Progress and pathways towards quality early learning: From the home to structured learning programmes

Linda Bierstekeri & Nicholas Dowdallii

This chapter puts a spotlight on issues that drive and influence quality in early learning – from the home to structured learning programmes – and concludes with a tangible set of actions that can be taken by the sector to progress quality early learning in South Africa. The first section delves into the essence of quality early learning, beginning with critical definitions, highlighting the pivotal role of play-based approaches and child agency, emphasising inclusion, and exploring key enablers of quality. The chapter then moves on to outline a concrete set of actions for government and broader early childhood development sector. It addresses the professionalisation of practitioners delivering early learning programmes, quality assurance and support systems, and the central role that resource and training organisations should continue to play alongside government to support quality. Additionally, we examine how technology can be harnessed to scale and enhance quality in early learning.

The National Development Plan 2030¹ sets out the country's strategic plan and vision for 2030 and elevates early childhood development (ECD) as an education sector priority in order to improve the quality of education and long-term prospects of future generations. To do this, the plan provided for two years of quality and compulsory preschool enrolment before Grade 1 and a policy and programme shift to ensure that the Department of Basic Education (DBE) takes the core responsibility for the provision and monitoring of ECD. This shift became effective in April 2022. The National Integrated Early Childhood Development (NIECD) Policy,² ratified by Cabinet in 2015, specifies a comprehensive holistic service package for young children. This includes health, nutrition, social security and protection, parenting and family support, and early learning opportunities, which align with the global Nurturing Care Framework.3 The Policy defines the goal for early learning as:

By 2030, to provide a universally available comprehensive quality age and developmental stage appropriate opportunities for learning for all children from birth until they enter formal school, which lay the foundations for optimal early learning, inclusion and the

socio-emotional, physical, intellectual and language development of young children through play and other related, recognised methods for early learning, as well as safe daily care in the absence of their parents and/or primary caregivers (p 59).²

Opportunities for early learning can be provided through a range of modalities including programmes that support parents to provide early learning and stimulation at home, such as parenting workshops, toy libraries and home-visiting programmes; and programmes for groups of children such as playgroups, ECD centres and preschools. Because early learning needs to be supported at home as well as in early learning programmes "recognition of and respect for parents and caregivers as primary and central to early child development" (p 51) is a fundamental principle of the NIECD Policy requiring good communication and partnership with parents.

In addition, South Africa has ratified the Sustainable Development Goals, and committed to ensuring that all boys and girls have access to quality early childhood development, care and pre-primary education by 2030 so they are ready for primary education.⁴ Yet, the nationally representative Thrive by Five Index Study⁵ of 5,139 children in 2021 found that only 45% of children 50 – 59 months attending early learning programmes are developmentally on track for early learning for the beginning of Grade R. A third were not emotionally ready for school and 27.5% did not show adequate social skills.

A continuum of support from home to early learning programmes is needed to get children on track. In 2020, more than 50% of children aged 0-4 years stayed at home with parents or guardians, while approximately 30% of 0-3-year-olds, and 70% of four-year-olds participated in early learning programmes.⁶

The home learning environment is a significant determinant of children's education performance – regardless of whether or not they attend a structured early learning programme. Particularly in the first three years of life, most interactions that support learning will come from the primary caregiver

i Independent research consultant

ii The LEGO Foundation

and other household members. Maternal responsiveness and cognitive stimulation in the first two years has been shown to be associated with increased cognitive scores at age five for children in low socio-economic status homes.⁷

For younger children (0 – 3 years), care at home with a primary caregiver is generally considered the best form of provision if the caregiver has adequate support and capacity to offer responsive care.⁸ For those children who need care arrangements away from home, such as the services of childminders and day care centres, these need to offer age-appropriate care and play-based learning opportunities. Children between 3 – 6 years benefit from a more organised early learning experience such as a playgroup or ECD centre-based programme, provided that it is of sufficient quality to meet their learning and developmental needs. Guidance on how adults (including parents and ECD practitioners) can best facilitate child development and early learning is specified in the National Curriculum Framework for Children Birth to Four Years (NCF).⁹

Is South Africa realising the right to early learning?

The UN Committee of Economic, Social and Cultural Rights identified four elements of the right to education: which should be available, accessible, acceptable and adaptable. ^{10, 11} Table 24 uses this framework to assess the status of early learning provision in South Africa drawing on the best available data, including the 2021 ECD Census.

Recent data indicate that access to early learning support through parenting or group learning programmes is limited and that cost is a barrier. There are gaps in the quality of many early learning programmes with un- or under-qualified teaching staff, limited learning resources and insufficient focus on individual needs. Parents do engage in some play and early stimulation activities with their children, but few engage in activities that will support early literacy. New technologies offer strategies for addressing some of these gaps. But as it stands, the available data suggest an urgent need to address issues of quality in early learning.

What is quality and what enables it?

The goal of the NIECD Policy is that every infant and young child has access to essential, quality ECD services. Definitions of quality commonly refer to changes in children's outcomes or well-being, and the causal day-to-day experiences, relationships and interactions across the continuum of care children experience that have the most proximal influence on children's well-being or outcomes.²²

Defining quality in structured early learning programmes

Acceptability refers to the quality of early learning programmes and the extent to which they reflect local and community values. Quality services provide for adequate nutrition, health and safety, sound administration, communication with parents, and a balanced early learning programme which provides for free and guided play and covers all the Nurturing Care Framework learning areas. In what follows we concentrate on those factors most closely associated with improved early learning and development outcomes.

There is substantial evidence, including from low- and middle-income countries, that investment in high quality provision is essential if children are to benefit from early learning programmes.²³ Early learning programmes alone cannot guarantee progress on child outcomes, they need to be implemented with quality. Quality of the classroom learning environment can be broadly divided into:

- Structural quality: including the physical environment, teacher qualifications, group size and practitioner-to-child ratios, access to learning materials, and provision for health and nutrition.
- Process quality: including classroom interactions (teacherchild and child-child), pedagogical approaches, and following a planned and holistic curriculum.

Research from both high and low- and middle-income countries indicates that process quality has a greater influence on child development than structural variables. ²⁴⁻²⁸ This refers to what children actually experience in their programme. It should include mediated teacher-child interaction that supports the learning, social and emotional needs of individual children and provides opportunities for children to interact with their peers. Language and cultural sensitivity help bridge home and school, and affirm children's identity. Warm, supportive and encouraging relationships with teachers²⁹ help facilitate the development of social and emotional skills and build children's confidence to explore, investigate, try new things, and learn from mistakes all of which are associated with successful school transition. ^{26,30}

There is growing evidence that certain aspects of early learning programmes are more highly associated with scores on school readiness measures. These include more time in small group work,³¹ and positive child-child and adult-child interactions.³² Stronger achievement outcomes occur when teachers rely on curricula that focus on particular skill areas such as language/literacy, math and self-regulation as distinct from more general programmes.³³ Learning through play is recognised as being one of the most effective ways of delivering quality early learning programmes.^{34, 35}

Availability: the supply of early education programmes, workforce and public funding.

Early learning programmes

- 1.6 million children aged 3 5 attend 42,420 early learning programmes (ELPs).
- 69% of ELPS have fees as the main source of funding.¹²
- 33% of ELPs receive government subsidy.¹²

Home

- No comprehensive data on enrolment in parenting support programmes.
- 2023 UNICEF scoping study identified 97 organisations that offer parenting programmes (including parenting training, support groups, home visiting).¹³
- Parenting programmes are concentrated in Gauteng (19), Western Cape (17) and KwaZulu-Natal (17) but at least two organisations are present in every province.

Accessibility: provision to mitigate barriers to access and other exclusions.

Early learning group programmes

- High socio-economic status (SES) children aged three are twice as likely to attend an ELP than low SES children.
- The vast majority of ELPs rely on income from parent fees which is a key determinant of early learning classroom quality¹⁵ and child learning outcomes.¹¹
- In 2014, the majority of registered ECD centres did not have programmes to support children with disabilities.¹⁶ In 2016/2017, children with disabilities accounted for .003% of the total enrolment in registered ECD centres.¹⁷ In 2021, principals identified less than 1% of children as having possible learning barriers.¹⁸
- 27% of ELPs had nothing in place to improve access for children with disabilities (e.g. ramps, suitable toilets, sufficient light for the visually impaired).¹⁸

Home

- 27% of caregivers were too busy to play with their child when they wanted to play.¹⁹
- 43% of households reported having no children's books in the home.¹⁹
- 71% of children (0 6) regularly watched TV or videos on a phone.¹⁹

Acceptability: standards and quality of programmes including play-based learning and child centred learning approaches, parent understandings of the importance of ECE.

Early learning programmes

- 52% of ELP practitioners have National Qualification Framework (NQF) qualifications and 28% attended an early learning skills programme.¹²
- Only 56% of ELPs have access to age-appropriate children's books.¹²
- 34% of ELPs do not have access to an outdoor playground with suitable equipment.¹²
- 42% of practitioners have less than five years' experience.¹⁵
- 60% of practitioners have a daily lesson or plan to guide the learning programme.¹⁵

Home

- 59% of caregivers report that a young child has been played with many times in the prior week with a strong focus on singing (65%) and active/physical play (64%) rather than cognitive activities.¹⁹
- 36% of households report never reading books or telling stories with their child.¹⁹

Adaptability: the ability of the ECE system to respond, adapt and be inclusive of the different needs of children such as children from different cultures and languages, children with disabilities, and children from difficult circumstances (abuse and neglect) and to embrace new technologies and delivery strategies to enable children's right to education.

- Recent qualitative data suggests that most ELPs are not adaptive to individual children's needs.²⁰
- New technologies have expanded opportunities to access information about early learning:
 - 127,160 ECD practitioners have completed the DBE online PLAYSA course to promote learning through play.²¹
 - There are over 6,000 active users on ECDmobi a low-cost app developed by DBE and UNICEF to support parents and caregivers of young children to facilitate learning through play in the home.²¹

Play and opportunities for agency

Play and opportunities for children to exercise their agency are essential ingredients of quality early learning and need to be actively fostered within the home and more structured early learning programmes. "Factory" models of education, with an emphasis on didactic or rote instruction and memorisation, are still prevalent in education systems in much of the world, including early learning settings.³⁶

However, play-based teaching and learning has become widely regarded as a more effective approach to early childhood education as it is more closely aligned with the developmental needs of young children. Young children thrive in a learning environment that allows them to explore and engage actively in hands-on activities, rather than sitting still for long periods and following a didactic teaching approach which frequently stifles curiosity.

Play is one of children's natural modes of expression and it allows them to explore, experiment, and discover the world around them in a meaningful and enjoyable manner. Much of the framing of the central role of play in children's learning and development comes from the extensive theorising of Vygotsky and Piaget, where play is recognised as crucial for children's cognitive, social, emotional, and physical development.^{37,38}

Piaget emphasized the idea that play is a primary vehicle for children to actively construct knowledge, develop cognitive abilities, and understand the world around them. He identified two main types of play: symbolic play, where children engage in pretend scenarios that foster imagination and representation; and games with rules, which promote social interaction, cooperation, and the internalisation of norms. Through play, children assimilate new information, adapt their understanding, and develop problem-solving skills. Piaget's work highlighted play as a vital component of cognitive and social development in early childhood.

Vygotsky highlights that play is a vital factor in facilitating optimal learning and development in children. Through play, children engage in self-directed challenges which maximises their learning potential. Play also fosters the development of symbolic representation and language skills, which are essential for cognitive growth. By actively participating in play, children co-construct knowledge, enhance problem-solving abilities, and cultivate self-regulation skills, contributing to holistic learning and development. Vygotsky's theory also highlights the socio-cultural aspects of learning, which is important when bridging the divide between the home and early learning environments.

Learning through play takes place when a play activity is occurring that engages the characteristics of play that are also known to lead to learning. A model proposed by Zosh,³⁵ summarised five characteristics of learning through play where play is meaningful, iterative, socially interactive, actively engaging and joyful. This model draws on an extensive review of research on the science of learning.³⁶

Learning through play also promotes children's agency. Agency involves children's initiation and direction of activities but also incorporates an element of power – children have permission to engage and direct their own play in a learning environment. Agency is crucial in early learning as it empowers children to play an active role in their education. By fostering autonomy, choice, and decision-making, child agency promotes engagement, motivation, and a sense of ownership over learning. It cultivates independence, critical thinking, and problem-solving skills. However it should be noted that not all play necessarily promotes child agency. Practitioners and parents need to be mindful of setting up learning through play experiences that open up, rather than shut down opportunities for agency.

Supporting learning through play at home

As already emphasised, parents and primary caregivers play a central role in young children's early learning and development. As their child's first and most important teachers, they provide the conditions for a nurturing and supportive environment or conversely an environment that lacks the key features for learning to occur optimally. They play an essential role in promoting cognitive, social, emotional, and physical development through responsive interactions, meaningful communication and stimulating experiences. By engaging in activities such as play, shared picture book reading and reciprocal interactions, parents contribute to children's language acquisition, curiosity and overall readiness for learning. The bond and attachment between parents and their young children create a secure base for exploration and lay the groundwork for future academic success and well-being. The same provides and selections are successed as the provides and selections and lay the groundwork for future academic success and well-being.

Consider three scenarios that characterise the caregiverchild relationship and home environment:

- Optimal characterised by love, responsive caregiving,ⁱⁱⁱ
 ample developmentally appropriate opportunities for learning, including play and shared attention activities such as picture book reading, serve and return interactions,^{iv} and a rich home language environment.
- Basic love, care, other basic needs are met, but responsive caregiving, learning opportunities, and parent/caregiver

iii Responsive caregiving = consistently and sensitively meeting a child's needs and cues in a timely manner.

iv Serve-and-return interactions = back-and-forth exchanges between a child and a caregiver that creates an interactive learning environment.

Box 3: Playful Parenting and Early Learning – examples of innovative practice in South Africa

Nicholas Dowdall with inputs from Hope Worldwide SA, Takalani Sesame & Mikhulu Trust

We know from decades of research that normal, everyday parent-child interactions shape a child's life trajectory. From the earliest moments, these engagements start building neural pathways, shape social-emotional competencies through sensitive and responsive caregiving, and ultimately impact on a child's academic achievement into adolescence and beyond.

However, not all parents appreciate this central role that they play as their child's first teacher, social navigator and bedrock of emotional wellbeing. Too often parents assume that learning and education only happen in preschool, rather than being something that is cultivated first and foremost at home.

Often what is needed is a slight reframing of how parents understand the everyday interactions they have with their young children to help them recognise how play connects to the science of learning.

A sensitive and joyful parent is a crucial part of early learning. Every interaction, no matter how mundane, has a learning opportunity embedded within it. Many of the most valuable of these interactions occur in the context of play including games of hide and seek, singing and dancing, or looking at a picture book together. How we reinforce and amplify these learning opportunities is crucial. This case study highlights three different examples of playful parenting interventions from South Africa. While all are unique in their approach, they share a common orientation of building on what parents inherently know and do, with an emphasis on promoting responsive, joyful engagement.

Caregiver Learning Through Play – Hope Worldwide

The Caregiver Learning through Play (CLTP) programme is delivered through a collaborative effort between four National NGOs (HOPE Worldwide SA, Save the Children SA, Ntataise and the Early Learning Resource Unit) and is funded by the LEGO Foundation. It is a grassroots-level intervention based on the understanding that children learn best through play and that caregivers have a strong, natural care and learning disposition that can be built on. It is designed for under-resourced settings, especially where children do not have access to formal early learning opportunities.

CLTP directly educates families and caregivers on the importance of responsive care and strong caregiver-child relationships, and how they can impact on their child's cognitive, social, and emotional development through the power of play in the home environment. For example, by:

- Finding opportunities for learning through play during everyday house chores, such as sorting laundry (colour identification);
- Allowing children to help with preparing meals in a positive and fun way (e.g. helping to count and measure ingredients whilst singing a song;
- Telling children stories about themselves and their family (e.g. why you decided to name them as you did).

To date, the evidence-based curriculum – delivered through a four-session, face-to-face, group-based, facilitated approach to caregivers and young children (0 - 6 years) has trained over 141,000 caregivers and over 5,000 ECD practitioners.

Initial assessments have shown positive results in the knowledge, attitudes and practices of caregivers around the importance of play. Specifically, there has been an increase in knowledge of play and its role in child development, more positive attitudes towards play, and an increase in playbased activities with children. Encouragingly, the programme has also shown a reduction in stress and depression levels among participating caregivers.

Play to Learn - Sesame Workshop South Africa

Play to Learn is a five-year, multi-media initiative that aims to increase capacity for learning through play among parents of ECD-age children, teachers in ECD centres, educational leaders, and social workers serving ECD-age children. Specifically, it aims to increase the capacity of these key figures in young children's lives to integrate playful learning into their everyday interactions in the home, classroom, and community centres.

The initiative is funded by the LEGO Foundation and implemented in selected districts across Gauteng, Eastern Cape, and Free State. This direct programming in communities runs in parallel with broadcasting of the Takalani Sesame TV show, which also highlights learning through play for young viewers and their families.

The intervention runs a series of 12 weekly workshops taking place in different locations across the respective

i The LEGO Foundation

provinces. Play workshops are community events that bring together caregivers and children to participate in predesigned play activities and discover the benefits of learning through play. The workshops aim to support caregivers to experience play with their children, to learn about the benefits of play and to empower them with quick, easy, achievable tips on how to create meaningful play experiences as part of everyday life. The play workshops are facilitated by Sesame Workshop trained play facilitators.

Key messages include:

- Play helps children learn new words to help them succeed at school;
- There is no cost to play, you have everything you need;
- Play teaches sharing, caring, and respecting others.

Take-home materials, specifically textless storybooks, supported the increase in time spent by caregivers reading and telling stories with their children. WhatsApp groups were used as a bridge between facilitators and participants to drive and support the continuous implementation of playful learning at home.

From 2018 - 2023 the programme had a cumulative direct reach of 137,794 children and 5,500 caregivers, while the TV show has reached well over 4 million families.

Picture Book-Sharing – Mikhulu Trust

Mikhulu Trust (MT) is an early childhood development organisation that focuses on developing support systems for parents of young children. MT supports parents to develop nurturing and stimulating relationships with their young children by providing them with useful tools to spend quality time with their children. "Dialogic book-sharing" is one of these tools. Parents attend 4 – 8 sessions with a trained facilitator where they learn how to use wordless picture books to have engaging interactions with their children from age 10 months up to 5 years. Key messages to guide interactions include:

- Follow the interests of the child;
- Point and name what you see in the pictures;

knowledge and awareness of child development are lacking as they see their role as providing care and not stimulating learning. However, there is no 'neutral' approach to parenting, and not engaging in certain types of interactions can have a negative impact on child development.

Harmful - exposure to harsh and punitive parenting interactions, toxic stress, violence (physical or verbal abuse),

- Ask lots of questions (what | where | why | how | who);
- Use the pictures to talk about emotions, intentions and perspectives.

Parents are encouraged to follow children's interests, ask stimulating questions and praise children's contributions during the activity. Through these skills, book-sharing fosters reciprocal, fun, interactive and engaging communication between parents and their young children.

The book-sharing programme has been evaluated in several randomised controlled trials, two of which took place in Khayelitsha, Cape Town. Through these studies, it was shown that children's cognitive and socio-emotional development benefitted immensely from this activity. Impressively, though, it was also found that parents' behaviours with their children changed - after being trained in the book-sharing programme, parents were more reciprocal in their engagements and communication, and were more responsive and sensitive to their children's needs.

Since 2018, MT has trained and supported 35 partner organisations across civil society and government to incorporate book sharing training into their programming. They have trained over 200 librarians, 650 community health workers and reached over 35,000 families with the programme.

At its core, playful parenting is about helping parents have joyful interactions with their children, but in addition to having fun, it is important to see changes in both parents' behaviours and children's outcomes, and book-sharing has been shown to positively benefit both of these. A good picture book can function as a stimulus for rich discussion - the pictures can be interpreted without the instructions or restrictions given by a written narrative. Often in shared reading, a caregiver and child will construct the story together, and then deconstruct it and reconstruct it in a different way. There are also no hard and fast rules like reading the pages in a specific order, the child is encouraged to use their agency and explore their own interests.

no stimulation (neglect), and no love. Such environments can have seriously adverse impacts on child wellbeing and development and are substantially worse than the 'basic' scenario described above.

These scenarios should help to frame what we know about caregiver-child interactions and home learning environments in South Africa at present.

Toxic stress = prolonged and severe adversity that can negatively impact a child's brain development, emotional well-being and overall health.

Characteristics of home learning environments in South Africa

General Household Survey (GHS) data offer nationally representative insights into home learning environments. 2018 was the last time that a set of questions were administered to assess the frequency of storytelling, book reading, drawing, naming objects, counting, and discussing activities with a child within the household. The findings reveal that almost half of children younger than four years never engaged in reading books (47%) or drawing activities (43%) with a parent or caregiver, while approximately a third of children were never engaged in storytelling or just talking about things done with the child. Taken together, this paints a picture of many young children deprived of rich language experiences, which are critically important for holistic development, school readiness and future academic success.41 It is therefore essential that South Africa resumes regular collection of nationally representative indicators on the home learning environment through existing population-level surveys like the GHS.

Some recent South African studies have sought to identify the links between the home learning environment and holistic child development outcomes using tools like the Early Learning Outcomes Measure (ELOM).⁴² The Early Learning Programme Outcomes study, 43 while not nationally representative, echoed many of the concerning findings from the GHS about a lack of learning and play resources in the home and limited engagement in cognitive stimulation (shared reading, telling stories, singing) between caregivers and children. However, on a more positive note, more than 90% of caregivers reported playing, naming and counting things regularly with their children. This related to child learning outcomes on the ELOM as follows: children with greater learning resources (books and toys) at home demonstrated significantly higher performance on fine motor, cognition and executive function assessments. This positive effect stems from the presence of a greater number of books and a diverse array of toys, including storebought, homemade, and everyday objects repurposed as toys (e.g., sticks and pans).43

Most recently, a larger scale study by UNICEF and the DBE,44 revealed a mix of encouraging and concerning parenting practices. The study focussed on caregiver knowledge, attitudes and practices in relation to play-based learning in children from birth to 6-years old and included responses from 1,422 participants across South Africa's nine provinces. Considering the 2021 Progress in International Reading Literacy Study results which indicated that only 19% of Grade 4 learners could read for meaning in any language, 45 a spotlight on shared reading practices in the home revealed that 42% of households

had zero access to books in the home, and while 58% had at least some books, only 32% used them regularly with their children. Encouraginaly, 92% of respondents believed that it is important to play with their children, but there was limited knowledge about the link between play and optimal early learning. Parents and caregivers' attitudes suggested that they largely believe that learning happens at preschool or creche, and that teaching is the responsibility of teachers rather than parents. Also concerning, was the apparent disappearance of playing traditional/indigenous games, with only 29% of caregivers reporting playing these games with their children.

Given the critical importance of early learning experiences in the home, greater investment is needed in parenting support programmes to provide caregivers and families with the tools, knowledge, skills and support they need to create a rich and supportive learning environment in the home.

Teaching and learning through play in early learning programmes

In traditional classrooms, teachers often prioritise "known answer" or quiz questions.46 But, in group early learning programmes it is important to carve out designated time for activities such as free play or drawing that allow children to exercise agency and encourage them to ask questions. Facilitators can help promote individual inquiry and agency through play by providing children with choices in both the activities they wish to carry out and how they wish to engage in the activities. This includes rule creation, and choice about who they want to engage with. Evidence from a nationally representative study in Columbia showed that these kinds of dimensions of process quality (opportunities for child choice, creative thinking, learning connected to prior experiences) were the strongest predictors of child development across all domains.28

Despite the National Curriculum Framework being anchored in a play-based pedagogical approach, the ECD Census¹² demonstrated that minimal time is allocated to free play in early learning programmes, with 54% of programmes offering less than 30 minutes for free play as part of their daily programme. In addition, there was a clear socioeconomic gradient with more affluent programmes incorporating more time for free play. While research indicates that even relatively short amounts of free play per day significantly improved children's self-regulation capacities, 47 guidelines and policies often encourage up to 2 - 3 hours of indoor free play, 48 depending on the length of the school day. Similarly, findings from the ECD Census suggested that practitioners tend to privilege their own agency or autonomy as a teacher over the agency of the

Box 4: What child capabilities are strongly associated with readiness for school?

- Executive functioning (EF) capacities underpin success in school⁵¹ but are insufficient without exposure to academic content and skills to foster preacademic skills.⁵² EF includes: holding information or instructions in mind during playroom activities: focusing on task-relevant stimuli during problem solving tasks and resisting internal or external distractions; and the cognitive flexibility to adapt and think about things in a variety of different ways.
- Early mathematics skills (such as counting, number knowledge, estimation, and measurement) the strongest predictors of later overall academic achievement.53-55
- Emergent early childhood literacy skills are strong predictors of later literacy achievement and include: a large vocabulary; being capable of explanatory talk; demonstrating some letter identification before age five; understanding narrative and story; understanding writing functions; knowing nursery rhymes; and demonstrating phonological awareness.^{56, 57} Vocabulary

- and oral language strongly predict later reading comprehension.58-60
- Social and emotional competence and self-regulation are important for school readiness and social success. 61-63 These include: self-awareness; self-management; social awareness; relationship skills; and responsible decisionmaking.64 Prosocial behaviours enable positive peer and teacher relationships (e.g. helping, sharing, taking turns) and self-regulation skills support the inhibitory control of aggression.61,65

The Thrive by Five study⁵ found that 41% of 4-5-year-olds in South Africa were on track for cognitive and executive functioning, 55% for language and literacy skills, and 34% for numeracy and mathematics. There is a notable socioeconomic gradient in learning outcomes, with a greater proportion of children from higher-income quintiles being on-track for learning outcomes. Children fared better on social and emotional functioning with 82% on track for social relations and 77% emotionally ready for school.

children in their care. This included items relating to children's choice of play and learning activities, and their ability to explore subject matter and answer questions themselves rather than being given the answers by practitioners. This pattern was consistent across all income groups. Some recent analyses from South Africa speak to the importance of practitioners providing opportunities for child choice and agency in their own learning. The positive deviance study by Data Drive 2030 found that teaching strategies (including allowing children to choose materials for engagement, levels of practitioner engagement during play, child participation, and use of openended questions to create opportunities for autonomy) were associated with high performance on ELOM assessments.49 Similarly, the Deep Dive Study found that practitioner support for child agency was associated with a higher likelihood of children being on-track for early learning based on composite ELOM scores.²⁰ Finally, an analysis of the Thrive by Five data showed that the use of open ended play materials and teaching strategies that included free choice were associated with higher child executive function scores.⁵⁰

Enablers of quality early learning programmes

There is growing evidence of how teacher-child interactions that enable learning in the playroom are affected by conditions at the early learning programme as a whole. Good management has been shown to affect programme quality in South African quality studies. 15, 66 Good leadership leads to financial sustainability that enables more secure working conditions and a resourced environment, oversight of the learning programme and motivated staff.⁶⁷⁻⁷² Training and education of teachers affects the quality of services and child outcomes primarily through the knowledge, skills and competencies that they can employ to guide children's learning. The main importance of staff lies in their effect on the process and content quality of early education (their ability to convey the curriculum).73 Practitioners need to organise the programme and apply activities and strategies to facilitate the desired outcomes. A well-trained, motivated, and supported workforce is therefore key to quality implementation of the learning programme as this depends directly on practitioner knowledge, attitudes, and skills.^{74, 75} This requires initial training⁷⁶ and continuing professional development (CPD) of which infield support and monitoring is a critical component 76 .

As noted, the home learning and care environment has a significant impact on child development both as the first source of early learning support for children and to complement more structured early learning programmes. Good quality early learning programmes actively engage with parents/caregivers, support their educational role, and advise on good health and nutrition practices. They also facilitate and link parents and caregivers to additional services that are of benefit to the child. such as social grants, developmental screening and health care. Figure 13 represents the pathways through which these factors influence child outcomes.

A supportive ecosystem

In addition, there is strong evidence that the broader supportive ecosystem can enhance the quality of early learning programmes. The DBE Deep Dive Study²⁰ and DataDrive 2030 Positive Deviancevi Initiative49 investigated enablers of better quality programmes and outcomes, seeking levers for improvement. Both studies have identified key characteristics and practices of successful programmes and highlighted the importance of a supportive ecosystem including:

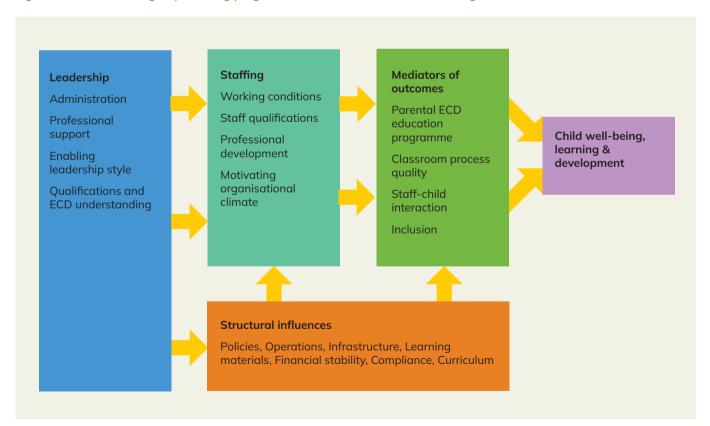
- Warm relationships between practitioners and children;
- Learning programmes allowing for free and structured play, as well as independent problem solving and adaptation to individual needs:
- Local and indigenous content integrated into the programme to support home to school transition and diversity;

- A strong focus on continuing professional development through internal support and mentoring;
- Teaching staff and principals planning together;
- Access to external workshops and courses when available:
- High performing sites engage parents and share information on learning activities;
- Strong leadership and teamwork, good administration and community linkages for external support including NGOs, government, business and ECD forums.

An inclusive approach

How early learning programmes adapt to – and accommodate - diverse needs is a critical aspect of quality programming. An inclusive approach when "all children are actively welcomed and supported so that they can optimally participate and benefit from early learning and development opportunities... to enable them to participate on an equal level with others"² is a significant and widely used indicator of quality programming.⁷⁷ While inclusion is most often associated with children with disabilities and developmental delays, it also covers the child's financial, social, and household circumstances, language, culture, and gender barriers to equal participation in early learning services.⁷⁸

Figure 13: Predictors of group learning programmes associated with child learning outcomes



Adapted from: Douglass AL. Leadership for Quality Early Childhood Education and Care. OECD Education Working Papers, No. 211. Paris: OECD Publishing. 2019.

vi Positive deviance refers to children who showed exceptional development compared to their peers, despite similar circumstances.

An inclusive approach requires programming that is sensitive to diversity and that pays attention to individual children's needs rather than teaching to the level of the group.²⁰ Children with disabilities and developmental delays require early identification and intervention and may require individualised support. However, very few children with disabilities are enrolled in early learning programmes or receive an appropriate educational intervention. While many providers report that they accept children with mild to moderate disabilities, knowledge of how to identify disability and adequate programme support for children who are enrolled is lacking, and parents are often reluctant to enrol their children.^{20, 72, 79} This is despite the fact that children with disabilities are a priority target group for ECD services specified in the NIECD Policy and the Children's Act 38 of 2005 and their enrolment in early learning services is an annual performance indicator. The Deep Dive study²⁰ has found that identification and referral of children with developmental delay and disability are limited. Study respondents stressed the need for DBE inclusion teams to take on a supportive and resourcing role to enable early learning providers to provide adequate identification and support.²⁰ Other aspects of inclusive practice involve programming that is gender responsive and supportive of different languages. DBE has developed a guide and training to gender responsive programming.80 The extent of the language challenge was indicated in 2021 when 58.8% of early learning programmes used a language of learning and teaching the same as children's home language and a third have different home languages in the classroom.80 Limited guidance on how to manage multilingual environments where English is the lingua franca makes it difficult to implement additive multilingualism, and parents often demand English language instruction as they believe it will advantage their children.

What can be done to enhance the quality of learning?

A range of interventions are needed to enhance the quality of learning at home and in more structured early learning programmes. This includes the professionalisation of early learning practitioners, strengthening quality assurance and support systems, and the central role of resource and training organisations and technology to scale up support for early learning.

Supporting professionalisation

The capacity of the teaching workforce is the most critical element in the delivery of quality early learning programmes and improving teacher competencies is an urgent priority. In 2017 the Department of Higher Education and Training finalised policy on requirements for the development of higher qualifications in early childhood care and education.81 Since the shift in ECD function from DSD to DBE in April 2022, the DBE has shown an interest in professionalising the ECD workforce. The South African Council for Educators (SACE) has in place a set of teaching standards, and a system of CPD credit requirements which can contribute to the upskilling and continuing improvement of the workforce. However, SACE guidelines for professional teaching standards do not include the birth-to-four age group. As part of their Learning through Play initiative, the VVOB supported by DBE and the LEGO Foundation has commissioned a consortium known as the Funda Udlale Nathi (FUN) ECD professional standards team⁸² to support the professionalisation of early learning practitioners by developing:

- ECD specific professional teaching standards;
- a suggested professional pathway for early learning practitioners; and
- recommended guidelines for providers on the development of early learning training programmes.83

The Occupational / Technical, Vocation, Education and Training qualification sub-frameworks need to align and articulate with professional qualifications frameworks in order to provide an accessible and inclusive professional learning pathway. The FUN ECD Professional Standards team has therefore adopted a systemic approach to professional development for educators of young children from birth to nine years old from preservice training to CPD, with a continuum of qualifications and different entry and exit points that will enable access and support progression along a professional learning pathway. The team will also evaluate and align SACE guidelines for providers to support flexible, quality provision.

Another promising training initiative is the development of the Higher Occupational Certificate: Early Child Development Centre Manager (National Qualification Framework Level 5). Once registered this should help principals with the leadership and management skills required to create an enabling environment for quality learning and teaching.

Quality Assurance and Support System

The NIECD Policy recognises that registration of ECD centres is not a sufficient condition to guarantee the quality of early learning programmes and therefore requires a quality assurance system to drive good child outcomes. This requires the development of an ECD quality control and improvement system including registration support, training, coaching and mentoring, monitoring, oversight and quality assurance for early learning programmes. The DBE, in partnership with Ilifa

Case 6: Mazi Umntanakho – A digital tool to support social emotional development and mental health Catherine E Draper

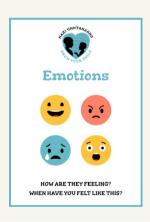
Young children in South Africa face numerous threats to their mental health, both in their home and community environments, and social emotional development remains a relatively unaddressed component of early childhood development. It is essential that investments into these aspects of children's well-being start as early as possible. Yet there is a serious lack of accessible services for children with developmental challenges. In this context, digital platforms have the potential to reach and support children in vulnerable settings.

The Mazi Umntanakho (Know your child) project aimed to respond to these challenges and brought together a multidisciplinary team of local and technical experts from the University of the Witwatersrand, the University of California in Irvine and Riverside, and Chapman University in California to work in partnership with community-based organisations in the Western Cape and KwaZulu-Natal.

Together they designed and piloted a digital tool to help community-based workers assess the social emotional development and mental health of young children in vulnerable South African settings and to provide feedback and contextually relevant resources for caregivers of young children

The Mazi Umntanakho tool is a WhatsApp chatbot. It is currently available in in English, isiXhosa, isiZulu, and Afrikaans, with plans to make it available in Sepedi, Sesotho, Setswana, Tshivenda, and Xitsonga. The chatbot guides a community-based worker through two sets of questions. Firstly, the child's caregiver is asked about the child's mental health, using adapted guestions from the Strengths and Difficulties questionnaire. Secondly, questions from the social emotional subsection of the International Development and Early Learning Assessment are asked of the child. Feedback on the assessment results and some additional information are then provided in the chatbot, using a simple traffic light system: green for no concerns, orange for some concerns, and red for many concerns. Caregivers can then choose to receive resources on self-awareness, emotions, social skills, difficult behaviour, and healthy habits and routines. These resources are available in a variety of formats including pamphlets, infographics, videos, and voice notes, and caregivers can choose to receive as many resources as they would like.

Electronic versions of all resources are available on request to catherine.draper@wits.ac.za







Labantwana, has developed and consulted on a draft Quality Assurance and Support System (QASS), which is aligned with existing policy and practices, and draws on local and international quality assurance and support systems.84 This includes draft indicators for group programmes (playgroups, ECD centres etc) at three levels (beginning, establishing, and good) and across six domains: learning programme, management and leadership, parent and community involvement, nutrition, health and safety, inclusiveness and staffing. These were based on extensive research and sector

consultation. Key principles for the assessment process include self-evaluation by programme staff and a developmental approach rather than one which penalises non-compliance. The QASS proposes that government focus its resources on supporting early learning programmes not meeting the minimum level of quality provided that they meet conditional partial care registration requirements (bronze level). Further development of the system will be undertaken through a longterm testing process. Once established QASS will not only encourage early learning programmes to improve their quality,

Case 7: Finding Thabo – for Cognition, Executive Functioning, Maths and Literacy

Finding Thabo is an innovative stimulation game for young children, utilising a mix of physical pictures and technology. The programme places the child at the centre of the intervention, but interestingly the child does not use the technology. Instead the child engages with a physical picture, similar to a "Where's Wally?" book, while the caregiver (parent or teacher) receives prompts and ideas via WhatsApp. This is an intentional design, seeking to improve responsive caregiving, by including the adult and empowering them to engage more effectively with the child. The result is a play-based game that provides direct stimulation of the child while encouraging behaviour change in the adult.

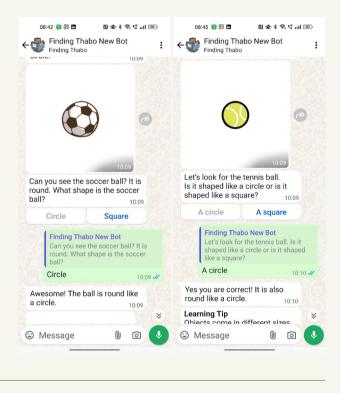


The programme was developed by The Reach Trust (a technology for good organisation) with input from Dr Ingrid Alhert and her team of occupational, and speech and language therapists at The Learning Initiative. The activities cover all the early learning development areas but place a special emphasis on developing executive function, literacy and mathematical skills.

Dr Alhert and her team have specifically focussed on typical learning difficulties that have been identified in studies such as the Thrive by Five report.

There are ten pictures in the series, each building on the previous picture using a scaffolding process. The core idea is to ensure that children receive high quality, play-based stimulation even in low resource settings.

Through a partnership with a leading local retailer, the pictures have been distributed to more than 100,000 children over the past three years. Over 3,000 ECD practitioners have been trained to use Finding Thabo in the classroom and in June 2023 a new app was launched to help practitioners to assess children using the Finding Thabo game.



The Reach Trust

it will also enable parents to identify and choose a quality early learning programme.

Use of resource and training organisations for training and enrichment of parents, practitioners and programmes

Quality assessment will help identify clear areas for improvement and based on this, specific resources for training and support of the ECD programme should be recommended. Local ECD resource and training organisations (RTOs) are well placed to provide this kind of support as provincial departments lack expertise and human resource capacity. A recent survey of 79 RTOs⁸⁵ found that the that the majority of providers are focusing on curriculum-related issues (including play and literacy), management and parenting support. These are key domains identified in the draft QASS framework.

An effective model for using local RTOs to provide support has been in effect in the Western Cape where they have been engaged as service providers to support the registration of ECD programmes and services. Similarly, NGOs are providing parenting programming in all provinces at varying degrees

Case 8: Careup – Supporting Foundational Literacy Andrew Rudgeⁱ

CareUp is a free parent focused application, designed to help lay literacy foundations in 3 – 5-year-olds. The app was developed with funding from Innovation Edge and the Western Cape Department of Social Development, and incorporates content from partner organisations including WordWorks, The Learning Initiative, Nal'ibali and Bookdash.

One of the key design principles was to ensure that the content is accessible to caregivers with low literacy (by using audio and images to minimise the amount of reading required) and in multiple languages (Afrikaans, English, isiXhosa and isiZulu). The user can simply toggle between languages, by pressing the world button.

Another key factor was cost of access. Once downloaded, the app runs completely offline, meaning that there is no cost to the user, and Wi-Fi hotspots were created at the parent workshops to enable them to download the app for free.

The CareUp app was independently evaluated and showed promising results in terms of engagement and retention. An unexpected finding was that ECD practitioners who used the app showed improved teaching practice. A website version is also available at https://careup.mobi/.

The website does require data to access, but is zero rated by the major cellphone networks. Since launch in 2016 the CareUp service (both app and website) has been accessed by more than 15,000 parents.



i The Reach Trust

of scale. We know that there are at least 97 organisations carrying out this essential work, but this effort would benefit substantially from some kind of central coordinating mechanism and agenda driven by government.¹⁹ The mandate for parent support does not currently sit squarely with any single line department, but it is crucial that a department, possibly the DBE in light of the function shift, take ownership of leading, coordinating and advocating for the importance of parenting support programmes and early learning in the home.

Using technology to scale up support

Digital resources have potential to support the scale up training for quality improvement and support. There are a wide range of digital products from online training programmes to daily activity ideas. The COVID-19 pandemic pushed many organisations that had previously conducted programming inperson to pivot to digital or hybrid approaches. These include a number of digital support platforms and appsvii that quality support workers could deploy. For example, PlaySA is a free

and zero-rated platform developed by Cotlands with the LEGO Foundation, UNICEF and DBE. It has been available since 2017. The courses are designed for anyone who implements programmes for babies and young children in South Africa (e.g. practitioners, teachers, childminders, day mothers, playgroup facilitators). PlaySA reports that they have trained over 289,000 educators across South Africa on play-based learning, 44% of whom are early learning practitioners.²¹ The course sessions include videos, images, reading, tasks, evaluation and reflection activities and are registered with SACE. Other innovative examples of digital support for parents and practitioners include Care up, Finding Thabo and Mazi Umntanakho (cases 6 - 8).

There are, however, challenges with using digital resources. Most households do not have access to computers with which to access online content. While 89.4% of households exclusively use cellular phones⁶ and smartphone use is increasing, costs of data remain amongst the highest in the world. So, it is important to either have the service zero-rated

vii Such as ECD Link, the Grow App, ECDMobi, ECD Connect, the Global Parenting Initiative suite of tools (ParentApp, ParentText, ParentChat), the True North Pre-School Registration Colour Guide App, the Ulwazi App, and the Impande WhatsApp Bot.

by the network providers, or to create applications that can run in offline mode. While the number of smartphones is increasing most tend to be low spec, with low processing power and small amounts of storage available. This presents a problem when trying to encourage the downloading of applications. Reaching people through apps like WhatsApp or Facebook is often more effective. More serious challenges are that targeted users may not see early education as important or find it difficult to put key messages and activities into practice. Take up of digital apps remains low.86

Conclusion

While the availability of early learning and parenting programmes has greatly increased in the last decade, accessibility for low-income children and those with disabilities remains a challenge requiring greater subsidisation and programme support for these priority beneficiaries. The primary challenge is to improve the acceptability or quality of early learning. This would entail strengthening both practitioner and parent understandings of learning through play, being more responsive to local contexts and the aspirations of parents, and providing access to appropriate training, support and teaching and learning resources. It is also clear that improving quality requires a multifaceted approach including strengthening the broader ecosystem of support for early learning programmes. Adaptability can be enhanced by focusing on new technologies,

flexible systems of professional support and greater awareness of and sensitivity to children, parents' and caregivers' diverse needs in order to provide an inclusive early learning system. But this will require knowledge generation, evidence-based testing of new approaches, and resourcing.

Child learning outcomes are influenced by multiple factors in the home, community and early learning programmes, and to improve them will require a multipronged and coordinated response. Addressing the systemic changes will take time but recent South African studies^{20, 49} suggest some key levers for improvement and there are promising innovations and planned initiatives which build on this foundation including:

- A greater focus on including and supporting parents in their role as primary caregivers and first teachers and in accessing support for this role;
- Professional support for teaching staff with particular focus on play, interactions and inclusion;
- Training/support for managers of early learning programmes
- Plans for a developmental and incentivising QASS;
- Continuing support to enable compliance of early learning programmes including essential financial support to ensure sustainability and workforce retention;
- Regular collection of data to track progress at child, household, community and programme level.

References

- 1. Republic of South Africa. Our Future Make it Work. National Development Plan. Pretoria: Government Printers. 2012.
- Republic of South Africa. National Integrated Early Childhood Development Policy. Pretoria: Government Printers. 2015.
- 3. World Health Organization. Nurturing Care for Early Childhood Development: A framework for helping children survive and thrive to transform health and human potential. Geneva: WHO. 2018.
- 4. United Nations. Transforming our World. The 2030 Agenda for Sustainable Development. New York: UN. 2015.
- 5. Giese S, Dawes A, Tredoux C, Mattes F, Bridgman G, van der Berg S, Kotzé J. Thrive by Five Index Report Revised August 2022: Innovation Edge, Cape Town. www.thrivebyfive.co.za; 2022.
- 6. Statistics South Africa. General Household Survey 2021. Pretoria: Stats SA 2022
- 7. Slemming W, Cele R, Richter L. Quality of early childcare in the home and cognitive development at age 5: Results from the South African birth to Twenty Plus cohort study. Early Child Development and Care,. 2021, 192(1).
- 8. UNICEF Programme Division. UNICEF'S Programme Guidance for Early Childhood Development. New York: UNICEF. 2017.
- Department of Basic Education. The National Curriculum Framework for Children Birth to Four Years. Pretoria: DBE. 2015.
- 10. Tomaševski K. Human Rights Obligations: Making education available, accessible, acceptable and adaptable. Right to Education. Primer 3. London: Right to Education Initiative. 2001.
- 11. Thapliya N. Unacknowledged rights and unmet obligations: An analysis of the 2009 Indian Right to Education Act. Asia-Pacific Journal on Human Rights & Law. 2012, 13(1):65-90.
- 12. Department of Basic Education. ECD Census 2021: Report. Pretoria: DBE, 2022.
- 13. UNICEF South Africa, Department of Basic Education. Scoping Study to Determine Priority Geographical Areas for Face-to-face training and

- Capacity Development of Parents with Children aged Birth to Six Years. Southern Hemisphere. 2023.
- 14. Hall K, Sambu $\stackrel{\cdot}{\mathrm{W}}$, Almeleh C, Mabaso K, Giese S, Proudlock P. South African Early Childhood Review 2019. Cape Town: Children's Institute, University of Cape Town and Ilifa Labantwana; 2019.
- 15. Biersteker L, Dawes A, Hendricks L, Tredoux C. Center-based early childhood care and education program quality: A South African study. Early Childhood Research Quarterly. 2016, 36:334-344.
- 16. Department of Social Development, Economic Policy Research Institute. Audit of Early Childhood Development (ECD) Centres: National report. Pretoria: DSD & EPRI. 2014.
- 17. National Planning Commission. The Status of Disability in South Africa. Pretoria NPC. 2020. Data provided by DSD 2018.
- 18. Department of Basic Education. Baseline Assessment Technical Report. Pretoria: DBE. 2022.
- 19. Rangasami J, Biersteker L, Naeser G. A Study on Knowledge, Attitudes and Practices of Parents/Primary Caregivers with Children Birth-Six years old regarding the Importance of Play in Early Learning. Pretoria: DBF & UNICEE 2023
- 20. Biersteker L, Kvalsvig J, Zastrau E, Carnegie T. *LEGO Deep Dive*. Pretoria: Department of Basic Education. 2023.
- 21. UNICEF South Africa, Personal Communication. 2023.
- 22. UNICEF. White Paper Quality Standards and Quality Assurance Systems for Pre-Primary Education. UNICEF. 2019. [Accessed 28 June 2024: https://www.ecdmeasure.org/wp-content/uploads/2019/06/ White-Paper-Quality-Assurance-May29-2.pdf]
- 23. Fund UNCE. A World Ready to Learn. Prioritizing quality early childhood education. New York: UNICEF. 2019.
- 24. Sabol TJ, Soliday Hong SJ, Pianta RC, Burchinal MR. Can rating pre-K programs predict children's learning? Science. 2013, 341(6148):845-
- 25. Rao N, Sun J, Wong JMS, Weekes B, Ip P, Shaeffer S, Lee D. Early

- Childhood Development and Cognitive Development in Developing Countries: A rigorous literature review. Department for International Development. 2014.
- 26. Torii K, Fox S, Cloney D. Quality is Key in Early Childhood Education in Australia. (Paper No. 01/2017). Melbourne: Mitchell Institute. 2017.
- 27. Diamond KE, Justice LM, Siegler RS, Snyder PA. Synthesis of IES Research on Early Intervention and Early Childhood Education. (NCSER 2013-3001). Washington, DC: National Center for Special Education Research, Institute of Education Sciences, U.S.Department of Education.
- 28. Maldonado-Carreño C, Yoshikawa H, Escallón E, Ponguta LA, Nieto AM, Kagan SL, Aragon CA. Measuring the quality of early childhood education: Associations with children's development from a national study with the IMCEIC tool in Colombia. Child Development. 2022, 93(1):254-268
- 29. Hamre BK, Pianta RC. Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? Child Development,. 2005, 76(5):949-967
- 30. Shala M. The impact of preschool social-emotional development on academic success of elementary school students. Psychology. 2013, 04(11):787-791.
- 31. McDaniel M, Townley-Flores C, Sulik M, Obradovic J. Widely used measures of classroom quality are largely unrelated to preschool skill development. Early Childhood Research Quarterly. 2022, 59:243-253.
- 32. Burchinal MR, Garber K, Foster T, Bartsch-Hines M, Franco X, Peisner-Feinberg E. Relating early care and education quality to preschool outcomes: The same or different models for different outcomes? Early Childhood Research Quarterly. 2021, 55:35-51.
- 33. Phillips D, Lipsey M, Dodge K, Haskings R, Bassok D, Burchinal MR, Weiland C. Puzzling It Out: The current state of scientific knowledge on pre-kindergarten effects. A consensus statement. Washington D.C.: Brookings Institute 2017
- 34. Zosh JN, Hirsh-Pasek K, Hopkins EJ, Jensen H, Liu C, Neale D, Whitebread D. Accessing the inaccessible: Redefining play as a spectrum. Frontiers in psychology. Frontiers in Psychology. 2018, 9:1124.
- 35. Zosh JN, Hopkins EJ, Jensen H, Liu C, Neale D, Hirsh-Pasek K, Whitebread D. Learning through Play: A review of the evidence. Billund, Denmark: LEGO Fonden, 2017.
- 36. Hirsh-Pasek K, Hadami H, Blinkoff E, Golinkoff RM. A New Approach to Education Reform: Playful learning promotes 21st century skills in schools and beyond. Washington D.C.: Brookings Institution. 2020.
- 37. Vygotsky LS, Cole M. Mind in society: Development of higher psychological processes. Cambridge, Massachusetts: Harvard University Press: 1978
- 38. Nicolopoulou A. Play, cognitive development, and the social world: Piaget, Vygotsky, and beyond. Human Development. 1993, 31(1):1-23.
- 39. Dowdall N, Melendez-Torres GJ, Murray L, Gardner F, Hartford L, Cooper PJ. Shared picture book reading interventions for child language development: A systematic review and meta-analysis. Child Development,. 2020, 91(2):e383-e399.
- 40. Groh AM, Fearon RP, van IJzendoorn MH, Bakersmans-Kranenburg MJ, Roisman Gl. Attachment in the early life course: Meta-analytic evidence for its role in socioemotional development. Child Development Perspectives. 2017, 11(1):70-76.
- 41. Gilkerson J, Richards JA, SF W, DK O, R R, B V. Language experience in the second year of life and language outcomes in late childhood. Pediatrics, 142(4). Paediatrics. 2018, 142(4):e20174276.
- 42. Dawes A, Biersteker L, Snelling M, Horler J, Girdwood E. To what extent can community-based playgroup programmes targeting low-income children improve learning outcomes prior to entering the reception year in South Africa? A quasi-experimental field study. Early Education and Development. 2023, 34(1):256-273.
- 43. Dawes A, Biersteker L, Girdwood E, Snelling M, Horler J. Early Learning Programme Outcomes Study Technical Report. Claremont, Cape Town: Innovation Edge & Ilifa Labantwana. 2020.
- 44. UNICEF South Africa, Impact Consulting. A Study on Caregiver Knowledge, Attitudes and Practices Regarding Play-Based Learning in Children from Birth to Six Years Old. Pretoria: UNICEF SA & Impact Consulting. 2023
- 45. Roux K, Van Staden S, Tshele M. Progress in International Reading Literacy Study 2021: South African main report. Pretoria: Department of Basic Education, 2023.
- 46. Rogoff B. Learning by observing and pitching in to family and community endeavors: An orientation. Human Development. 2014,
- 47. Colliver Y, Harrison LJ, Brown JE, Humburg P. Free play predicts selfregulation years later: Longitudinal evidence from a large Australian sample of toddlers and preschoolers. Early Childhood Research Quarterly. 2022, 59:148-161.
- 48. New York City Department of Education. ECERS Minimum Materials Requirements for Early Childhood Programs. New York: NYC Department of Education. 2019. [Available at: https://infohub.nyced.org/

- docs/default-source/default-document-library/ecers-minimal-materialrequirements.pdf]
- 49. Henry I, Giese S. Data Insights: The Early Learning Positive Deviance Initiative - Summary report of quantitative and qualitative findings. Cape Town: DataDrive. 2013.
- 50. Neville R, Herholdt R, Mashilo D, Baloyi N. What Elements of Playbased Learning are most strongly associated with the Development of Executive Functions. Working paper. Johannesburg: JET Education Services, 2024
- 51. Fitzpatrick C, McKinnon D, Blair C, Willoughby M. Fitzpatrick, C., McKinnon, D., Blair, C., & Willoughby, M. (2014). Do preschool executive function skills explain the school readiness gap between advantaged and disadvantaged children? Learning and Instruction. 2014, 30:25-31.
- 52. Cook CJ, Howard S, Scerif G, Twine R, Kahn K, S N. Executive function and pre-academic skills in preschoolers from South Africa. South African Journal of Childhood Education. 2023, 13(1):a1369.
- 53. Watts TW, Duncan GJ, Siegler RS, Davis-Kean PE. What's past is prologue: Relations between early mathematics knowledge and high school achievement. Educational Researcher. 2014, 43(7):352-360.
- 54. Jordan NC, Kaplan D, Ramineni C, Locuniak MN. Early math matters: kindergarten number competence and later mathematics outcomes. Developmental Psychology. 2009, 45(3):850-867.
- 55. Manfra L. Associations between counting ability in preschool and mathematics performance in first grade among a sample of ethnically diverse, low-income children. Journal of Research in Childhood Education. 2014, 28(1):101-114.
- 56. Strickland D, Riley-Ayers S. Early Literacy Policy and Practice Preschool Years. Preschool Policy Brief. New Brunswick: National Institute for Early Education Research. 2006. [Available at: https://nieer.org/sites/default/ files/2023-08/10.pdf]
- 57. O'Carroll S, Hickman R. Narrowing the Literacy Gap: Strengthening language and literacy development between birth and six years for children in South Africa. Cape Town: Wordworks. 2012.
- 58. Papadimitrious AM, Vlachos FM. Which specific skills developing during preschool years predict the reading performance in the first and second grade of primary school. Early Child Development and Care. 2014, 184(11):1706-1722
- 59. Sénéchal M, Ouellette G, Rodney D. The misunderstood giant: On the predictive role of early vocabulary in future reading. In: Dickinson D, Neuman SB, editors. Handook of Early Literacy Research Volume 2 New York: Guilford Press; 2006. p. 173-184.
- 60. Roth FP, Speece DL, Cooper DH. A longitudinal analysis of the connection between oral language and early reading Journal of Educational Research. 2002, 95:259-272.
- 61. McLelland MM, Morrison FJ, Holmes DL. Children at risk for early academic problems: The role of learning-related social skills. Early Childhood Research Quarterly. 2000, 15:307-329.
- 62. Housman DK. The Importance of Emotional Competence and Self-Regulation from Birth: A case for the evidence based emotional cognitive social early learning approach. International Journal of Child Care and Education Policy. 2017, 11(13).
- 63. Cadima J, Doumen S, Verschueren K, Buyse E. Child engagement in the transition to school: Contributions of self-regulation, teacherchild relationships and classroom climate. Early Childhood Research Quarterly. 2015, 32:1-12.
- 64. Durlak J, Weissberg RP, Dynmnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: A metaanalysis of school-based universal interventions. Child Development. 2011, 82(1):405-432.
- 65. Arnold DH, Kupersmidt JB, Voegler-Lee ME, Marshall NA. The association between preschool children's social functioning and their emergent academic skills. Early Childhood Research Quarterly. 2012, 27(3):376-386.
- 66. Van der Berg S. Tracking Public Expenditure and Assessing Service Quality in Early Childhood Development in South Africa. Pretoria: Department of Basic Education, Department of Social Development & UNICEE 2010
- 67. Douglass AL. Leadership for Quality Early Childhood Education and Care. OECD Education Working Papers, No. 211. Paris: OECD Publishing. 2019.
- 68. Goelman H, Forer B, Kershaw P, Doherty G, Lero D, LaGrange A. Towards a predictive model of quality in Canadian child care centers.

 Early Childhood Research Quarterly. 2006, 21(3):280-295.

 69. Sim MP, Belanger J, Stancel-Piqtak A, Karoly L. Starting Strong Teaching
- and Learning International Survey (TALIS) 2018 Conceptual Framework. OECD Education Working Papers, No. 19. Paris: OECD Publishing. 2019.
- 70. Siraj-Blatchford I, Manni L. Effective Leadership in the Early Years Sector: The ELEYS Study. London: Institute of Education Press. 2007
- 71. Siraj-Blatchford I, Muttock S, Sylva K, Gilden R, D B. Researching Effective Pedagogy in the Early Years. Research Report 356. Norwich: Deparment for Education and Skills. 2002.
- 72. Umalusi. Practitioners' Perceptions and Understanding of the

- Approaches Underpinning Curriculum and Pedagogy in an Early Childhood Classroom. Pretoria: Umalusi. 2021.
- 73. OECD. Qualifications, Education and Professional Development Matters. Research Brief. Paris OECD. 2012.
- 74. Spier E, Leenknecht F, Carson K, K B, Faria AM. Tipping the scales: overcoming obstacles to support school readiness for all in low-and middle-income countries. Early Years. 2019, 39(3):229-242.
- 75. Aboud FE, Yousafzai AK, Nores M. State of the science on implementation research in early child development and future directions. Academy of Sciences 2018, 1419(1):264-271.
- 76. Early DM, Maxwell KL, Burchinal MR, ALva S, Bender RH, Bryant D, . ZIII N. Teachers' education, classroom quality, and young children's academic skills: results from seven studies of preschool programs. Child Development. 2007, 78(2):558-580.
- 77. United Nations Economic Scientific and Cultural Organisation. Overview MELQO (Measuring early learning quality and outcomes). Paris: UNESCO. 2017.
- 78. Department of Education. White Paper 6 Special Needs Education. Pretoria: DoE. 2001.
- 79. Biersteker L, Berry L, Gwele M. In whose best interests? The ECD

- regulatory framework, understandings of the best interests of the young child and access to quality early education. South African Journal on Human Rights. 2023, 38((3-4)):215-239.
- 80. Department of Basic Education, VVOB. All Are Welcome: Promoting gender equality in early childhood development. 2021. https://learning. vvob.org.za/courses-on-gender-equality-in-ecd
- 81. Department of Higher Education and Training. Policy on Minimum Requirements for Programmes Leading to Qualifications in Higher Education tor Early Childhood Development Educators. Pretoria: DHET. 2017
- 82. Funda Udlale Nathi. Professional Standards Working Draft Concept Note, May 2023. 2023.
- 83. Ebrahim HB, King M, Drew S. Professionalisation for a Quality Early Childhood Care and Education Workforce. South Africa: VVOB. 2024.
- 84. Department of Social Development. Draft Quality Assurance and Support System. Cape Town: Ilifa Labantwana. 2022.
- 85. Horler J, Biersteker L, Berry L. Survey of Resource and Training Organisations Supporting Early Learning Programmes in South Africa. Cape Town Umncedi and National ECD Alliance. 2023.
- 86. Andrew Rudge the Reach Trust, personal communication, 19 June 2023.