Chapter 2 Positioning Early Childhood Development as a Sustainable Development Goal Target: Challenges and Opportunities in the South Asian Context



Meenakshi Dogra and Venita Kaul

The Context

One of the most significant advances in recent years in our understanding related to child development has been the critical role of Early Childhood Development (ECD), which not only sets the foundation for lifelong learning and development but is also acknowledged as a key input for successful completion of primary education. This global acknowledgement is evident in the growing inclusion of ECD as a subject of importance within international discourse, relating more immediately to the attainment of primary education goals but in a longer-term perspective to larger societal goals of global peace, social equity, and poverty reduction. More recently this discourse has culminated its inclusion in the recent SDGs as Target 4.2 for Goal 4 for education, which we consider as an important acknowledgment of this understanding of the significance of the continuum in learning and development.

Building on the SDGs framework, our chapter attempts to unpack the relevance, comprehensiveness, and complexity of this target of ECD, as articulated specifically in the context of Goal 4, while also recognizing its interconnectedness in achieving the other SDGs. We begin with a review of the significant contribution of multidisciplinary developmental science research, which has paved the way for more evidence-based advocacy at the international level for inclusion of this target in the SDGs. We also examine briefly the preceding policy and programmatic provisions that have been in place internationally from a historical perspective and their influence in the South Asian context. We move on to unpack the construct of ECD as articulated in terms of its subdomains and examine the significance and challenges of monitoring both quality and effectiveness of each of these subdomains. This

M. Dogra (⋈) · V. Kaul

Centre for Early Childhood Education and Development (CECED), Ambedkar University,

New Delhi, India

e-mail: meenakshidogra@aud.ac.in

would entail taking into account systemic challenges in operationalization, especially the lack of nuanced understanding of the nature and significance of this field among stakeholders and alongside the emerging sociopolitical realities in South Asian countries. Some of the key influencers, we discuss, would be the parallel and vertical governance structures and systems in place for the social sector and the neoliberal policy environment. This is interestingly to be seen alongside a paradoxical trend of reduced priority to the social sector in some governments, with emergence of the market economy. We discuss implications of these for ownership of this holistic and integrated indicator and the need for coordination and convergence in planning, implementation, and monitoring of this target across sectors. We identify some research gaps and conclude with some broad recommendations for the way forward for policy and further research in this area.

Developmental Science Research and Its Contribution to Positioning of ECD

The last decade of the 20th century spawned an unprecedented growth in the research on early childhood. Across disciplines common conclusions began to emerge that both supported the importance of early life for the development of human potential and also provided ways to improve child outcomes and well-being. (Britto et al., 2013, p. 3)

Research across various disciplines, predominantly from neuroscience on how brain architecture develops during early years (Karoly et al., 1998) to developmental science on how children learn language and other skills (Phillips & Shonkoff, 2000) and economics and on how investment in early years can provide high rate of returns (Heckman et al., 2010), have in an unprecedented way contributed to the recognition given to ECD in the global development agenda, leading to its inclusion as a target in the SDGs. Science has also suggested new ways of thinking in ECD, with the focus not only on building strong foundations to succeed in schools but also on it laying the foundation for lifelong learning and development. Further, there is also an emerging realization that healthy development requires not just enriched learning opportunity for children; there are also risk factors identified such as *toxic stress* created in children by adverse early experiences which may affect the developing circuitry in the brain related to attention, impulse control, and problem-solving (Shonkoff, 2009).

Over and above its contribution to the education goal, evidence has been generated of ECD's larger role in impacting holistically other SDGs as well. Research indicates that investment in the early years leads to breaking of barriers of poverty (Shonkoff et al., 2012), improves nutrition and health (Gertler et al., 2013), improves learning outcomes (Kaul et al., 2017), and creates responsible communities (SDG 1, 2, 3, 4, 5, 8, 10, 11, 12, 16, and 17). This compelling evidence requires the concept of ECD to be seen not in isolation but be recognized for its potential to fetch multiple returns and contribute to attainment of multiple goals related to children and society as a whole.

Global Commitment Toward Early Childhood Development (ECD): The Journey from EFA to SDGs

With this recognition that the early childhood years lay the foundation on which children build their lives, the world has seen a global movement to improve the lives of young children, primarily through ensuring basic education. This acknowledgment began initially with the United Nations Convention on the Rights of the Child (1989), which adopted a Child Rights' perspective and brought in a holistic concept of child's right to development and protection, ratified by 195 countries. ECCE was more specifically identified and agreed to as Goal 1 in the international formulation of the Education for All (EFA) Goals in 2000. The Dakar Framework for Action on EFA defined the aim of this goal which was to "Expand and improve comprehensive early childhood care and education, for girls and boys, especially for the most vulnerable and disadvantaged children" (UNESCO 2000). Subsequently, the Millennium Development Goals (MDGs) were also positioned in 2000-2015, but these focused on improving health and education, achieving primary education and eliminating gender disparities at all levels of education by 2015. These did not specifically include ECD. The most recent and significant development has been the adoption of the Global Goals in 2015 (to follow the 15-year MDG period), comprising of 17 Sustainable Development Goals (SDGs) which are a new, universal set of goals, targets, and indicators that aim to tackle the persisting global issues of poverty, inequality, and climate change. ECD has been included as a specific target in the context of Goal 4 of the SDGs, which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (UN 2015).

Influence of International Commitment to EFA Goals on Initiatives in South Asian Countries

The global commitment to achieve EFA clearly encouraged several countries to undertake a number of policy and research initiatives. In this section, we present the range of these initiatives taken by South Asian countries, in particular Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, for developing and implementing national, comprehensive, and multi-sectoral ECD policies and frameworks.

Policy Initiatives In Fig. 2.1, we map out the initiatives related to policies and provisions in the above South Asian countries. These have to an extent paved the way for implementation and monitoring of the SDG 4.2 in these countries. In terms of having a policy on ECCE, above mentioned all South Asian countries have developed their country-specific policy on ECCE. However, the terminology and scope may vary by country, but basic concepts and principles may be similar—emphasizing an integrated and holistic approach (UNESCO 2016a, b; UNESCO and UNICEF,

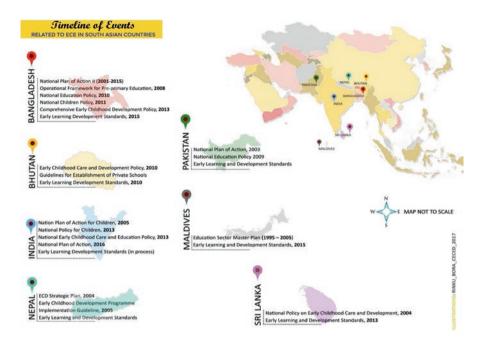


Fig. 2.1 Timeline of events related to ECD in Bhutan, Bangladesh, India, Nepal, Pakistan, Maldives, and Sri Lanka

2012). This initiative led further to development of the Early Learning and Development Standards, Curriculum Framework, and Strategic Plan for promoting early learning in many South Asian countries (UNESCO and UNICEF, 2012).

Research Initiatives The above policy initiatives in some of the South Asian countries have also been influenced to an extent by in-country research in ECD. Some of these research studies available in the public domain include the following:

India Early Childhood Education Impact (IECEI) Study: This longitudinal research followed about 14,000 rural children from the age of 4 years till they were 8 years old, from 3 provinces of the country. The study tracked the status of ECE in terms of nature and levels of children's participation, the quality of their ECE experiences, and its impact on their school readiness levels at age 5 and subsequently on their learning levels as they moved into the school system. The evidence generated from the study over the years, which confirms the significance of quality ECCE in determining children's school readiness levels and thereon their learning levels in primary grades, has been consistently informing policy making in the context of both the approved National Policy on ECCE (GoI, 2013) and the policy in the making of the domain of Education (Kaul et al., 2017).

Nepal ECD Impact Study: The Nepal study also showed positive impact of ECD programs not only for young children but for their families and communities. "It

focused on the impact the program has had on children's transition to school, which is a significant issue in a country where many children never start school and where those who do, drop out in large numbers during the first and second year" (Save the Children, p.3). A positive outcome of ECD intervention is that among the ECD participants, "the rate of Dalit or lower caste children starting school is slightly higher compared to their non-dalit peers—over 95 percent have started school" (Save the Children, 2003, p. 7).

Thus from the EFA Goal1 (2000) to the recent SDG (2016), the development in terms of policy may be perceived as a progressive shift, with Target 4.2 focusing beyond care and education to include holistic ECD as an outcome.

Early Childhood Development in SDGs: Unpacking the Concept

The ECD target toward which countries are expected to make a formal commitment is articulated as follows: "By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education" (UN 2015). The key concepts emphasized in this target are interconnected and follow the continuum of learning and holistic development (Fig. 2.2).

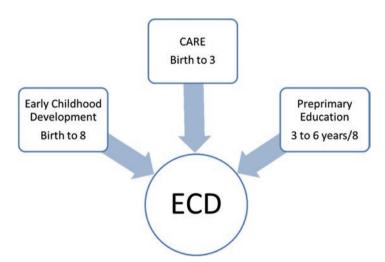


Fig. 2.2 Unpacking the "integrated" ECD—The Early Learning Continuum

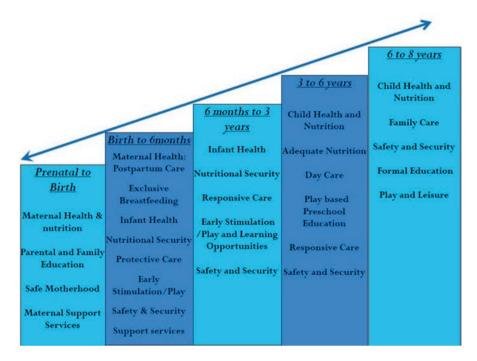


Fig. 2.3 Right to ECD—A Comprehensive Framework. (Kaul et al., 2013, p. 11)

Since the process of development is essentially continuous and cumulative in nature, ECD conceptually implies both vertical and lateral interconnectedness. On the one hand, health, nutrition, care, and education are critical components, which are interdependent and complementary. On the other hand, the substages within the continuum from birth to 8 years each have their own specific priorities, which cumulatively influence a child's development and learning potential. Figure 2.3 shows the concept of ECD along the continuum, with priorities for each substage indicated.

We now critically review the key concepts of this multicomponent target and explore opportunities and challenges that may need to be addressed by the countries, especially in the South Asian region, as they work toward achieving the same.

Unpacking the Sub-concepts: A Critique

Three specific components of Target 4.2 separately specified are early childhood development, care, and pre-primary education, all three aimed at preparing children for primary education. While the concept of ECD is itself holistic and encompasses the other two conceptually as elements of a child's early development, it is not clear why each is specified separately even as a target. With pre-primary education

mentioned distinctly, does ECD then refer to children below 3 years with specific reference to early stimulation? If so, is this not considered as responsive care which would again overlap with the third element, i.e., the care domain. In a way, the target as articulated could be perceived as a contradiction of the holistic nature of ECD with care and education getting separated from development. This presents a great deal of ambiguity, which needs clarification.

Quality ECD in Global Target 4.2

The term "quality" is prefixed collectively to the three elements defining this target. This is a key factor which is globally one of the most pressing concerns in ECD. Highlighting quality in the ECD target is an outcome of a repeated concern emanating from research evidence which is showing that poor quality implementation either can lead to no positive effects on children's development or may lead to even negative effects (Lake & Chan, 2015; Kaul et al., 2017).

The concept of "quality" also needs further unpacking and clarity, as it may lead to limited or distorted understanding of the concept. Some arguments that may come while unpacking the concept could be—What do we mean by quality? What are the key components of it? Should it be uniformly conceptualized for all countries or does it vary from country to country and from context to context? If it can be similar for all the countries, then how can we ensure cultural and contextual perspectives related to it?

There are also multiple stakeholder perspectives with respect to quality in ECD in terms of structure, process, and outcomes. On the one hand, professional understanding of ECD across the globe, derived largely from disciplines of child development, sociology, and cognitive science, is that given the interdependence of domains, ECD structurally is an integrated set of services which cater to the holistic development of the child below 6 years, consistent with the stage in which the child is and offered in a contextualized manner. In terms of processes, the understanding is that early education implies a play- and activity-based curriculum that aims to facilitate children's inherent developmental needs for physical, social, language, and cognitive development through play and activity in an exploratory, safe, and caring environment. ECD till 6 years is not aimed at academic learning through formal teaching methods. On the other hand, the practitioners, parents, and public at large understand preschool education or ECCE for 2- to 6-year-olds particularly as accelerated introduction of alphabet and numbers in a school-like environment, with the mistaken understanding that "the earlier children start the better they will learn." This disconnect in perceptions and expectations, particularly with the emergence of a vibrant private sector investment in ECD across South Asian countries hand in hand with absence of any planned regulation, has led, for example, in the case of India, to a situation where children in the preschool years, in a large number of cases, spend time learning the 3 Rs by rote with negligible opportunities for play and activity, which becomes counterproductive for their developmental outcomes, as derived from the professional understanding of ECD (Kaul et al., 2017).

Globally too there is no comparable data available on the quality of all types of care for very young children, so it is not possible to chart progress in this area since 2000 (UNESCO 2015). The recent Global Education Monitoring (GEM) Report (2016) highlights "a pathway that draws upon measurement expertise while allowing for adaptation, revision and alignment with cultural values and discourse is essential for accurately measuring and comparing the quality of ECD" (UNESCO 2016a, b, p. 211). In this context, it is important for the countries to deliberate on what constitutes "good quality" in their respective contexts and reflect on indigenous values and priorities on children's development as well as research-based quality factors that impact school readiness.

As a case in point, the longitudinal IECEI study, mentioned in the earlier section, looked at the composition of quality in preschool education in terms of its impact. The key quality factors that emerge as significant in this context are related to attributes of the teacher, curriculum planning, content and transaction, and the physical setting of the program in consonance with professional understanding of developmental appropriateness (Kaul et al., 2017). Similar longitudinal studies in diverse contexts are required to be planned to explore the quality factors and validate the same in specific country contexts for better exploration and understanding of the quality in ECD.

"Developmentally on Track": Global Indicator 4.2.1

This is positioned as one of the most significant indicators to determine whether a child's development is on track or not on track and to assess child's readiness for primary education. However, the lack of clarity on what do we mean by developmentally on track, particularly in diverse contexts, makes it difficult to define and assess. Marfo (2011) raised the similar concern that "it is difficult to define normative development in a globally comparable manner because culture influences development and, primarily, because the extent to which children achieve milestones is unknown in much of the world" (as cited in UNESCO 2016a, b, p. 215–216).

In view of the above mentioned concerns, understanding this specific indicator is a challenging task for the countries until they have sound evidence in their own cultural context. This requires cross-cultural and/or multicountry researches in developmental sciences designed to explore and identify issues of diversity.

Globally, there is also a need to build a common framework for understanding ECD in multiple contexts. Though the concept of having a universal framework has some opposing views, leading one is the notion of "multiple childhoods" which has gained significant attention in childhood studies. This is based on the idea that "multiple modernities" in South Asia have resulted in diverse childhoods and point toward looking at the child and childhood from specific cultural and contextual lens. Nevertheless, this notion has also been criticized for the risk of creating fragmented understanding and increasing inequalities (Hopkins & Sriprakash, 2015). Consequently, building common understanding will certainly bring some dilemmas such as—(a) Is it possible or justifiable to understand all children or childhood across the globe with the same lens, particularly when children are living in varied

cultural and contextual diversities? (b) How can we integrate and articulate the contextual and cultural realities into our common understanding of child and childhood?

However, we need to acknowledge these dilemmas and deliberate on how to take care of these cultural and contextual variations which has an influence on children while making policy frameworks for the successful implementation at the country and region level. Thus, the consensus needs to be built on having universal framework for understanding children and their development irrespective of their background. Since universal ways cannot be applicable in varied contexts to achieve universal goals, therefore, it is important to come up with country-specific implementation methodologies which are relevant to different needs, and this can be taken care while framing legal provisions for children living in different circumstances.

Moving forward, the countries can build on this framework and work to develop Early Learning and Development Standards (ELDS) on what children should be able to do at different ages so that they are informed by knowing what is typical or what children around them can do. This would also help stakeholders to understand the developmental trajectory of children in their contexts based on conceptually and empirically validated indicators.

Access and Participation in Global Indicator 4.2.2

The key challenge in relation to this specific indicator is its limited description and wide scope which needs to be specified with more clarity. A consistent philosophical issue, particularly in education and perhaps in all social services, has been the debate on access vs. quality and equity. Should "quality" follow "access," or alternatively, can access be defined as separate from quality? The issue is "access" to what, given that access without quality is of very little value and may also have adverse consequences. A related issue in defining quality which may arise is that is equity 'equal opportunity' or is it beyond that in terms of enhanced affirmative action to close the equity gap? Similarly the term "participation" is difficult to define. The challenge is how do we see participation, whether it is just enrolment or attendance or consistent and active participation of the child in organized learning. If it is consistent participation, then how can we define consistency? The indicator lacks this specificity, which is likely to create complications for the countries on how to collect and report reliable and comparative data on this particular indicator and give a valid profile of their respective countries. Besides, the indicator mentions participation in organized learning which is again not clearly defined since in ECE, a diverse range of provisions are available across countries which are both organized and unorganized. Even the broader curriculum in the field is often not developmentally appropriate as discussed earlier and varies across contexts, so that quality as defined by parents and practiced in day cares and preschools is different from that conceptualized and advocated by professionals in the field. At the international level, some broad guidelines would need to be developed and made available to the countries so that reliability and validity of the data can be ensured.

Status of Children in Early Childhood Development: Setting the Baseline

A review of available data from South Asian countries indicates that the efforts and commitments have undoubtedly contributed toward some progress in many aspects of ECD. This progress is largely focused toward reducing under-5 mortality which declined by 63 percent from 12.7 million in 1990 to 4.8 million in 2016 (UNIGCME, 2017) with a decline in the rate of stunting from 47 percent in 2004 to 40 percent in 2010 (Black et al., 2017). Between 1990 and 2016, Bangladesh, Bhutan, India, and Pakistan showed major decline in their under-5 mortality rates (UNIGCME, 2017). Despite these efforts and limited progress, ECD remains an area of grave concern. The number of children at risk of not attaining their developmental potential is highest among South Asian countries, with nearly 53 percent of children jointly exposed to stunting and poverty in 2010 (Black et al., 2017). A significant proportion of this percentage (40 percent) is living in India (UNICEF et al., 2012). Stunting among children is the prevailing risk factor which impact later learning and development among young children. Research evidence has shown association of stunting with lower levels of cognitive development during the primary school years of children (Walker et al., 2015). The Multiple Indicators Cluster Survey (MICS) data shows that 37 percent of children are having lower levels of either cognitive or socioemotional development in LMICs (McCoy et al., 2016). In addition to this, the concentration of under-5 mortality is at the national level, with about half of these deaths occurring in five countries—India, Nigeria, Pakistan, Democratic Republic of Congo, and China. In fact, India and Nigeria represent together one third of the global burden. Similarly, the rate of low-birth-weight (LBW) infants is higher in South Asia. Of about 18 million LBW babies born globally each year, more than half are in South Asia (Dundar et al., 2014, p. 166). The main cause of these deaths in South Asia is major health problems of early childhood which includes pneumonia, diarrhea, and malaria which are predicted by social and ecological determinants related to child's context which includes poverty, access to hygienic water and sanitation facilities, and health services (Black et al., 2017).

In terms of access and participation of children in pre-primary, there has been a great increase in many countries over a period of time. However, most of the proliferation in pre-primary education access occurs in HICs as compared to South Asia (18.5 percent). One of the reasons of lower participation is inequities in access to pre-primary education (Black et al., 2017).

These statistics clearly show that the state of world's children particularly in South Asia is far from satisfactory. Many children younger than 5 years are at risk of not reaching their developmental potential (Black et al., 2017). To improve this situation, global agenda has prioritized the issue of ECD which now needs concerted efforts at global, national, and regional levels to achieve the specified target.

Monitoring Progress in Early Childhood Development: Opportunities and Challenges

The focus of the ECD target on access to quality *early childhood development* (ECD), care, and pre-primary education presents significant monitoring challenges. In the following section, we present an overall perspective on the challenges before focusing on the specific monitoring issues, particularly in the context of South Asian countries, related to Target 4.2 and its two global indicators.

Global Indicator 4.2.1 – Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex

Global Indicator 4.2.2 – Participation rate in organized learning (one year before the official primary entry age), by sex

Monitoring ECD Indicators: Some Challenges

Key concepts that have been indicated as measures of progress in the SDG context in ECD primarily relate to readiness to learn, participation, and provision. However, measuring these concepts is challenging because the availability and nature of data to evaluate these indicators is uneven in many countries throughout the region. In addition, there are some major systemic challenges that may require to be addressed alongside. These include the following:

(a) There is a trend toward expanding private provisions for day care and preschool education across countries, particularly in South Asia, which serve a useful purpose in the absence of adequate public provisions. However, being a completely unregulated sector, with no restrictions on their establishment or on the quality dimensions of these programs, there is no compulsion for them to adhere to any prescribed norms, despite good ECD policies being in place. There are also provisions run by NGO sector which get grants for working with the underprivileged, but these tend to be often minimalist in provisions and may or may not adhere to quality standards (GoI, 2014). In the case of India, this applies also to the ICDS in many cases (Kaul et al., 2017). These also provide a challenge for development of any regulatory mechanisms, since those would have implications for quality standards across sectors, public and private. There are also no means of procuring reliable data on these provisions in view of a laissez-faire approach, so that their numbers are at best captured through estimation, which, as in the case of India, for instance, could be grossly underestimated.

- (b) A critical dimension of the quality of the ECD provision, in private or public domains, is the teacher or day care/child care worker and his/her capacities and profile. This dimension assumes systematic arrangements to be in place in a country for their professional development and support. Again with the professional development programs being largely in the private sector, as in India (Ambedkar University Delhi and National Council of Teacher Education, 2011), there is neither any reliable information on these institutions/programs in the public domain nor any MIS in place across South Asian countries which would capture these.
- (c) Another challenge stems from lack of universally accepted quality and/or outcome indicators for ECD, which would lend to an operationally objective measurement of progress. With professional initiatives including measurement tools based on what constitutes quality in terms of developmental appropriateness, and practices in place which are not consistent with this expectation, there often arises the need for a compromise.
- (d) The indicators may or may not be located within the mandate of any one nodal Ministry with, for example, pre-primary education often housed with the Education Department, while ECD may be with the Ministry of Social Welfare or Health. With vertical structures in place and limited convergence across these institutions, the integration of these aspects in planning and monitoring of provisions is not easily achievable.

Measures for Assessing Progress on ECD Indicators and Monitoring Challenges

In recent years, attention has focused on development of globally comparable population-based measures of ECD (UNESCO 2016a, b). Several measures have been developed and used across South Asian countries at the population level. Nevertheless, there are few dilemmas and questions related to generating globally comparable data in terms of:

- (a) How realistic is it to develop a standard global measurement which can integrate national and regional data into global monitoring?
- (b) How can we ensure cultural and contextual alignment of the key concepts highlighted in the target?
- (c) What would be the approach to compare data of different countries which are at diverse baselines and performing differently?
- (d) What kind of a sharing platform can be created for the countries that are developing and implementing ECD assessments so that there is cross sharing and learning?

Alongside, for the above specified indicators of the target, it is critical to explore feasible approaches toward resolving the challenges discussed below for any effective monitoring system to be in place.

Quality in Target 4.2

Though the target has highlighted the need for good quality preschool education, none of the proposed indicators in Target 4.2 capture the quality of provision. The issue is how can quality be ensured and measured in diverse contexts across different provisions of ECCE. Interestingly, in this context even different stakeholders hold diverse perceptions of what constitutes a good quality service or program, as discussed earlier. This is going to be a great challenge for the countries in the absence of specific indicators and concrete guidelines.

Globally, quality in education is seen as the extent to which school setting and systems support the learning and development of children. Both at the system and setting levels, several measures have been developed and used to assess quality (UNESCO 2016a, b). Some of the tools which are available for measuring the quality of the program and ECD outcomes are presented in Figs. 2.4 and 2.5. While developing some of these measures, validation studies have been conducted across various countries. For instance, East Asia-Pacific Early Child Development Scale was validated across six countries—Cambodia, China, Mongolia, Timor-Leste, Vanuatu, and Vietnam—with a sample of over 7000 children. Similarly, to date, the International Development and Early Learning Assessment has been used and validated in over 16 countries (Raikes, 2016).

To monitor quality internationally, particularly in the South Asian region, countries need to consider using and adapting the tools relevant to their context, set their standards, and use mechanism to monitor standards. This can be done by encouraging appropriate research and validation studies to develop local tools within a global framework based on priorities identified in their own specific contexts. For instance, in India, the work on standardization of the tools for assessing the quality of programs called the Early Childhood Education Quality Assessment Scale (ECEQAS) and School Readiness Instrument (SRI) has been initiated by the Centre for Early Childhood Education and Development, Ambedkar University Delhi, in partnership with UNICEF, the World Bank, and Centre Square Foundation.

Child Development Outcomes in Indicator 4.2.1

Target 4.2 focuses on ensuring that children who begin formal schooling are developmentally on track and "ready for primary education." This requires a reliable and valid measure of school readiness to be administered on children. However, school readiness as a construct involves more than just child outcomes. It also includes the need for schools to be ready for children as they come in terms of matching their learning needs and contexts and readiness of parents/families to understand what early education implies and be therefore able to partner with preschools and schools to promote school readiness in children (UNICEF, 2012). Thus, monitoring of this indicator involves multiple tools of measurement including an instrument for assessing children learning levels at school entry, a measure of the quality of the classroom processes and environment for early learning in preschool and early primary

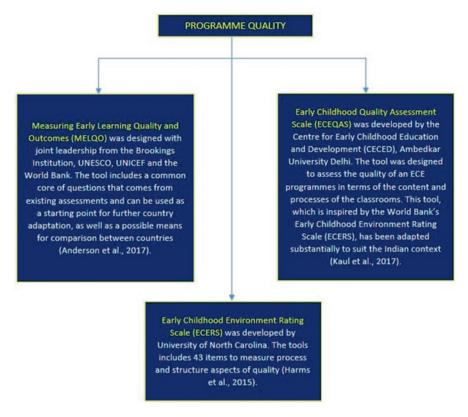


Fig. 2.4 Tools to measure quality of ECE programs

grades, and a household survey instrument which elicits information on parents/families' readiness for sending children to school in terms of the learning environment available to children.

In any such measures, particularly for child outcomes, the emphasis should be on population-based measurement or measures designed to assess the health of the system and not the individual child and inform policy at the national or subnational levels (UNESCO 2016a, b). This kind of instrument needs to provide essentially for a short and quick assessment at scale and would be more on the lines of a "dipstick" measure. For individual assessment, more comprehensive, diagnostic tools would be required in clinical settings, which are not being referred to in this context.

The development and standardization of tools to track normative development at a population level in this context for purposes of monitoring nationally and at international levels require a great deal of collaborative effort and sharing and constitute a very important research agenda on its own. A significant challenge is to monitor progress across cultures while retaining a normative framework.

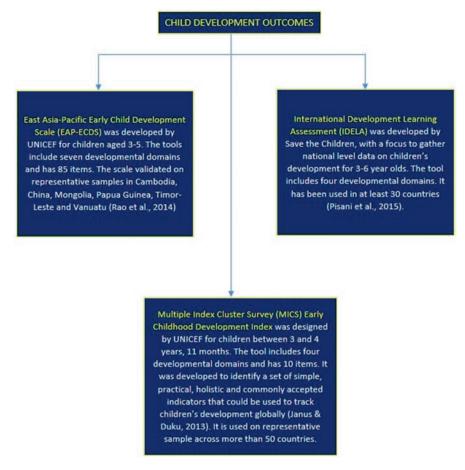


Fig. 2.5 Tools to measure ECD Outcomes

Access and Participation in Indicator 4.2.2

A major challenge in relation to access and participation is the absence of any reliable data across countries on actual number of children attending existing ECD provisions, particularly in terms of disaggregation across different services in an integrated program. The issue is also of enrolment vs. participation particularly since the latter is difficult to estimate and document. Where the data is available, the challenge is how to compare participation rates across and within countries with systemic diversities such as entry ages not being uniform. At present very few countries have free and/or compulsory pre-primary education, and with the private sector growing exponentially in this sector, as discussed earlier, and varied provisions on the ground, there is a diverse range of ECD provisions available to children.

Recent research evidence from India indicates that children's participation in preschool and early primary grades is very fluid and uneven with no alignment to

what is prescribed in policy. There can be 4-year-olds in school and 7-year-olds still in preschools, thus following diverging educational trajectories, right from the beginning of their schooling. Further, children attend irregularly, and the composition of early grades in the school system in terms of age appropriateness stabilizes only by age 8 (Kaul et al., 2017). This raises the need for each country to institute an MIS or data management system that differentiates and estimates progress on gross and net enrolment ratios separately on a regular basis to assess the efficiency of the system.

Looking Ahead: Suggestions for the Way Forward in the South Asian Region

The acknowledgment of ECD in SDGs is definitely a significant achievement. However, the comprehensive nature of the concept presents a number of monitoring challenges discussed above for the countries. In this section, we present some thoughts on the way forward to implement the SDG framework, particularly in South Asian Region.

Strengthen Scientific Evidence Science is an incredible platform for driving a research and development agenda. In ECD, while there have been innumerable pilots of innovative practices, the need now is to scale up these initiatives. This requires research in multiple contexts on ways and modes of scaling up of innovative practices. Since scaling up of the intervention may not lead to the same results in different contexts, it is also important to get a deeper understanding of why, for whom, and in what context the intervention worked well (Yoshikawa & Kabay, 2015). More scientific evidence is needed which can help in identifying diversity in contexts and which can contribute to the understanding of what needs to be prioritized in the context of Target 4.2.

Integrated Approach The needs of young children are spread across different areas of health, nutrition, protection, care, stimulation, and learning. Comprehensive development frameworks are needed to integrate the vision of policy makers and to coordinate action on the ground level (Richter et al., 2017). Most research tends to be uni-sectoral and focuses on any one dimension, whereas the need now is for multi-sectoral, multidisciplinary research which can enrich understanding of complementarities and associative benefits and can thus inform more comprehensive planning frameworks.

Multi-sectoral Coordination In most countries, all child related-services are not delivered under one department but spread across multiple departments. There is a need to ensure that the needs of the child are fulfilled in an integrated manner through appropriate and effective convergence mechanisms (Kaul et al., 2013). In Bangladesh, there is an umbrella ministry (Ministry of Women and Child Affairs)

which has been set up to enable multi-sectoral coordination across other departments. In India too there is the Ministry of Women and Child Development, but the experience shows that ECD should have a higher-level authority institution which can ensure coordinated effort by all relevant sectors at all levels, such as the Prime Minister's Office.

Advocate and Disseminate Evidence There is an imperative need to bridge the gap between research and policy and programming, demystify research findings, and communicate these in user-friendly formats for wider sharing and utilization. Research at the level of policy is at present very deficient and needs to be promoted.

Regional Partnerships There is a need to expand the participation network, including more stakeholders especially region-based networking, as this would enhance the opportunities for shared learning for the countries. This would be particularly useful in development of monitoring frameworks and tools, some of which could be used across countries within the region.

Outcome-Based Monitoring System Designing and developing a monitoring and evaluation system, in addition to measurement tools, are of significant importance. Most monitoring systems generate data which is largely for "reporting upward" purposes and does not in any way provide feedback for systemic improvement at appropriate levels. The need therefore for appositeness in data generation is important so that it can be designed in ways that can promote effective utilization of data at levels at which it is most applicable.

Sharing of Good Practices Sharing of good practices can be helpful for other countries to take informed decisions and implement strategies to improve access and quality of the ECCE programs. For instance, in 2012, the Government of West Bengal in India undertook an initiative to revamp the pre school education component of Integrated Child Development Scheme (ICDS) so that it prepares children better ready at the age of six. The positive outcomes of ECCE in West Bengal are explicit in case studies from the field which testify how attendance at model centers has risen and how the enthusiasm of the children has truly been kindled. This experience has led to other states getting inspired to set up model centers too and focus on quality.

Conclusion

The priorities and challenges mentioned in the above sections provide a direction to the kind of initiatives that countries, particularly the South Asian countries, need to undertake on priority to support the process of achievement of Target 4.2 in the context of not only Goal 4 but other SDGs too, to which it has the potential to make

a significant contribution. In this context, the significant impact of developmental science to promote healthy child development across all the countries and achieving the SDGs need to be realized. In South Asian context, very limited research initiatives have been undertaken which can guide the work further and help in effective implementation of the SDGs. Prioritization of the developmental science in the region is much needed which can be done through taking appropriate actions and adopting mechanisms such as generating relevant data on diverse contexts; planning and conducting policy-oriented research, program evaluations, and longitudinal studies; ensuring reliable measurement to generate data; using novel approaches to data collection; development and use of contextually appropriate tools; and building capacity for SDGs and policy-relevant developmental science across and within countries (Raikes et al. 2017, p. 7).

References

- Ambedkar University Delhi and National Council of Teacher Education. (2011). *Preparing teachers for early childhood education*. New Delhi: Centre for Early Childhood Education and Development, Ambedkar University and National Council of Teacher Education.
- Black, M. M., Walker, S. P., Fernald, L. C., Andersen, C. T., Digirolamo, A. M., Lu, C., & Devercelli, A. E. (2017). Early childhood development coming of age: Science through the life course. *The Lancet*, 389(10064), 77–90.
- Britto, P. R., Engle, P. L., & Super, C. M. (Eds.). (2013). *Handbook of early childhood development research and its impact on global policy*. Oxford: Oxford University Press.
- Dundar, H., Beteille, T., Riboud, M., & Deolalikar, A. (2014). *Student learning in South Asia: Challenges, opportunities, and policy priorities*. Washington, DC: World Bank Publications.
- Gertler, P., Heckman, J., Pinto, R., Zanolini, A., Vermeersch, C., Walker, S., & Grantham-McGregor, S. (2013). Labor market returns to early childhood stimulation: A 20-year followup to an experimental intervention in Jamaica.
- Government of India. (2013). *National Early Childhood Care and education policy (NECCEP)*. New Delhi: Ministry of Women and Child Development, GoI.
- Government of India. (2014). *Quality standards for early childhood care and education*. New Delhi: Ministry of Women and Child Development, GoI.
- Harms, T., Clifford, R. M., & Cryer, D. (2014). *Early childhood environment rating scale*. New York: Teachers College Press.
- Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P. A., & Yavitz, A. (2010). The rate of return to the high/scope Perry preschool program. *Journal of Public Economics*, 94(1–2), 114–128.
- Hopkins, L., & Sriprakash, A. (2015). The 'poor child': The cultural politics of education, development and childhood. London, UK: Routledge.
- Janus, M., & Offord, D. R. (2007). Development and psychometric properties of the early development instrument (EDI): A measure of children's school readiness. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 39(1), 1.
- Karoly, L. A., Greenwood, P. W., Everingham, S. S., Hoube, J., Kilburn, M. R., Rydell, C. P., & Chiesa, J. (1998). What we know and don't know about the benefits of early childhood intervention, Monograph MR-898-TCWF, RAND Corporation. Santa Monica: Rand.
- Kaul, V., Mehendale, A., & Dogra, M. (2013). Right to early childhood development: A comprehensive framework (ECED Brief-4). New Delhi, India: Centre for Early Childhood Education and Development, Ambedkar University and CARE India.

- Kaul, V., Chaudhary, A. B., Bhattacharjea, S., Ramanujan, P., Banerji, M., & Nanda, M. (2017). The India early childhood education impact study. New Delhi, India: Centre for Early Childhood Education and Development, Ambedkar University and ASER.
- Lake, A., & Chan, M. (2015). Putting science into practice for early child development. The Lancet, 385(9980), 1816–1817.
- Marfo, K. (2011). Envisioning an African child development field. *Child Development Perspectives*, 5(2), 140–147.
- McCoy, D. C., Peet, E. D., Ezzati, M., Danaei, G., Black, M. M., Sudfeld, C. R., & Fink, G. (2016). Early childhood developmental status in low-and middle-income countries: National, regional, and global prevalence estimates using predictive modeling. *PLoS Medicine*, 13(6), e1002034.
- Phillips, D. A., & Shonkoff, J. P. (Eds.). (2000). From neurons to neighborhoods: The science of early childhood development. Washington, DC: National Academies Press.
- Pisani, L., Borisova, I., & Dowd, A. J. (2015). *International development and early learning assessment technical working paper*. Save the Children.
- Raikes, H. A. (2016). Measuring of child development and learning. Background paper for Global Education Monitoring Report 2016. Retrieved from http://unesdoc.unesco.org/ images/0024/002455/245579e.pdf
- Raikes, A., Yoshikawa, H., Britto, P. R., & Iruka, I. (2017). Children, youth and developmental science in the 2015–2030 global Sustainable Development Goals. Social Policy Report, 30(3).
- Rao, N., Sun, J., Ng, M., Becher, Y., Lee, D., Ip, P., & Bacon-Shone, J. (2014). Validation, finalization and adoption of the East Asia-Pacific Early Child Development Scales (EAP-ECDS). UNICEF, East and Pacific Regional Office.
- Richter, L. M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F. L., Behrman, J. R., & Bhutta, Z. A. (2017). Investing in the foundation of sustainable development: Pathways to scale up for early childhood development. *The Lancet*, 389(10064), 103–118.
- Save the Children. (2003). What's the difference? An ECD impact study from Nepal. Kathmandu: Save the Children, U.S.A.
- Shonkoff, J. (2009). In brief: The science of early childhood development. Cambridge, MA: Center on the Developing Child, Harvard University.
- Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., McGuinn, L., & Committee on Early Childhood, Adoption, and Dependent Care. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232–e246.
- UNESCO and UNICEF. (2012). Asia Pacific end of decade notes on education for all: Early child-hood care and education. Paris/New York: UNESCO/UNICEF.
- UNICEF. (2012). School readiness: A conceptual framework. New York: UNICEF.
- UNICEF, WHO, World Bank. (2012). UNICEF-WHO-World Bank joint child malnutrition estimates. New York/Geneva/Washington, DC: UNICEF/WHO/World Bank.
- United Nations. (2015). Transforming our world: the 2030 Agenda for sustainable development. Version 1, September, 2015. Geneva: United Nations.
- United Nations Convention on the Rights of the Child. (1989). Retrieved from www.ohchr.org/ Documents/ProfessionalInterest/crc.pdf
- United Nations Educational, Scientific and Cultural Organization. (2000). *The Dakar framework for action*. Paris: UNESCO.
- United Nations Educational, Scientific and Cultural Organization. (2015). EFA global monitoring report: Education for all 2000–2015 Achievements and challenges. Paris: UNESCO.
- United Nations Educational, Scientific and Cultural Organization. (2016a). *Global education monitoring report: Education for people and planet: Creating sustainable future for all.* Paris: UNESCO.
- United Nations Educational, Scientific and Cultural Organization. (2016b). New horizons: A review of early childhood care and education in Asia and the Pacific. Paris: UNESCO.
- United Nations Inter-agency Group for Child Mortality Estimation. (2017). Levels & trends in child mortality: Report 2017, Estimates developed by the UN inter-agency Group for Child Mortality Estimation. New York: UNICEF.

Walker, S. P., Chang, S. M., Wright, A., Osmond, C., & Grantham-McGregor, S. M. (2015). Early childhood stunting is associated with lower developmental levels in the subsequent generation of children. *The Journal of Nutrition*, 145(4), 823–828.

Yoshikawa, H., & Kabay, S. (2015). *The evidence base on early childhood care and education in global contexts*. Background paper for EFA Global Monitoring Report 2015. Retrieved from http://unesdoc.unesco.org/images/0023/002324/232456e.pdf

Meenakshi Dogra is an Early Childhood Education professional with Centre for Early Childhood Education and Development, Ambedkar University Delhi, since January 2011. Currently, she is leading a multistate research project on developing and validating Early Learning and Development Standards for children in India. This is being undertaken in the context of the National Policy on ECCE (2013) and its emphasis on upgradation and standardization of quality of provisions.

Venita Kaul is Professor Emerita, Department of Education, Ambedkar University Delhi, and Chairperson of the Advisory Committee of Centre for Early Childhood Education and Development (CECED). Her past assignments include positions of Senior Education Specialist at the World Bank and Professor and Head of the Department of Preschool and Elementary Education at NCERT. She has led several projects within and outside India and been on several national and international committees. She has a PhD from I.I.T. Delhi in Psychology and has several national and international publications in education to her credit.