 committee sought to increase the prominence of children's voices by including the Children Draw Talking Global Online Gallery to move to the participatory concept of "2. Children are supported in expressing their views" (Shier, 2001, p. 107). The design of the drawing task was informed by consulting eight children as well as research from members of the ECIR (e.g. Dealtry & McFarland, 2024; McCormack et al., 2022; Murray et al., 2022). Child assent and parent consent were required upon online submission. Children from 24 countries submitted 200 drawings that were collated into four PowerPoint presentations that displayed each drawing for approximately 5 seconds with musical backing (Charles Sturt University, 2022). These four online galleries collectively were viewed more than any other presentation at ECV2022. Further work has been undertaken by ECIR members to analyse, synthesise, and report children's perspectives about talking that can be gained from the drawings and their explanations (with approval from the university ethics committee) (McLeod et al., 2023). The challenge for future conferences will be to continue to develop respectful relationships with children to ensure authentic participation (Shier, 2001).

Interdisciplinary, International, and Accessible Participation

The Early Childhood Voices Conference 2022 also aimed to build upon its success by increasing interdisciplinary, international, and accessible (free, online, asynchronous) participation and reach. Liaising directly with international and national professional associations to promote the conference and call for abstracts is one way of achieving this. While the conference was in English, attendees could use closed captioning and transcripts to facilitate an understanding of video presentations and multilingual presentations will be included in ECV2024. Equity of access was compromised during ECV2022 by only having live Yarning Circle discussions at five designated times across 11 h (day and evening in Australia). Given the distance from other countries, finding time zones suitable for both Australian and global audiences was difficult. To help address this issue, the presentation slides and other notes from the event were uploaded to the conference website. A website, event management system, online submission process, and video conferencing platform (for live interaction) was required to successfully organise and host this online conference. These were mostly available within existing CSU infrastructure and expertise or elsewhere (via web-based platforms, including Eventbrite, Submittable). Nonetheless, members of the conference organising group relied on information technology support from within CSU to set up and monitor these digital platforms. Variable Internet access and differences in accessible software required consideration of global compatibility with programs used for event registration and submission management (e.g. Google platforms were not accessible to participants in countries such as Iran and China). Alternatives, such as email submissions and cloud-based file storage services, were offered to participants.

Being entirely online and asynchronous was a strength of the Early Childhood Voices Conference format. Future conferences can build on this strength by expanding opportunities for live interaction through Yarning Circles. Future conferences could also expand opportunities for children to meaningfully participate through other modes of expression (e.g. discussion, photography, music, and dance). Although initially unplanned, the biennial timing enabled researchers to undertake and publish research in conjunction with a past conference presentation and provided time to undertake research for a future presentation or grant application.

Purposeful Research Mentoring

During ECV2020 and ECV2022, every member of the ECIR group was either a chair or member of at least one conference committee (see Appendix), reviewed abstracts as part of the Scientific Committee (with mentoring from ECIR colleagues if required), and submitted a conference abstract (with mentoring if required). Everyone in ECIR was an integral part of the committees that hosted these international conferences. Additionally, after ECV2020, some ECIR members initiated a book project published by Springer (Mahony et al., 2024; i.e., the current volume). Consequently, members were mentored (by SM) to edit a research book and/or write book chapters (tasks that most ECIR members had never previously undertaken). Committee members have added their involvement to their curriculum vitaes and have leveraged additional opportunities arising from their involvement in conference planning, peer reviewing, and chairing. For example, learning how to undertake a peer review of conference abstracts is a skill that can be applied to reviewing academic journal articles and improving one's own conference and journal submissions. Increased collaboration and networking have promoted and built a professional learning community within the university and across the world.

Many early childhood professionals require evidence of ongoing education and training. The processes to obtain recognised professional development certification in Australia are lengthy and time-consuming. Committee members unsuccessfully sought methods for providing recognised certification of participation for ECV2020 and ECV2022. Subsequently, a CSU certificate of attendance was issued upon request. It is recommended that the process of seeking formal accreditation for conference participation be pursued in the future.

Conference Organization

Organizing a conference takes time. Both ECV2020 and ECV2022 were a collaborative team effort across the ECIR group, faculty, and university. Having a dedicated conference secretary (CG) streamlined ECV2022 compared to ECV2020; however, this requires additional funding, which is not guaranteed. The conference

audience and needs differed between ECV2020 and ECV2022 due to the changed global contexts. ECV2020 was held when most conferences had been cancelled due to international COVID-19 restrictions. In contrast, ECV2022 was competing for conference participants' attention with more conference offerings at the same time as workforce shortages resulting in higher workloads in many countries (Gromada et al., 2020). Unlike in 2020, the gap in the conference market was closing. The ECV2022 online format reached further into low- and middle-income countries (e.g. Ghana, Bangladesh). The ECV2022 Yarning Circles mostly attracted participants with access to the technology required to join (e.g., a reliable internet bandwidth, camera, microphone), although a phone-in option was available via the Zoom platform.

Summary and Conclusion

The Early Childhood Voices Conference began due to the silencing of early childhood researchers' and professionals' voices during the COVID-19 pandemic and has provided an inclusive and quality platform for sharing interdisciplinary research across the world. ECV2020 reminded early childhood researchers and professionals that their voices remained valued during the COVID-19 lockdowns and that they could participate in reciprocal conversations among the international community to share research about innovative methods, theories, and partnerships with children, parents/carers, and professionals supporting social justice and SDGs. The success of ECV2020 was not only due to the presentations, the number of attendees, and the worldwide coverage but also the capacity-building that was afforded to members of the ECV2020 committee. This capacity building led to gaining a grant to employ a research officer, to run ECV2022, and to an edited book published by Springer (Mahony et al., 2024). The ECV2020 and ECV2022 committee members not only learned how to run an international conference but also about writing and reviewing abstracts, presenting papers, and making connections with international colleagues. The Early Childhood Voices Conference has been underpinned by the values of: (a) children first; (b) interdisciplinary, international, and accessible participation; and (c) purposeful research mentoring. At each conference, these values have been strengthened. The online conference format can be adapted for other disciplines and will endure into the future so that early childhood researchers' and professionals' voices can continue to be heard, along with those of children.

Appendix: Early Childhood Voices Key Contributors to ECV2020 and ECV2022

Dates	ECV2020 (16–20 November 2020)	ECV2022 (5–9 December 2022)
Image (iStock)		
Keynotes	1. Prof. Laura Lundy, UK 2. Prof. Gail Gillon, New Zealand 3. Prof. Marilyn Fleer, Glykeria Fragkiadaki, Prabhat Rai, Australia 4. Prof. Sheila Degotardi, Australia 5. Prof. Sue Dockett, PhD Professor Emeritus Bob Perry, Australia 6. Prof. Jayne Osgood, UK 7. Prof. Ann Merete Otterstad, Norway 8. Jacqui Emery, Australia	1. Prof. Barbara Rogoff, USA 2. Prof. Christina Siry, Luxembourg 3. Prof. Barbara May Bernhardt and Prof. Joe Stemberger, Canada 4. Dr Chontel Gibson, Australia 5. Prof. Linda J. Harrison, Australia 6. A/ Prof. Cathrine Neilsen-Hewett, Australia
ECV Chairs	Prof. Sharynne McLeod and Dr Tamara Cumming	Prof. Sharynne McLeod and Dr Shukla Sikder
ECV Conference Secretary	Belinda Downey	Dr Carolyn Gregoric
ECV committees	Scientific committee, Organisation committee, Promotion/social media committee	Scientific committee, Organisation committee, Promotion/social media committee, Children's voices committee

ECV committee members	Dr Michelle I. Brown, Mandy Cooke, Anna Cronin, Dr Kathryn Crowe, Dr Lena Danaia, Dr James Deehan, Jenny Dwyer, Dr Suzanne C. Hopf, Dr Nicola Ivory, Dr Helen Logan, Dr Linda Mahony, Kate Margetson, Holly McAlister, Dr Laura McFarland, Dr Nicole McGill, Jessica McLeod, Dr Libbey Murray, Dr Andi Salamon, Dr Van Tran, Dr Sarah Verdon, Dr Cen Wang, Robbie Warren	Josephine Ohenewa Bampoe, Dr Michelle Brown, Dr Kathryn Crowe, Dr Jessamy Davies, Dr Lysa Dealtry, Cheree Dean, Belinda Downey, Dr Sheena Elwick, Dr Leanne Gibbs, Prof. Julian Grant, Dr Carolyn Gregoric, Dr Laura Hoffman, Dr Suzanne C. Hopf, Marie Ireland, Dr Nicola Ivory, Dr Olebeng Mahura, Dr Linda Mahony, Kate Margetson, Holly McAlister, Dr Nicole McGill, Dr Anne McLeod, Dr Jahirul Mullick, Dr Elizabeth Murray, Dr Andi Salamon, Dr Shukla Sikder, Dr Natalie Thompson, Dr Kelly Tribolet, Dr Van Tran, A/Prof Sarah Verdon, Dr Audrey Wang, Dr Cherie Zischke
CSU Faculty of Arts and Education support	Prof. John McDonald (Executive Dean), Prof. Philip Hider (Associate Dean Research), Nicole Longhurst and Krystal Gleeson (Faculty Operations Team)	Prof. John McDonald (FOAE Executive Dean), A/Prof. Brendon Hyndman (Associate Dean Research), Jelena Bogdanovic (Faculty Administration Manager), Patrick McKenzie (Faculty Technical Manager), Nicole Longhurst (Faculty Operations Team), Michelle Egan (Faculty Operations Team), Kevin Ng (Technical Specialist Officer), Damian Moloney (Technical Specialist Officer)
Charles Sturt University support	Cassandra Dray (Marketing / Brand), Bruce Andrews (Media), Gail Fuller (Spatial Analysis Network)	Mark Filmer (Office of Research and Graduate Studies), Cassandra Dray (Marketing / Brand), Craig Poynter and Gail Fuller (Spatial Analysis Network), Bronwyn Martin (Social Media Content Producer), Fleur Horsley (Social Media Strategist), Bruce Andrews (Media), Bethany Brightmore (Marketing / Brand), Lisa Limbrick (Office of Research and Graduate Studies)
Media	CSU news release 1: https://news.csu.edu.au/latest-news/strong-international-registrations-for-online-early-childhood-conference CSU news release 2: https://news.csu.edu.au/latest-news/when-do-children-learn-speech-sounds CSU news release 3: https://news.csu.edu.au/latest-news/teachers-can-help-children-who-are-experiencing-separation-and-divorce The Early Education Show (podcast): https://www.earlyeducationshow.com/episodes/episode138 CSU Recognising Excellence Daily (RED): https://csu.rewardgateway.com.au/SmartPress/Article/6397/20201126_1731069	CSU news release 1: https://news.csu.edu.au/latest-news/leading-experts-to-speak-at-online-early-childhood-voices-2022-conference CSU news release 2: https://news.csu.edu.au/latest-news/children-everywhere-invited-to-draw-talking-for-a-university-conference *Radio* 2BS radio interview 2MCE radio interview

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Sharynne McLeod, PhD is a speech-language pathologist and Distinguished Professor of Speech and Language Acquisition at Charles Sturt University, Australia. Her research foregrounds the right of everyone (particularly children) to participate fully in society, and she has presented a speech about communication rights at the United Nations in New York. She is an elected Fellow of the Academy of the Social Sciences in Australia, has received Honors of the American Speech-Language-Hearing Association, is a Life Member of Speech Pathology Australia, and has been an Australian Research Council Future Fellow supporting multilingual children's speech development. She was the founder and co-chair of ECV2020, ECV2022, and ECV2024.

Carolyn Gregoric, PhD is a Research Officer for the Early Childhood Interdisciplinary Research Group at Charles Sturt University, Australia. She was conference secretary for the Early Childhood Voices Conference (ECV2022 and ECV2024). Before this, she worked as a Project Manager and Research Officer at Flinders University, Australia, for many research projects in the College of Nursing and Health Sciences and College of Education, Psychology and Social Work. Carolyn's interests include interdisciplinary collaborations and working collaboratively for change across the life cycle.

Tamara Cumming, PhD is a Senior Lecturer with the Macquarie School of Education, Macquarie University, Australia and has worked in the early childhood sector for over 20 years. Before becoming an academic, she held positions as an early childhood educator, inclusion support manager, and research officer in a children's services organisation. Tamara's research concerns the complexity of early childhood practice and the well-being and sustainability of the early childhood workforce. She is co-leader of the Early Childhood Educator Well-being Project and was co-chair of ECV2020.

Belinda Downey, PhD is a Lecturer at Charles Sturt University, Australia, was conference secretary of ECV2020 and co-chair of ECV2024. She has over 20 years of experience teaching across the birth–12 years age range across regional Australia (New South Wales and the Northern Territory). Belinda's research addresses retention and well-being in early childhood education.