

# **Social Franchising for ECD**

**A project of the DG Murray Trust**

## **Developing an early learning programme for South Africa: A literature review**

By Rebecca Hickman

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## 1. Introduction

This literature review provides a survey of research and policy relating to the proposed goals, design and content of Social Franchising for ECD's (SFECD) early learning programme. The review identifies key themes in the literature and draws out areas of greater and less consensus. It offers quotes and references throughout to evidence and amplify the discussion.

The review has limitations. While a large volume of literature was looked at, because the review covers a wide spectrum of issues within early childhood development (ECD) and a range of academic disciplines, it can only offer a survey of some of the literature pertaining to each. It does not attempt to extract and evaluate themes in any kind of statistical way.

In addition, many of the most extensive studies of early childhood development and early years practice and pedagogy come from developed countries. While there is much to be learned from this significant body of research, each country's context is to some extent unique and so different lessons and 'evidence' from elsewhere have varying degrees of applicability and relevance to the South African context.

*Today, over 90% of the world's children live outside the Euro-Western Minority World; yet the vast majority of developmental and ECD literature comes from the Minority World, and in particular from the US. (Pence and Marfo 2008)*

It should be noted that this review does not look specifically at the physical development of children during the early years, nor at the benefits of health and nutrition interventions. There are understood to be close links between children's physical development and socio-emotional, cognitive and language outcomes.

For all these reasons, this review offers signposts and insights into good practice and areas of emerging consensus, rather than definitive conclusions. It seeks to draw out some dominant themes in the literature, which help to take us towards an evidence-based understanding of how young children learn and develop and what may, therefore, constitute effective practice in early years settings in South Africa.

### 1.1 Defining terms

SFECD have described the early learning programme that they will offer as a 'playgroup'. However, generally in developed English-speaking countries, 'playgroup' refers to ECD provision attended by both parent and child for the duration of the session. Hancock et al define playgroups as follows:

*[...] regular, organised gatherings of parents and young children typically held for a few hours once a week during school term. [...] Unlike child care, crèche or kindergarten arrangements, where children are customarily left in the care of others, parents stay for the duration of the playgroup and interact with their children. Mothers and fathers also socialise with other parents, which may provide an opportunity to establish a valuable parenting support network. (Hancock et al 2012)*

SFECD's description of their proposed early learning programme is more akin to typical short-form childcare programmes – variously called nursery, daycare, kindergarten, preschool or crèche in the literature. Importantly, parents do not routinely attend this kind of provision, although the programme may include *additional* ways of involving, supporting and building the capacity of parents, such as workshops, 'stay and play' sessions, and home visits.

Families often only attend conventional playgroups once or twice a week – in other words, they are a low dosage intervention – whereas short-form childcare programmes are usually offered daily, even though some parents may enrol their children for only a few days a week.

There is very little research on the impact of playgroups, and even less that distinguishes between the mediators of outcomes. In other words, where benefits for children are identified, it is difficult to know whether these are due to the nature of the playing and learning opportunities and/or to the presence of parents, whether the children would benefit more if their parents were not present, or if the children are likely to have better outcomes because they have the kinds of parents who take time out to opt into this kind of provision in the first place.

However, there is extensive research on both full and part-time childcare programmes and it seems that this evidence-base is most relevant to the SFECD proposal. This enables us to consider the different elements of the SFECD early learning programme proposal (outcomes, design, content, pedagogy) against the available literature.

Finally, it should be noted that the term 'curriculum' can mean different things in the early years. It is consistently used to describe national-level and sub-national-level frameworks for ECD provision, which define desired outcomes, learning standards and key content. These documents vary considerably in scope and detail. 'Curriculum' is also sometimes used to describe particular programmes that are delivered in ECD settings – for instance, Reggio Emilia, HighScope and Montessori – which may or may not also seek to make explicit links with the curriculum framework for the region in which they are delivered. Furthermore, these programmes sometimes use the term 'curriculum' even more specifically, distinguishing between their philosophy and pedagogic approach and the specific *curriculum* (i.e. teaching and learning content) of the programme.

The OECD proposes a broad definition for 'curriculum framework', which may be useful to bear in mind for the 'Discussion on early years curricula' section below:

*A curriculum framework (guidelines or standards) is a tool which can guide the content of and approach to children's care and learning. (OECD 2012)*

## **1.2 What is evidence?**

The study of early childhood development engages a wide range of academic disciplines, including but not limited to psychology, cognitive science, education, sociology, child health, and economics. These fields sometimes use different research methods, and so what is claimed as 'evidence' by one may not be accepted as evidence by another. Furthermore, much of the literature is discursive, describing what is understood to be good practice or accumulated wisdom in the field, rather than the outcomes of trials.

At the same time, not all quantitative research is of equal value. The size, representativeness and mode of selection of the sample, framing of research questions, metrics selected and independence of the researchers are just some of the factors that impact on the reliability of different studies. Where the *quality* of interventions is being looked at, there is the additional complexity of agreeing how to *define* and *measure* quality, including accurate measurements of practitioner fidelity (Darrow 2013). These factors are likely to be responsible for the conflicting research produced on the same intervention. They should make us cautious in how we read and use studies purporting to show evidence of effectiveness for certain ECD interventions.

In their review of research evidence on quality provision for children under-three, Mathers et al suggest how we can make best use of the available evidence:

*So how can we make the best possible decisions based on scientific evidence in an area where research is scarce? The first important principle is to be very clear about the strength of the evidence which is available, and to be explicit about where the science base is strong and where greater caution should be exercised in interpreting findings. The second principle is to find practical yet robust ways of building on best available evidence. A respected developing methodology is to draw on experts and practitioners within the field to evaluate existing research and develop recommendations which are anchored in the scientific evidence base but go beyond it. We can also seek other sources of evidence, for example making inferences from scientific studies which suggest that certain practices or services will be beneficial even if there is, as yet, no randomised control trial that firmly demonstrates their usefulness. (Mathers et al 2014)*

The personal beliefs and cultural mindset that are brought to research studies are also an important contextual consideration. These influence how both questions and findings are framed, and therefore the conclusions drawn.

*Singer (1993) has noted, however, that ‘pedagogies of childhood’ are not reducible to scientific enquiry alone, since they are framed within cultural values that can best be addressed when the researcher’s own position is made explicit. As she pointed out, child development theories are presented as objective and universal and ‘very often we are unaware of just how deeply our theories, concepts and research questions are anchored in moral and social-political choices and problems.’ [...] Cultures not only vary but change over time, thus, notions of childhood change correspondingly. These constructions are constituted through discourse and are highly productive of pedagogical theory and practice. (BERA 2003)*

*It is fair to say that claims about what human infants need – for their emotional and intellectual development, not just their health and physical growth – are more abundant than the cross-cultural evidence to support them. [...] Terms like ‘optimal development’, ‘security of attachment’, ‘developmentally appropriate’, and ‘maternal competence’ represent cultural preferences for developmental courses and outcomes, not the findings of empirical research on the human species as a whole.*

*[...] Evidence from Africa constitutes a real challenge to knowledge in the child development field as we have received it from those whom we consider experts. [...]*

*Evidence from studies conducted in other cultural settings, like the Gusii infant study, permits us to see that alternative patterns of care based on different moral and practical considerations can constitute normal patterns of development that had not been imagined in developmental theories. The child development field needs to expand its imagination through cross-cultural research in order to generate more valid knowledge of human development and a more critical understanding of our own culture's practices. (LeVine 2004)*

*By understanding that developmental theories and research are shaped by value systems, philosophical mindsets, and historical circumstances within specific cultures, students are more likely to appreciate the urgency of understanding and framing African child development within the context of local knowledge, values, traditions, and practices. (Pence and Marfo 2008)*

## 2. Research on early years curricula

No single early years curriculum emerges from this literature review as superior to others (Farran and Wilson 2014, Barnett et al 2014). Some studies have compared the impacts of different early years curricula to each other and to 'business as usual' but these studies have rarely produced clear or reliable results.

*Apparent from the mixed research results is that early childhood educators do not yet know how to configure pre-k instruction to reliably promote both school readiness and long-term school success. [...] A meta-analytic review of rigorous evaluations of various early childhood curricula has not established either that one curriculum is better than another or that having a particular curriculum produces more positive effects than business as usual (Darrow, 2013). Unfortunately, our cluster randomized control trial of an additional curriculum supports these conclusions. (Farran and Wilson 2014)*

*What emerges from this review of research evidence in the field of early childhood education curriculum models, the effects of their implementation and related models of assessment, is how little hard evidence we have to guide policy and practice. So, for example, the debates about the efficacy of subject led and developmentally appropriate practice led knowledge bases for the education of young children continue without a robust evidence base. Research into curriculum design, delivery and assessment in 'real world', educational contexts tends to be complex and 'messy'. (BERA 2003)*

The Preschool Curriculum Evaluation Research Consortium at the Institute of Education Sciences (IES) in the USA, examined 14 curricula through randomised trials. The results showed no significant differences between curricula and the trial was terminated:

*Overall, 10 of these curricula showed no statistically significant impacts on any of the student-level outcomes of reading, phonological awareness, language, or mathematics. None of the pre-k curricula had statistically significant positive impacts on social skills or problem behaviours. No curriculum outperformed the control classrooms on all child outcomes; only two showed significant differences on even one skill measured in kindergarten. And, no curriculum stood out as notably more effective than any of the others. (Farran and Wilson, 2014)*

*These findings, coupled with other experimental studies supported by IES that have failed to show positive impacts of curriculum implementation, suggest that many early childhood curricula inadequately represent the "active ingredients" of classroom instruction that are needed to bring about positive impacts on children's language, literacy, social, or cognitive skills, or fail to include specific approaches that are effective for improving children's learning. As Clements has noted, many curricula were developed through market research rather than through formative design research to identify the critical ingredients of a curriculum. In addition, little is known regarding the "threshold" of implementation of these active ingredients that is needed for a given curriculum to achieve its desired effects. Although studies often find beneficial curricular effects for children whose teachers accurately implement language, literacy, and cognitive curricula, such effects might actually reflect unmeasured variables that relate to teachers' implementation (e.g., teacher motivation). There is a substantial*

*need for research, particularly of an experimental nature, that isolates these active ingredients and identifies thresholds of curriculum implementation needed to achieve positive impacts for children. (Diamond et al 2013)*

Another complicating factor is whether research studies that look at the effectiveness of early years curricula focus on classroom and teacher quality (e.g. using the ECERS scale) or child outcomes and gains. The large US Head Start FACES study found that the Creative Curriculum was the most widely used curriculum among Head Start programmes and that the Creative Curriculum and HighScope had consistently higher classroom quality scores than other curricula (Zill et al 2003). However, on a range of cognitive and socio-emotional outcomes, the Creative Curriculum was found not to result in significantly larger gains for children than the other curricula (see also the recent study for the US government which found that the Creative Curriculum has ‘no discernible effects on oral language, print knowledge, phonological processing, or math for preschool children’ (What Works Clearinghouse 2013)).

Where gains were identified for children in the FACES study, in particular for children receiving the HighScope curriculum, these were not clearly linked to classroom quality (including caregiver interaction), but rather to factors such as teacher salary, longer periods of provision, and teachers’ prior education levels. Furthermore these gains were ‘relatively modest in magnitude’ (Zill et al 2003) and not evenly spread across cognitive areas:

*The important areas of vocabulary and early math skills showed little variation in gains that were linked to specific program or class characteristics. (Zill et al 2003)*

*Claims made about the effectiveness of the High Scope curriculum in USA preschool intervention programmes have been influential in guiding government policy. However, the fact that parents were so intricately involved in the delivery of High Scope 'knowledge', or that the staff in the initial programmes were highly motivated and well trained postgraduates, may have been more influential on children's long term social and life skill gains than the way the curriculum was framed or taught. (BERA 2003)*

The FACES study highlighted how, perhaps counter-intuitively, higher quality ECD classrooms (as measured by the widely used ECERS rating scale) and caregiver interactions do not necessarily translate into gains for children. The study suggests that the missing link between the two could be the use of appropriate (more effective) pedagogy.

*The FACES results should make us wary of claims that Head Start could produce dramatically larger achievement gains in children from low-income families simply by raising ECERS scores or other indicators of classroom quality. It may be that good classroom quality is a necessary but not sufficient condition for practically significant gains in specific cognitive or behavioral areas. It may be that further progress depends on discovering and applying instructional approaches that can bolster gains in specific areas. Preliminary findings from randomized intervention studies conducted in Head Start programs in New York state as part of the Head Start Quality Research Consortium studies suggest that children in Head Start can make strikingly larger gains in letter recognition and related skills with appropriate, research-based supplementary curricula (Fischel, Storch, Spira & Stoltz, 2003). (Zill et al 2003)*



Some early years curricula have a strong focus on a particular area of development and learning, such as language or self-regulation. However, the literature suggests that caution needs to be exercised when generalising from evidence on the significance of a particular learning domain to define a whole curriculum approach.

The *Tools of the Mind* curriculum focuses heavily on the development of self-regulatory tools as a means to support children's learning and tightly prescribes the role of the teacher. But a recent large study of *Tools* (Farran and Wilson 2014) gives rise to the question of whether this degree of focus and prescription may have been at the expense of other key considerations. The study found that across a range of outcomes, where there were significant differences between *Tools* and the comparison settings, they favoured the comparison settings, even with respect to self-regulation measures. This led the research team to question the theory of change underpinning *Tools*.

*In spite of fairly high implementation fidelity, Tools did not produce significant gains on assessments of achievement, self-regulation, or teacher ratings at the end of pre-k. Negative effects were found on Letter Word Identification, Quantitative Concepts, and Corsi Backward Span in kindergarten and on Spelling, Copy Design, and the composite self-regulation score in 1st grade. Several reasons for these unexpected findings are explored. [...] The disconnect in the model appears to come between the set of activities teachers are to implement and the changes they are supposed to induce in the children.* (Farran and Wilson 2014)

However, the complexity of research in this area is highlighted by the fact that smaller studies have found benefits for the *Tools* curriculum (Barnett et al 2014, Diamond et al 2007). This perhaps supports the case for a balanced approach that reflects what is currently known across ECD domains and pedagogy, but is also flexible and responsive to local context and emerging evidence.

The Organisation for Economic Co-operation and Development (OECD) underlines the role that national-level curriculum frameworks can play in ensuring even quality across different forms of ECD provision. They also emphasise the importance of producing national early years curricula that are locally appropriate and co-developed with key stakeholders.

*Curriculum and standards can reinforce positive impacts on children's learning and development. They can: i) ensure even quality across different settings; ii) give guidance to staff on how to enhance children's learning and well-being; and iii) inform parents of their children's learning and development.* (OECD 2013)

One key question that emerges from the literature is the extent to which different early years curricula and programmes can be successfully transferred between countries. Engle et al (2007) are among those who emphasise the importance of blending cultural beliefs and practices with evidence-based approaches. There are also warnings against displacing community assets and indigenous knowledge and practices by imposing a singular framework for optimal early childhood development imported from very different contexts (Marfo et al 2008, Nsamenang 2010, Pence and Marfo 2008). Participatory planning that directly involves communities and parents helps to ensure programmes are respectful and reflective of local knowledge, values and practices (Pence 2004).

*Programs developed elsewhere cannot fully meet the needs of African families. At the same time, colonial-era models – such as the kindergarten and nursery school – have been shown to be amenable to indigenization. As indicated by the example of community-based programs in Kenya, ECD programs are strengthened when they are reconceptualized from an African standpoint. (Prochner and Kabiru 2008)*

*Our images of childhood and young children are deeply embedded within specific historical, cultural, geographical, economic and political contexts, within certain sets of societal norms and values. While childhood is a biological fact, the way in which childhood is understood, is socially determined. In this sense, official curricula for young children can be considered to represent an interface between a particular society's cultural view of childhood and its structural plans for children's learning processes, as a blueprint for child development goals that are seen to be culturally relevant. (Oberhuemer 2005)*

*A greater extent of local adaptation of curricula can reinforce the relevance of ECEC services. This can be especially important when national values or ideas on early childhood development are not shared by all (Eurydice, 2009). Co-constructed responses developed in partnership with teachers, parents, children and communities can greatly enhance the local appropriateness of curriculum aims and objectives (OECD, 2001). (OECD 2012)*

*When Euro-American ECD programs are applied as the gold standards by which to measure forms of Africa's ECD, they deny equity to and recognition of Africa's ways of provisioning for its young, and thereby deprive the continent a niche in global ECD knowledge waves. [...] The gap between African children's conditions and the theories that interveners apply to them persists because the field relies more on scripted new conceptualizations than on embedded contextual realities of childhood. (Nsamenang 2008)*

More recently, there have been efforts to define what an indigenous early years curriculum framework in Africa might look like (Awopegba, Oduolowu and Nsamenang 2013).

*The Indigenous Early Childhood Care and Education framework is a strength-based approach that acknowledges and seeks to incorporate the knowledge, skills, values and timeless wisdom of early child care and education that originated in Africa and are still usefully relevant for rapidly globalizing requirements for early childhood development. [...] It is designed to address the perceived lack of resources for conventional and elitist models by encouraging the creative use of local resources and positive cultural capital. Appropriate indigenous models involve the participation of knowledgeable indigenous individuals and make use of available resources in the indigenous setting for providing early stimulation and education for the African child. (Awopegba, Oduolowu and Nsamenang, 2013)*

Finally, some of the literature poses a prior question – whether curricula are useful and desirable for early years provision at all. The potential problems associated with curricula for this phase include diminished professional responsibility and autonomy, less reflective and adaptive practice, and reduced child choice and agency. Highly detailed curricula are also less

likely to make space for locally appropriate practice and content, and may be less responsive to the individual needs and inclinations of the child.

*Some experts, however, believe that by their design, curriculum models lower expectations for early childhood educators and diminish the professional responsibilities of early childhood teachers. To achieve consistency across sites, curriculum models operate by using predictable representations of teaching and learning, relying on fixed interpretations of the nature of children and teachers, and minimizing variation across sites. Teachers function less as reflective practitioners and more as technicians who implement others' educational ideas. The increasing use of curriculum models, therefore, challenges the early childhood profession to examine its image of teachers and deliberate how best to improve children's daily experiences in early childhood settings. (Goffin 2000)*

*There are also warnings that overly prescriptive, content-heavy curricula may crowd out opportunities for children to follow their own ideas, make choices, and grow as independent learners. (Whitebread et al 2005)*

*The implication, then, is that curricular frameworks should give early childhood centres, pedagogues and children the largest possible freedom to follow individual pathways, while striving towards goals based on agreed societal norms and values. (Oberhuemer 2005)*

### 3. Research on quality early years programmes

While the evidence for the efficacy of specific ECD curricula may be inconclusive, research studies from around the world confirm that high quality early years programmes have lasting positive impacts on academic and other outcomes for children (NEA 2008, Engle et al 2011). These findings seem to hold true for both developed and developing countries.

*In France, universal free pre-school (école maternelle) is available to children starting at age 3 with over 90% take up rates. State-collected data show that pre-school had a sizeable and persistent positive effect on a child's ability to succeed in school and obtain higher wages in the labour market. Pre-school also appeared to reduce socio-economic inequalities, as children from less advantaged backgrounds benefited more than those from more advantaged backgrounds. [...] In Norway, which expanded pre-school education for 3 to 6 year-olds during the 1970s, researchers found that pre-school participation was associated with strong benefits for later educational and job outcomes (Havnes & Mogstad, 2009).*

*There is similar evidence of pre-school's benefits from Asia, South America, and elsewhere (e.g., Siraj-Blatchford & Woodhead, 2009). In Bangladesh, pre-school boosted primary school achievement (Aboud, 2006), with similar results reported for 10 other countries (Montie et al., 2006). When Uruguay expanded its pre-school system, studies comparing siblings with and without pre-school, and regions with varying levels of pre-school, revealed clear benefits for children attending pre-school (into secondary school, Berlinski et al., 2008). Similar analyses in Argentina found that 1 year of pre-school was associated with primary school attainment increases of 0.23 of a standard deviation (Berlinski et al., 2009). (Sylva et al 2012)*

*Studies of skill formation have shown that interventions in the early childhood years are one of the rare examples of interventions that are both equitable and efficient – that is, the interventions reduce inequalities whilst also raising the productivity of the society as a whole. [...] Walker and colleagues (2007) identify inadequate cognitive stimulation as one of the four most urgent modifiable risk factors that are encountered by young children in developing countries. (Baker-Henningham and López Bóo 2010)*

*All eight [centre-based] evaluations recorded a substantial effect on children's cognitive development. ... Most reported gains in noncognitive skills such as sociability, self-confidence, willingness to talk to adults, and motivation. Longitudinal studies recorded improvements in the number of children entering school, age of entry, retention, and performance. [...] The estimates from Brazil and Guatemala (not controlling for measurement error) and estimates from developing countries of the economic returns of schooling suggest that preschool participation contributes to increases of around 5–10% in lifetime labour income. (Engle et al 2007)*

Quality early years provision is also seen as being a key strategy in tackling the multiple deficits caused by poverty, disease and social disruption in poorer countries, including South Africa (Young and Mustard 2008, Chórr 2012). Furthermore, some of the wider benefits of early years programmes, such as the positive impacts for local economies, community development and the empowerment of women, are particularly significant in developing countries.

*The many benefits of ECD programs have been proven over time and in different countries. Three main benefits that are germane for Africa are (1) enhanced school readiness, enrollment, and completion; (2) later age of motherhood for young women (that is, reduced birthrate); and (3) improved family situations, including the empowerment of women. [...] For families, ECD programs involving parents can improve parent-child relationships, “free up” older siblings from caregiving responsibilities to attend school, and enable mothers to participate in the paid workforce and increase the family’s income. (Young and Mustard 2008)*

The UK’s EPPSE longitudinal research project has tracked children from preschool to age 14 and found a range of lasting benefits for children who attended quality preschools.

- *There is an enduring impact of pre-school on children’s academic and social-behavioural development up to age 11.*
- *Those who attended low quality or no pre-school had poorer outcomes.*
- *Specific pedagogical and structural practices differentiated effective pre-schools.*

*It should be emphasised that pre-school education still shows beneficial effects even after nearly 10 years of intervening experiences from multiple sources. There are continuing effects of pre-school attendance and also of pre-school quality and effectiveness, particularly for later attainment in maths and science. Pre-school quality is also a significant predictor for all four social-behavioural outcomes at age 14. This is relevant to the development of policies which increase the quality and effectiveness of pre-school and is especially important given the increased numbers of children who now attend pre-school. Investment in high quality pre-school education can be an important contributor to developing the educational and social capital of the population, and thus promote longer term economic development. (Sylva et al 2012)*

Conversely, poor quality early years interventions are found to have no effect or a negative effect on children’s development and learning (Centre on the Developing Child 2007).

*Expanding access to services without attention to quality will not deliver good outcomes for children or the long-term productivity benefits for society. Furthermore, research has shown that if quality is low, it can have long-lasting detrimental effects on child development, instead of bringing positive effects. (OECD 2012)*

Some key ingredients of quality are consistently articulated across the literature, and include both structural and pedagogic factors, but the evidence-base for these varies.

Key features of quality in ECD settings:

1. *relationships between practitioners and children*
2. *pedagogical practices*
3. *stability and continuity of care*
4. *the physical environment*
5. *family-practitioner partnerships*
6. *adult-child ratios and group sizes*
7. *practitioner qualifications and training*

(Mathers et al 2014)

*Higher (or good-) quality settings on the other hand offer more free choice; as a result, children spend more time in cognitively enriching activities such as creative play, language or science activities. They are more engaged with their peers and spend more time in one-to-one interactions with their teachers. (Sylva et al 2007)*

For developing countries, evidence on the ingredients of effective early years interventions is more scant. However, Maulik and Darmstadt (2009) concluded from their review that play-based interventions and interventions that promoted shared reading were the most effective and feasible types of intervention for developing countries. The importance of reflecting and incorporating local knowledge, practices and resources is also emphasised, in terms of both programme content and how goals and quality are defined.

*ECD programs should draw from and build on indigenous traditions, childrearing practices, and material resources within the local environment in the provision of routine care and developmental stimulation. Indigenous traditions of childrearing are rich with practical tools and strategies – for example, stories, songs, lullabies, lap games, and pretend play activities – for stimulating language, social, emotional, intellectual, moral, and spiritual development. For infants, developmental stimulation and routine care are often inseparable activities; ECD programs should strive to keep them so. (Marfo et al 2008)*

Finally, there is some debate around whether it is possible or desirable to reach a unified definition of ‘quality’ (LeVine 2004). Nsamenang (2010) argues that definitions of ‘quality’ in ECD have been heavily influenced by Euro-Western social and economic values and American research. Using such definitions to guide ECD programme design in Africa may hinder rather than assist efforts to develop curricula that are locally appropriate and therefore effective.

*‘Quality’ has gained a certain reverence that makes almost irrefutable claims. ‘Quality’, for example, is frequently used in research papers, discourse and policy documents without appreciation or even acknowledgment of the concept’s complexity and multifaceted nature. Dahlberg et al (1999) have argued very effectively that there are ways other than the ‘discourse of quality’ for looking at what happens in early childhood settings. [...] the field would gain from addressing the multiple issues in diversified ECD settings pertaining to whose quality, whose efficiency and effectiveness for whom, vis-à-vis the primary ECD stakeholders. (Nsamenang 2010)*

*Many child development specialists implicitly assume that the conditions of infants and children among educated middle-class Anglo-Americans represent, or at least approximate, the optimal environment for individual development in humans – in terms of parental commitment, health care, nutrition, living space, domestic facilities, physical protection, emotional warmth, cognitive stimulation, communicative responsiveness, and social stability. Deviations from this pattern are interpreted not as alternative pathways for normal child development but as conditions of deficit or deprivation, representing less adequate environments in which to raise children ... (LeVine 1989, in Pence and Marfo 2008)*

*Comparisons of ratios and service quality in different countries must be made in the context of local philosophies of childcare. Early years services both within and between countries can have very different aims and objectives. For this reason it often makes no*

*sense to make direct comparisons of quality between two or more different countries. The services may simply be modelled on completely different notions of best practice.*  
(Munton et al 2002)

## 4. Key themes: Early learning and development

### 4.1 Early brain development

The brain grows rapidly in the months and years after birth. This is a period of high opportunity and high risk (McCain et al 2007). High opportunity because young children who experience a loving and stimulating environment are likely to develop the healthy brain function that underpins wellbeing and future success. High risk because deficits that occur during this period tend to accumulate, and remediation becomes increasingly challenging and costly.

*The considerable susceptibility of the young, developing brain to the synergistic effects of environment and experience has enormous implications for policymakers, parents, and society. An abundance of scientific evidence clearly demonstrates that critical aspects of brain architecture begin to be shaped by experience before and soon after birth, and many fundamental aspects of that architecture are established well before a child enters school. [...] Consequently, healthy and stimulating experience results in brain architecture that operates at its full genetic potential, and persistent adversity leads to weak brain architecture with impaired capabilities. (National Scientific Council on the Developing Child 2007).*

*In other words, the child's capacity to learn when she enters school is strongly influenced by the neural wiring that takes place in the early years of life. The connections that are formed between neurons and between neural networks affect a child's ability to attend to a lesson; the speed at which she can process and retain information; the ability to recognize patterns; to absorb new information; to understand what others are thinking or feeling; or simply, to grasp and conform to the norms of classroom behavior. The greater the synchrony between the subcortical and prefrontal systems in the child's brain, the more she will thrive in a school environment. (McCain et al 2007)*

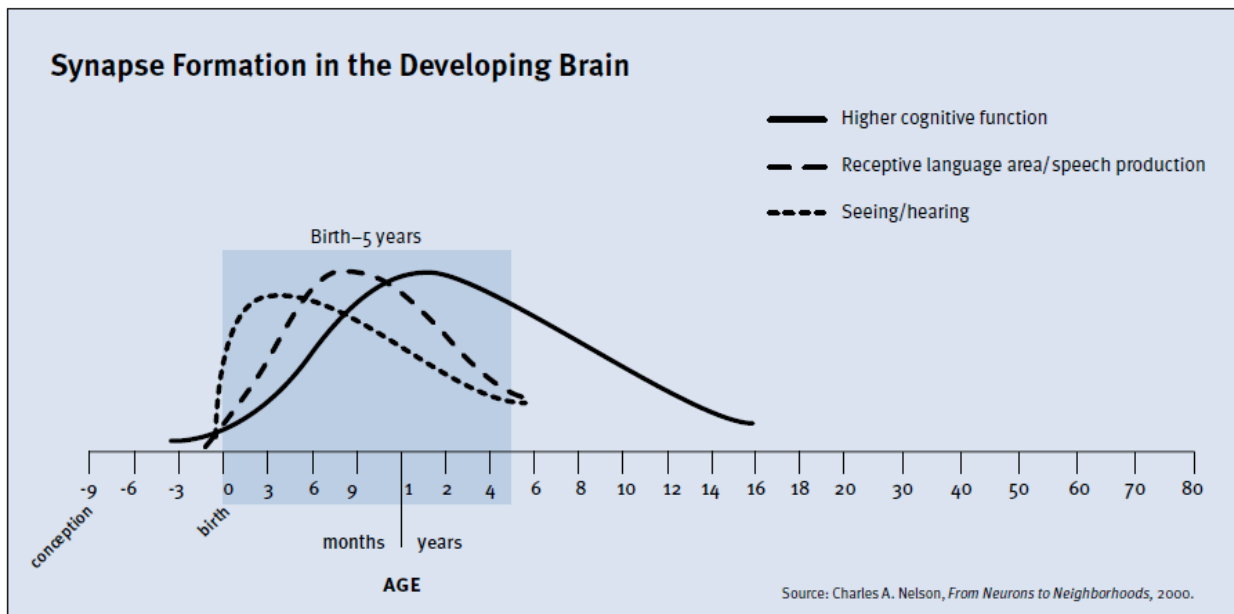
Genetics explain how things are but not necessarily how they must be (Kirby 1997). Epigenetics highlights the role that environment and experience play in 'telling' genes what to do, when and how.

*The child's experiences in the early years of life are pivotal for how the genes that govern various aspects of neurobiological development are expressed. Furthermore, these experiences are essential for vital cortico-cortical connections that are formed in the early years of life. Recent findings in developmental neuroscience are revealing just why and how these early experiences promote the development of a child's core capacities. This research also tells us why it can be so difficult to alter a child's developmental trajectory; for once formed, the neural connections that underpin a child's competencies can be difficult to modify. (McCain et al 2007)*

There is a degree of sequencing in the construction of neural pathways, which build on each other, with the sensory and coping neural pathways starting to form before birth, followed by the language neural pathways and then the neural pathways underlying higher cognitive function (McCain et al 2007). Environment and experience heavily influence the forging of these pathways, giving rise to the phrase 'neurons that fire together wire together'.



Everything in the infant environment contributes to brain development – noise, light, and changes in temperature; the touch, voice, and smell of her caregiver. (McCain et al 2007)



There are some warnings in the literature against simplifications and overgeneralisations emanating from neuroscience findings on brain development in recent decades. In particular, misinterpretations of these findings have sometimes resulted in an over-emphasis on the birth to three years period, at the expense of the pre-natal and later childhood periods. In addition, the distinction between sensitive and critical period of brain development has not always been properly made (Twardosz 2012).

McCain et al (2007) summarise the implications of research on early brain development as follows:

- *Early experiences shape brain development.*
- *Brain development strongly influences learning, behaviour, and health throughout life.*
- *The early years are a period of heightened opportunities and increased risks.*
- *Families and communities matter.*
- *Early child development programs can make a significant difference.*

#### 4.2 Nurturing relationships

There is considerable emphasis in the literature on the role of positive and stable attachments with caring adults in promoting healthy development in the early years. Again, this understanding of the role of strong emotional bonds, highlights how both benefits and deficits can accumulate rapidly during this period.

*Nurturing and stable relationships with caring adults are essential to healthy human development beginning from birth. Early, secure attachments contribute to the growth*

*of a broad range of competencies, including a love of learning, a comfortable sense of oneself, positive social skills, multiple successful relationships at later ages, and a sophisticated understanding of emotions, commitment, morality, and other aspects of human relationships. Stated simply, establishing successful relationships with adults and other children provides a foundation of capacities that children will use for a lifetime.*

*The warmth and support of the caregiver in a child care setting also influence the development of important capabilities in children, including greater social competence, fewer behavior problems, and enhanced thinking and reasoning skills at school age. (Center on the Developing Child 2004)*

*Nurturing relationships provide an emotional refuge for children, fostering the development of a healthy sense of belonging, self-esteem, and well-being. When parents are sensitive and responsive to children's emotions, children are more likely to become socially competent and show better communication skills. Warm, reciprocal parent-child interactions and fewer life stresses in the home facilitate children's prosocial behavior and ability to concentrate. (Weiss et al 2006)*

*The quality of exchanges between caregiver and infant serves as the foundation for the infant's signalling system and influences the child's subsequent mental and physical health. The relationship between caregiver and infant plays a pivotal role in the child's capacity to interact with others and influences neural pathways for language and higher cognitive functions. (McCain et al 2007)*

Strong bonds with reliable caregivers promote healthy brain function and in this way are understood to contribute to a range of positive outcomes for children, including resilience, cognitive development, language learning, social competence, and simple wellbeing.

*In Bowlby, the founder of attachment theory's words: "the pathway followed by each developing individual and the extent to which he or she becomes resilient to stressful life events is determined to a very significant degree by the pattern of attachment developed during the early years". [...] One of the consequences of secure attachment is the development in the child of a sense of self-confidence, the ability to manage their own emotions, and make other good relationships. [...] Large-scale reviews have shown that attachment is associated with children's early language development. (Moullin et al 2014)*

*Experiencing emotional attachment and responsive interactions with other people cultivates children's thinking and reasoning, as well as their motivation and self-confidence. (Hickman and O'Carroll 2013)*

While much of the emphasis is on the importance of positive parent-child relationships, warm and nurturing relationships with caregivers in ECD settings are also seen to be significant and help to lay the foundation for children's positive attitudes to learning.

*Children who develop warm, positive relationships with their kindergarten teachers are more excited about learning, more positive about coming to school, more self-confident, and achieve more in the classroom. (Center on the Developing Child 2004)*

*Responsive interpersonal relationships with teachers nurture young children's dispositions to learn and their emerging abilities. Social competence and school achievement are influenced by the quality of early teacher-child relationships, and by teachers' attentiveness to how the child approaches learning. (Bowman et al 2000)*

### **4.3 Early language and literacy**

Language is generally understood in the literature as a self-productive skill that provides a platform for new kinds of interactions and learning, including early literacy. Language is also central to wellbeing and social competence, enabling children to express emotions, ideas and needs.

*The acquisition of a first language is the most complex skill anyone ever learns. And this task needs to be virtually complete by the time a child reaches school age. (David Crystal, Cambridge Encyclopaedia of Language 1987, in Talk To Your Baby 2005)*

*Even the most basic learning relies on effective linguistic and social interaction with parents, teachers and other children. (Hofkins and Northen 2009)*

*Literacy begins with speaking and listening. Adults are so familiar with these faculties we rarely acknowledge them as complex, learned skills, except when visiting a foreign country. Speaking and listening are the primary means by which young people understand and participate in the social/cultural world around them, linking their internal, individual experience to that of the community. (Grigg 2003, in Talk To Your Baby 2005)*

Language and thought are developmentally linked in that language facilitates listening, thinking, reasoning and speaking skills. There is therefore a degree of inter-dependence between successful early language learning and other cognitive and non-cognitive competencies.

*Language is an actual mechanism for thinking, a mental tool. It is one of the processes through which external experience is converted into internal understandings. Language makes thinking more abstract, flexible and independent from the immediate stimuli. Through language, memories and anticipations of the future are brought to bear on the new situation, thus influencing its outcome. When children use symbols and concepts to think, they no longer need to have an object present in order to think about it. Language allows the child to imagine, manipulate, create new ideas, and share those ideas with others. It is one of the ways we exchange social information with each other. Oral language is the foundation for literacy development. Oral language provides children with a sense of words and sentences and builds sensitivity to the sound system so that children can acquire phonological awareness and phonics. Through their own speech children demonstrate their understanding of the meanings of words and written materials. (NIEER 2006)*

*Cognitive and language development seems to be intertwined. Naude' in 1999 found that parents from deprived communities do not adequately stimulate their children's cognitive abilities and a code of language is therefore not adequately facilitated. [...] A*

*broadened and expanded code of language is thus essential for later successful learning, because it enables the learner to analyze, to synthesize and to globalize new information. (Pretorius and Naudé 2002)*

*Research findings have provided evidence firstly, that proficiency in written language builds on well-developed spoken language and secondly, on the ways through which children learn to read and write. It is now appreciated that the literacy process involves complex, cognitive functioning, which is composed of an interrelated array of skills, dispositions and attitudes, which interact powerfully together. (BERA 2003)*

*Therefore language has two roles: It is instrumental in the development of cognition and it is also a part of cognitive processing. (Bodrova and Leong 2007)*

Studies suggest that early language competence predicts both early reading and writing ability and later academic success.

*Language development at the age of 2 years predicts children's performance on entry to primary school. Children's understanding and use of vocabulary and their use of two or three word sentences at 2 years is very strongly associated with their performance on entering primary school. (Roulstone et al 2011)*

*A substantial body of research has demonstrated positive correlations and longitudinal continuity between individual differences in oral language skills and later differences in reading. (Lonigan et al 2000)*

*Language skills are a strong and early predictor of school success. Children with low language skills at school entry are unlikely to have the process reversed by the school system. (McCain et al 2007)*

*Language, without question, is the key to learning. Children who fail to develop adequate speech and language skills in the first years of life are up to six times more likely to experience reading problems in school than those who receive adequate stimulation. When asked to identify the areas in which students are most deficient, teachers overwhelmingly cited 'lack of proficiency in language'. (Boyer 1991, in Talk To Your Baby 2005)*

The Vygotskian perspective gives a particularly important role to language, and private speech in particular, in the development of thinking skills and self-regulation.

*Once children can talk about something before they do it, they have better control over what they're doing. It helps in understanding both objects and goals, as well as contributing to monitoring one's own behaviour. Speech that originally had a social, communicative function is internalised and used in thought. When speech and action become integrated, the child can use words to create a plan; this affords much greater flexibility in solving a task or attaining a goal. (Kritt 2013)*

*Reliving emotional events and explaining the actions of others helps children to develop their sense of self, their self regulation and understanding of others' minds. Again,*

*caregivers have an important role in facilitating children's construction of narratives, by listening to, prompting and extending their stories. (Mathers et al 2014)*

Early literacy can be defined as a range of competencies and understandings that provide the foundations for later reading and writing. The different strands of early literacy include vocabulary and comprehension, narrative skills, print awareness, enjoyment of books and print, drawing, mark-making and emergent writing, phonological awareness, and letter knowledge (Hickman and O'Carroll 2013).

Children are active agents in their own acquisition of these skills (BERA 2003). There are also many things that adults can do to create the kinds of environment that provide sustained language and literacy experiences for young children. For example, talk supports vocabulary, comprehension and narrative skills; pretend play creates opportunities for the practice of decontextualised language (important for formal learning) and supports narrative skills; shared storybook reading supports vocabulary and print awareness and motivation; opportunities for drawing and mark-making support an understanding of symbolic representation and emergent writing (Hickman and O'Carroll 2013).

*This review of selected research has affirmed young children as active literacy learners and problem solvers who are able to engage in the formidable task of making sense of a complex system of spoken and written language. The evidence available supports the view that in the earliest years this is most likely to take place in a literacy rich environment where learning is supported by a receptive and psychologically available adult. (BERA 2003)*

*Adults who can arrange emergent literacy environments and scaffold children's interactions or stories promote children's growth in profound ways that are only beginning to be understood. (Rosenkoetter and Barton 2002)*

The emergent literacy and whole language perspectives highlight the embedded and social nature of successful early literacy learning. In this view, the emphasis is on meaning and the construction of meaning, rather than on isolated skill development (Murriss 2014). This requires young children to have plentiful opportunities to use oral and written language in personally meaningful and purposeful ways in social contexts (Bloch 2006).

*Meaningful language activities are ones where phonics and other technical skills are learned as a part of a range of intellectually engaging activities where young children explore, in an ongoing cultural apprenticeship mode, what it means to be literate. (Alexander and Block 2010, in Murriss 2014)*

*It is remarkable how little attention is paid in South Africa to what it means to read for meaning, the thinking skills involved in making sense of complex texts and how this should be taught in the foundation phase. [...] Deep reading requires comprehension skills that do not develop naturally, but need to be taught explicitly even before formal schooling starts. It is conceptually flawed to put so much emphasis on decoding skills – the solution and the problem do not match. [...] I have argued that various literacy skills should not be taught sequentially (with the teaching of comprehension after children can decode texts), but that they need to be developed simultaneously and in contexts that are respectful for children as thinkers and meaning-makers. (Murriss 2014)*

South Africa's literacy rates are very low, even by comparison to other African countries (Vally 2012). Deficits accrue from birth, meaning that many children are entering Grade R without the skills and understanding required to learn to read and write successfully.

*Results indicate that these children are ill-prepared for formal education. They reveal inadequate literacy skill, poor sentence construction, poor sense of syntax, and inadequate sound development, and knowledge of the alphabet. They also reveal poor knowledge of sounds especially pertaining to prefixes and suffixes, transposition of sounds within words, and replacement of a sound within a word by another. (Pretorius and Naudé 2002)*

Some of the reasons for this may be culturally specific. For instance, Pretorius and Naudé (2002) argue that children who have been carried for long periods on their mother's back are more at risk of visual and fine motor deficiencies, which in turn undermine early literacy competence. However, the key issue is the quality of the language and early literacy learning opportunities available to young children. In this sense, the determinants of poor literacy outcomes in South Africa have much in common with other countries.

*It was concluded that the inadequate linguistic example set by both the family and the community resulted in inadequate language development and enrichment and the senior toddlers revealed their impoverished, undifferentiated world of language in deficiencies pertaining to mastery of language, style of language and code of language. [...] Parental non-involvement might be ascribed to various factors. Firstly there is little coherence between the rural home culture and the demands set by the westernized, urban school culture. Secondly, parents might feel alienated, they might have a lack of education themselves, and because of a lack of knowledge on the part of the parents regarding the readiness level of a child when entering school, they do not know how to mediate stimulating learning experiences during the early phases of childhood. (Pretorius and Naudé 2002)*

The importance of mother tongue language learning is also particularly pertinent in South Africa's multi-lingual context, for socio-cultural as well as educational reasons (Bloch 2006). There is evidence that the linguistic skills acquired in a first language, including phonological awareness and narrative skills, are transferable to a second and subsequent languages (Quiroga et al 2002, and Durgunoğlu, Nagy and Hancin-Bhatt 1993). In the early years, the focus should therefore be on supporting children to build strong foundations in their mother tongue (Awopegba, Oduolowu and Nsamenang, 2013).

The roles of talk, play and shared storytelling in helping children to build early language and literacy are looked at in more detail in the sections below.

#### **4.4 Self-regulation**

The early years is a uniquely important period for the development of self-regulation.

*As essential as they are, we aren't born with the skills that enable us to control impulses, make plans, and stay focused. [...] Acquiring the early building blocks of these*

*skills is one of the most important and challenging tasks of the early childhood years, and the opportunity to build further on these rudimentary capacities is critical to healthy development through middle childhood and adolescence. (Center on the Developing Child 2011)*

The terms executive function and self-regulation are not used consistently across the literature, but they broadly refer to the same set of skills or competencies. The four (inter-connected) dimensions that are most frequently highlighted are attention, working memory, inhibitory control and mental flexibility (Savina, 2014). The broadest definitions include non-cognitive skills such as concentration, motivation and persistence.

*An extensive range of basic cognitive processes have been proposed as 'executive functions', but in an influential integrative review of the most up-to-date research Garon, Bryson & Smith (2008) have concluded that the key processes appear to be those related to attention (focusing on relevant rather than irrelevant information), working memory (holding information in mind while updating or manipulating it), inhibitory control (stopping an initial, proponent, automatic or perceptually attractive response and replacing it by another) and cognitive flexibility (often referred to as 'set shifting', or the ability to adapt from one mental set, or task rules, to a different set). (Whitebread and Basilio 2012)*

*There has been a broadening of notions of self-regulation to include emotional, social and motivational aspects. (Whitebread et al 2005)*

*Self-regulation incorporates encouraging helpful, healthy emotions as well as controlling disruptive ones. The concept of executive functions instead has emphasized cognitive control. (Diamond et al 2007)*

Self-regulation is evident even in infants, who from an early age demonstrate elements of memory and attention. Between the ages of three and six years, strengthening executive function processes may express through a range of cognitive and socio-emotional behaviours, such as controlling attention, internalising behavioural standards and thinking critically (Whitebread and Basilio 2012).

*By age 3, children demonstrate working memory, attentional flexibility (the ability to shift attentional focus), and inhibitory control (Hughes, 1998), indicating that they can remember information to help them complete tasks, shift attention from one aspect of a task to another, and are capable of controlling their own behavior by restraining their own actions (although they don't always do it). Inhibitory control improves between ages 3 and 6 (Montgomery & Koeltzow, 2010), which helps children adjust to the behavioral and academic demands they encounter in school. Cognitive flexibility, a skill particularly important for reading (Cartwright, 2009), improves markedly between ages 4 and 5. (Cartwright 2012)*

*From around 30 months onwards, individual differences become more salient. In general, children from this age know more about their own emotions and others' and they are better able to communicate about them and control them according to the context. (Whitebread and Basilio 2012)*

Self-regulation is understood to contribute to a child's social and emotional development and wellbeing, as well as to their academic success.

*More recently, research with young children has shown that early developing executive functioning and self-regulatory abilities in pre-school children predict 'positive adaptation to school' (Blair & Diamond, 2008) and the development of early academic abilities (Blair & Razza, 2007). (Whitebread and Basilio 2012)*

*Teachers identify problems with paying attention, managing emotions, completing tasks, and communicating wants and needs verbally as major determinants of whether a child is ready to succeed in the school setting. In many ways, coming to school with a solid base of these foundational executive function skills is more important than whether children know their letters and numbers. [...] Children with stronger working memory, inhibition, and attentional skills also have been found to make larger gains on tests of early math, language, and literacy development during the preschool years than their peers with weaker executive function skills. (Center on the Developing Child 2011)*

*Executive function provides the means to manage complex cognitive processes, such as reading. And because executive function and its associated brain developments parallel reading acquisition, work in executive function has profound implications for fostering the successful development of reading skills, including prereading skills, word reading, and reading comprehension. (Cartwright 2012)*

Importantly, the development of self-regulation in children is understood as something that can be actively supported by adults.

*Metacognitive and self-regulatory abilities, under-pinned by efficient executive functioning, have a major impact on children's general and academic development. It is also evident that adult intervention and social mediation can have significant influence of this development, and that there are marked individual differences in the skill and sensitivity with which adults are able to fill this role. (Whitebread and Basilio 2012)*

*Enhancing the development of executive functioning involves sensitive, responsive caregiving and individualised teaching in the context of situations that require making choices, opportunities for children to direct their own activities with decreasing adult supervision over time, effective support of early emotion regulation, promotion of sustained joint attention, and the availability of adults who are not under such pressure that they cannot make time for children to practice their skills.*

*[...] A young child's environment of relationships plays an important role in the development of executive capacities. Environments that foster executive functioning are characterised by adult-child relationships that guide children from complete dependence on adult support to gradual assumption of the 'executive' role for themselves. (Center on the Developing Child 2011)*

Self-regulation is closely linked to the dispositions and mindsets that are likely to make children keen and effective learners. In particular, children need to develop a strong sense of their own efficacy in order to stay engaged and motivated (Siraj-Blatchford et al 2011). This is sometimes described as having a 'mastery' or 'can-do' mindset (DCSF 2009).



*According to the Canadian psychologist Carol Dweck, young children also quickly develop a fixed set of beliefs or 'mindsets' about themselves (e.g. I am stupid, I am a failure etc) that is then very difficult to undo. Depending on whether they develop a 'fixed' or 'growth' mindset they will react to the world in very different ways. The former produces 'helpless' responses to challenge in the environment whereas the latter is more likely to result in 'mastery' responses. It is essential, therefore, that adults working with young children do what they can to promote the development of positive mindsets and are aware of the messages (both verbal and non-verbal) that they are conveying to children. (Ellyatt et al 2014)*

There is not sufficient evidence to support the idea that one particular approach to fostering self-regulation in the early years is more effective than another, and an integrated approach is likely to be most successful.

*A review of existing evaluation data on interventions focused on executive functioning reveals no evidence that one approach is superior to the others. Moreover, little is known about how these programmes produce the benefits that they do. Interventions that include an explicit focus on executive function skills do not need to be implemented separately from those focused on instruction in early literacy and math abilities. (Centre on the Developing Child 2011)*

However, child-led play is seen to offer rich opportunities for children to practise and build self-regulation. This is discussed in more detail below.

#### **4.5 How children learn and develop**

A sound understanding of how children learn and develop, enables adults to make informed choices between appropriate mediation and teaching techniques within their particular context.

Different pedagogic and curricula approaches are heavily influenced by different philosophical understandings of the child and of childhood. The interactionist view combines the empiricist view (children are empty vessels) and nativist view (children are biologically pre-programmed) and is evident in the approaches of Froebel, Montessori and Steiner, as well as Piaget and Vygotsky, and in many modern-day curricula, such as HighScope. Bruce argues that all theories about how children learn and develop have their range.

*It is important to look at the fitness of purpose of any theory, and to draw on theories that complement each other and so have some philosophical cohesion. This is very different from taking an eclectic approach where bits and bobs of different theories are taken in isolated, unconnected ways. This leads to inconsistency, confusion and to practice that constantly contradicts itself. [...] A theory that is all-encompassing has yet to be developed, and it may well be that this is not possible. (Bruce 2005)*

By seeing early childhood as a unique period with its own intrinsic value, concern for learning and development is situated within the more fundamental context of concern for childhood itself – in other words, there is a particular onus on adults to both respect and actively

encourage young children's specific ways of seeing, being in and interacting with the world. In this sense, the child's perspective is paramount.

*Froebel, Montessori and Steiner all saw childhood as a part of life, with its own particular needs and requirements, which are important in their own right. (Bruce 2005)*

In terms of how children learn, various themes emerge from the literature. Children need to be given choice and autonomy in order that they can exercise initiative, follow their interests and direct their own learning.

*A significant proportion of children's time should therefore be devoted to play on their terms, in order for their minds and bodies to develop to their full potential. Unprompted adult interference, either through the provision of inappropriate materials (such as toys that provide passive entertainment) or through imposing their own script on play, however well intended, compromises a child's innate ability to play freely and creatively. (Morris 2012)*

Children need to be actively involved in building their own understanding, rather than passive recipients of directions or information.

*To have discovered a quarter of the answer to his own question is of more value to the child than to hear the whole answer, half-understood, from another. (Friedrich Froebel)*

*That children learn by being active seems to be something all the above-mentioned programmes agree upon. In the Froebel (1995) and Montessori pedagogy, activity is, however, a question about the child's inner drive. In the High/scope programme, children seem to become active by teachers adapting activities to the child's level of development and using a structure where children have to be active. In the dialogue pedagogy, argued for by Blank (1983) and very popular in Sweden in the 1970s, as well as in the Reggio Emilia pedagogy, activities are shaped in the interaction with the world around them. [...] Although children play in all these programmes it is specifically discussed only in the Froebel pedagogy. Play there is a necessity, separated from learning and work. (Pramling Samuelsson and Asplund Carlsson, 2008)*

*This involves experimenting, exploring, investigating, discussing and responding, particularly in peer groups. Children gain knowledge, skills and other valuable skills as they construct personal understandings in the activities they are actively engaged in. [...] Children should be able to manipulate materials in a variety of ways to discover relationships, cause and effect and acquire skills using tools relevant to real life situations. (Awopegba, Oduolowu and Nsamenang, 2013)*

Children need to have plenty of time to fully immerse themselves in open-ended, free-flowing activities and explorations. Bruce suggests that the depth of involvement is important because it supports focus and concentration, which are key predictors of later academic success (Morris 2012).

*Allow children ample time when working to allow for persistence. When children are deeply involved with an activity, make sure that they can finish without interruption. (Carlton 2003)*

*Children's time must be managed so that they have the opportunity to become deeply involved in their activities and to follow their ideas through, including returning later to continue their explorations or creative expressions. (DCSF 2009)*

Children need to have the chance to make mistakes – and discover these as windows for new learning. Children need to be able to repeat the same activity again and again in order to consolidate their learning and to develop the confidence to try something new.

The social dimension of learning is also important. Children need to have opportunities to learn with and from each other and adults.

*Children learn or acquire a mental process by sharing, or using it when interacting with others. Only after this period of shared experience can the children internalise and use the mental process independently. [...] Shared activity forces the participants to clarify and elaborate their thinking and to use language. (Bodrova and Leong 2007)*

*Learning will be viewed as not an individual construction, but as an activity that a group of people participate in – one that is contextually based, but requires abstractions to be introduced and made explicit to children. (Fleer and Raban 2006)*

Children therefore learn most effectively through behaviours that come naturally to them, and through activities that chime with their inclinations and interests – in particular, through talking and interacting, through play and games, through music, movement and dance, and through shared storytelling.

*Long established African games are still as exciting and full of fun if teachers and care-givers can be creative in their use. Some of these games range from out-door game like jump rope, ballgames, racing, circle games, [...] and indoor games like Ludo, riddles and jokes, thinking games, toys, rhymes, tongue-twisters and spelling games among others. (Awopegba, Oduolowu and Nsamenang, 2013)*

Learning in the early years is understood as a continuous process and not confined to discrete activities – learning happens as children get dressed and eat meals, as they play at home and in the yard, when they go to the shops, the clinic or the mosque, when they walk down the street or take a taxi (Hickman and O'Carroll 2013). Learning must be embedded in children's everyday world in order that it is both accessible and personally meaningful (Fleer and Raban 2006). Context is, therefore, everything and where learning arises from children's everyday experiences and encounters it is more likely to be internalised and capable of re-application.

When adults grasp this notion of continuous, contextual learning, they become more alert to 'teachable moments' and spontaneous opportunities to extend children's understanding (Hickman and O'Carroll 2013).

## 5. Key themes: Early learning activities and pedagogy

### 5.1 Talk and interaction

Given what is known about early brain development and about the importance of warm, reciprocal adult-child relationships, it is no surprise that the literature underlines the role and value of talk for all aspects of young children's development and learning.

*Yet talk – at home, in school, among peers – is education at its most elemental and potent. It is the aspect of teaching which has arguably the greatest influence on learning. Hence the Review has nominated classroom interaction as the aspect of pedagogy which most repays investment by teachers and those who support them. An increasing number of local authorities and schools are exploring the true potential of talk. Certainly teaching which is 'dialogic' – where classrooms are full of debate and discussion that is collective, reciprocal, supportive, cumulative, critical and purposeful – can only be seen as the antithesis of any 'state theory of learning' and indeed as its antidote. In promoting its value the Review builds on a vast body of research. (Hofkins and Northen 2009)*

In the UK and elsewhere, national information campaigns targeting parents and caregivers have been developed and run over a number of years, focusing exclusively on the prime importance of talk for young children's emotional, language and cognitive development (I CAN 2011, Talk To Your Baby 2005). These campaigns not only communicate key messages around the value and purpose of talk, but also offer practical ideas for talking strategies and activities in homes and early years settings.

*Close attention to the early language environment of children, with efforts to promote the richness of children's verbal experiences, is a potentially effective intervention to optimise children's language development and emergent literacy skills [...] Family support systems in communities should promote multi-faceted approaches [...] and teach parents and other care providers effective ways of interacting with their children to promote oral language and emergent literacy skills along with other developmental competencies. (Regalado et al 2001, in Talk To Your Baby 2005)*

The term 'talk' is used to describe attentive, responsive communication between adults and children, and for younger children may include responding to infants' babbling, body language and gestures. Key elements of effective talk are likely to include listening to young children with care and respect, not hurrying or interrupting them, answering their questions, and using comments and open-ended questions to encourage and extend conversations. It can also involve thinking out loud, labelling what children are doing, and repeating the early vocalisations of infants. When adults make their actions and children's actions verbally explicit they support the development of meaning.

*The more you tie language to action, the more you will help children use language to facilitate learning. (Bodrova and Leong, 2007)*

*Oral language development is facilitated when children have many opportunities to use language in interactions with adults and each other and when they listen and respond to stories. Young children build vocabulary when they engage in activities that are*

*cognitively and linguistically stimulating by encouraging them to describe events and build background knowledge. (NIEER 2006)*

*Oracy must have its proper place in the language curriculum. Spoken language is central to learning, culture and life, and is much more prominent in the curricula of many other countries. (Hofkins and Northen,2009)*

Research also indicates that children from disadvantaged homes may experience less talk, and that this in turn affects their language acquisition and other areas of development and learning. Hart and Risley's seminal research on the link between language environment and language development found that the number of words addressed to children differed significantly depending on their socio-economic background, and their subsequent vocabulary growth rates reflected these differences. It was the language experience rather than the child's socio-economic background that accounted for the most variance in achievement (Kirby 2007). However, more recent studies have emphasised that it is the quality of the talk as much as the quantity that matters (Quenqua 2014).

*According to Hart and Risley (1999): "The most important aspect of parent talk is its amount. Parents who just talk as they go about their daily activities expose their children to 1000-2000 words every hour [...] What children need is time, not tricks. The data show that the first 3 years of experience put in place a trajectory of vocabulary growth and the foundations of analytic and symbolic competencies that will make a lasting difference to how children perform in later years." (Rosenkoetter and Barton 2002)*

*The communication environment is a more dominant predictor of early language than social background. In the early stages of language development, it is the particular aspects of a child's communication environment that are associated with language acquisition rather than the broader socio-economic context of the family. (Roulstone et al 2011)*

In the context of developing countries and resource-poor early years settings, therefore, the evidence suggests that strategies that encourage talk in the early years may offer exciting ways of supporting and accelerating young children's language and learning.

## **5.2 Play**

Play is generally seen in the literature as essential to a child's wellbeing, development and learning. Because play is something that children do naturally and enthusiastically, it provides a unique opportunity and mechanism for self-motivated learning and for fostering individual agency and a sense of self-efficacy within a context that is fun and meaningful for the child.

*The very existence of youth is due in part to the necessity for play; the animal does not play because he is young, he has a period of youth because he must play. (Karl Groos, German biologist 1861–1946)*

*Play in all its rich variety is one of the highest achievements of the human species, alongside language, culture and technology. Indeed, without play, none of these other*

*achievements would be possible. The value of play is increasingly recognised, by researchers and within the policy arena, for adults as well as children, as the evidence mounts of its relationship with intellectual achievement and emotional wellbeing. (David Whitebread 2012, in Ellyatt et al 2014)*

*Children MUST play in order to develop. It is the very nature of play that is building and shaping their brains throughout the early years. (O'Connor 2014)*

*Play is the language of childhood, it is how children acquire and refine new skills and it is how they demonstrate their competencies and build their confidence. (Morris 2012)*

*Froebel made the distinction between play and work. Play is what children are involved in when they initiate the task, and work is what they do when they fulfil a task required by an adult. (Bruce 2005)*

Vygotsky used the term 'play' narrowly to talk about socio-dramatic (pretend) play (Bodrova and Leong 2007). However, the literature defines play more broadly and suggests benefits for a wide array of playful activities, including constructive play and artistic/creative play.

*Two forms of play are considered particularly effective in supporting children's development: floor-based play which allows children to explore different objects and experiences; and symbolic, representational play. Symbolic play develops gradually in the second year of life and is typically understood as play which involves enacting familiar activities out of context, and using objects to represent other objects. Engaging in symbolic play with a caring adult may form a basis for the private speech that is used to solve problems and support self-regulation in young children. (Mathers et al 2014)*

Play offers rich opportunities for learning when there are opportunities for "emerging understandings [to be] integrated, practiced, and tested in a safe environment" (Rosenkoetter and Barton 2002). The wide range of skills, understanding, behaviours and thinking that are fostered through play are listed in Appendix 1. Prominent among these are language and self-regulation because these are self-productive skills – in other words, they provide building blocks for other learning. Vygotsky suggested that children tend to demonstrate more self-control in play than in everyday life (Savina 2014).

*Children's social play is believed to be an important practice ground for the development of executive function skills. Partly, this is because children need to test for themselves the skills that adults have been scaffolding for them. (Center on the Developing Child 2011)*

*There is a growing body of evidence supporting the many connections between cognitive competence and high-quality informal play. It is clear that if children lack opportunities to experience such play, their long-term capacities related to metacognition, problem solving, and social cognition, as well as to academic areas such as literacy, mathematics, and science, may be diminished. (Ellyatt et al 2014)*

*The magic of play is that it is a spontaneous and joyful activity, and yet it is a powerful context for the development of self-regulation. [...] Extensive verbal interactions in the course of play including planning, negotiation of roles and goals, and resolving conflicts*

*are important for the development of verbal self-regulation. [...] Having children to develop a play plan not only contributes to the play flow and children's mutual understanding (Bodrova & Leong, 2007), but also promotes inhibition control and working memory as children begin to act upon a mentally represented sequence of actions. (Savina 2014)*

*In play, children try out new ways of combining thought and language; for example, by using language to represent new ideas not tied to reality. Since dramatic play is symbolic in nature it can provide a 'bridge' to printed language. Dramatic play enhances children's comprehension of stories through 're-enactments'. Children use decontextualized language within the context of dramatic play and in recounting events derived from personal experience in their play. Talk about play, referred to as 'metaplay,' is an indicator of children's ability to think about language and has been associated with children's later reading and writing. (Pelletier 2011)*

Pretend play (also called imaginary play, socio-dramatic play and make-believe play) involves children taking on roles in an imaginary situation and is understood to offer important opportunities for the development and practice of certain skills and understanding.

*As children develop as players, the ability to pretend has special significance for children as learners. When a small child begins to pretend that one object stands for something else – such as a toy cow 'eating' the toy bricks – a key ability is being formed. The child is beginning to understand the idea of symbols, which eventually leads to being able to think in abstract ways. (DCSF 2009)*

*Role play is how children make sense of their world, acting out experiences, ideas or stories. Imagination, which is at the heart of children's role play, is more important than knowledge according to Einstein: 'for knowledge is limited, whereas imagination embraces the entire world.' (O'Connor 2014)*

*Few activities so challenge children to exercise [executive function] as does mature, social pretend play. (Diamond et al 2007)*

Conversely, a more recent analysis by Lillard et al (2013) questions whether the research evidence supports the claims made for the learning benefits of pretend play, pointing to the mixed evidence base.

How adults can best enable, frame and support play is the subject of some debate (BERA 2003). There is agreement that the existence of learning opportunities should not mean that the child loses control of the play, as the experiences of choice, initiative, autonomy and self-discovery are what makes play such a powerful learning medium. Children must therefore be able to maintain control of the direction and content of their play, even while adults identify and support learning objects within that play. In turn, adult intervention should be sensitive to the flow of play and to children's cues and direction of interest.

*An approach to early childhood education built on a perspective of goal orientation related to the playing learning child challenges the teachers to be child-centred and directed towards objects of learning simultaneously. It also challenges the children to*

*maintain their right to self-determination and to pay attention to the object of learning simultaneously.*

*Being able to integrate play and learning in a goal-orientated preschool means to see the playing learning child and, in so doing, make room for children's creativity, choices, initiatives, reflections etc. It also means being aware of the objects of learning and utilising the whole day and all activities to develop the child's understanding of different aspects of the surrounding world. (Pramling Samuelsson and Asplund Carlsson 2008)*

*Although how adults engage with young children varies across cultures, we know that responsive caregivers are attentive to children's explorations and follow the spontaneity of the child's play, joining in and offering support and encouragement without interrupting the child's flow of thinking. Children's interest and motivation to learn is most effectively nurtured through child-centred, play based activities, which support both cognitive and emotional processes. (Mathers et al 2014)*

*The African environment is rich in resources and materials that children can utilize for play. It is for the teachers and caregivers therefore to adapt them to the social, emotional, intellectual and moral context so that the African child can reap the benefits from play. (Awopegba, Oduolowu and Nsamenang, 2013)*

*Practitioners cannot plan children's play, because this would work against the choice and control that are central features of play. Practitioners can and should plan for children's play, however, by creating high-quality learning environments, and ensuring uninterrupted periods for children to develop their play. (DCSF 2009)*

*We must exercise caution and not make it too much an object of adult gaze. Children's play belongs to children; adults should tread lightly when considering their responsibilities in this regard, being careful not to colonise or destroy children's own places for play through insensitive planning or the pursuit of other adult agendas, or through creating places and programmes that segregate children and their play. Adults should be aware of the importance of play and take action to promote and protect the conditions that support it. The guiding principle is that any intervention to promote play acknowledges its characteristics and allows sufficient flexibility, unpredictability and security for children to play freely. (Lester and Russell 2010, in Gleave and Cole-Hamilton 2012)*

Play is seen as a prime opportunity for adults to scaffold children's understanding by helping them extend their thinking or by introducing new concepts within a playful context that is meaningful for the child. Some research indicates that this type of active adult involvement is the key to producing the potential learning benefits of play.

*Research evidence for the efficacy of play is mixed and, in some areas, problematic. [...] Whilst play-based learning appears to hold much promise, implementing a play-based pedagogy continues to present numerous challenges to practitioners. [...] So what characterises this new pedagogy of play? The primary emphasis is that play should be planned and purposeful, and should provide children with challenging and worthwhile activities. In addition to creating the appropriate conditions for learning, practitioners are encouraged to interact with children and provide a richly resourced learning*



*environment. Children should be enabled to plan and develop their own activities, and have sustained periods of time to work in depth. (BERA 2003)*

However, there are also warnings against the over-instrumentalisation of play and the 'scholarisation of childhood' (Mayall 2000). In this view, play should be treated as a necessity for young children simply because it is what they love to do. In other words, the facilitation of play should be an end in itself, not simply a means of achieving other outcomes. This approach locates play within a child rights framework and views childhood not as a preparation phase but as a valuable period in its own right (Hofkins and Northen 2009).

*Play is the highest expression of human development in childhood, for it alone is the free expression of what is in a child's soul. Friedrich Froebel*

*If we view play primarily as a means to achieve long-term physical, psychological and social benefits we are in danger of losing sight of the essence of play as intrinsically motivated behaviour, something children do in their own time, following their own ideas, in their own way, for their own reasons. [...] Caution should be exercised when linking play to cognitive functioning, as this can lead to the 'instrumentalising' of play (Lester and Russell 2008). While research does indicate that play can help to foster specific skills, Lester and Russell argue that it should not be perceived simply as a tool for learning and that the role of play within a particular moment, the joy it brings and the right that children have to play regardless of the positive outcomes, should be recognised as its primary drivers. (Gleave and Cole-Hamilton 2012)*

- 1. States Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.*
- 2. States Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.*

*(Article 31, UN Convention on the Rights of the Child)*

*All children and young people need to play. The impulse to play is innate. Play is a biological, psychological and social necessity, and is fundamental to the healthy development and well-being of individuals and communities. (Playwork Principles Scrutiny Group 2005, in Gleave and Cole-Hamilton 2012)*

### **5.3 Shared storytelling**

The literature suggests a particularly important role for shared storytelling in promoting language and early literacy. Storytelling, including reading books, recounting events and telling traditional tales, introduces children to new vocabulary, syntax and grammar, and helps children to learn about the structure and elements of good stories – narratives, characters, sequencing and context. It also provides opportunities to find out about new places, events and things that may not be part of the child's everyday world.

*Storytelling with or without books, and repeating the same story, offers infants a sense of security and familiarity and also promotes vocabulary development. Simply looking*

*at books and other texts together, even if only talking about the pictures and pointing to familiar objects, can promote early literacy skills. (Mathers et al 2014)*

*Books have a tremendous influence on many areas of learning. They can introduce themes of friendship, diversity, and overcoming challenge, thus helping to develop character. They can expand children's knowledge of the world, other people, cultures and traditions, or they can introduce imaginary themes. It is said that the best way to strengthen children's intelligence is to read them fairy tales. (O'Connor 2014)*

*During the early years, reading together is more significant than targeting any specific content or skills. While sitting on a lap, rocking in a chair, or even sprawling side-by-side on the floor with his favorite adult, the toddler builds very positive associations and happy preverbal memories of "reading." The material might be a picture book, the "funny" papers, or a religious storybook, to name just a few possibilities. Thus, sharing routines must be built into group care situations as well as into individual family schedules. With young children, reading times can be very brief, but they must happen every day. Shared reading helps children explore new worlds, laugh across generations, and learn about amazing things as well as ordinary things. (Rosenkoetter and Barton 2002)*

Shared reading is also understood to expose children to a certain kind of abstract language that supports learning in general and early literacy in particular.

*Story telling and reading expose children to a special form of language which is holistic, rich and complex. This allows them to tune into the rhythms and structures of language and broadens their conceptual worlds and their vocabulary to express themselves. As well as providing information in ways that are easy to remember, stories orient and shape our emotions like no other form of language can do, helping us move out from our own egocentric feelings and interests to a position of being able to empathise with others. (Bloch 2006)*

*Often parents engage in 'decontextualized talk' during book-sharing, a discussion that extends beyond the pictorial representations in the book to include additional new and unfamiliar concepts. This talk during book-sharing is often more complex compared to other parent-child interactions (e.g. free play or meal-time settings) and serves to enhance comprehension, vocabulary, and emergent literacy (De Temple, 2001). Empirical enquiry confirms that measures of parental mean length of utterances, responsive replies to child utterances, and abstraction are higher in book reading contexts than elsewhere. (Vally 2012)*

*Reading books aloud exposes children to grammatical forms of written language and displays literate discourse rules for them in ways that conversation typically does not. We therefore expect that book reading, in particular, increases children's knowledge of the written language register and, as a result, their reading achievements. (Bus et al 1997)*

As books are only partially accessible to children without the support of an adult (Bus et al 2007), it is important that adults make time to read and discuss books with children. Shared reading has an important role to play in helping children to understand how written language

works and introducing them to the conventions of print, as well as in building oral language. The National Early Literacy Panel found that beyond these two important areas, the positive effects of shared reading could not be demonstrated for a wider range of emergent literacy skills (such as decoding, reading comprehension and writing).

*These studies indicate that shared-reading interventions can have a significant, substantial, and positive impact both on young children's oral language skills and on young children's print knowledge. [...] there is not yet evidence that shared reading promotes the development of other emergent literacy skills, and there is no evidence that shared reading promotes any improvement in conventional literacy skills. (National Early Literacy Panel 2008)*

Many of the benefits of shared reading are understood to result from the extended conversations that take place around the book itself (Vally 2012). Through questions, comments and expansions and by being sensitive to what the child notices and is interested in, adults can make shared reading a time of rich conversation (Pelletier 2011). This kind of dialogic or interactive reading also creates opportunities for children to develop and practice other important skills, such as abstraction, reasoning and making predictions and inferences.

In one meta-study of shared reading interventions (by What Works Clearinghouse, see Lonigan 2008), only dialogic reading produced positive effects on children's oral language skills (compared to teachers simply reading books with children). Furthermore, there was only evidence for the effectiveness of dialogic reading when it took place in small groups and occurred regularly (at least three times a week). The National Early Literacy Panel found positive effects for both dialogic reading and typical shared reading, with stronger effects for dialogic reading. They also found that children who were at risk of later academic difficulties benefited as much as children who were not at risk.

*In dialogic reading, the adult reader asks the child or children questions about the story or the pictures in the book and provides feedback to the child or children in the form of repetitions, expansions, and modeling of answers. In dialogic reading, the adult tries to facilitate the child's active role in telling the story rather than foster passive listening. (National Early Literacy Panel 2008)*

*Dialogic reading can be classified as an empirically supported instructional strategy for both teachers and parents. This approach is preferable to other forms of shared reading. (Lonigan 2008)*

A study in Bangladesh pointed to the benefits of dialogic reading in low-literacy, low-resource environments, with significant improvements in preschoolers literacy scores (Vally 2012). This intervention was for relatively large groups, and impacts may have been maintained by using longer sessions.

*One potential strategy that does not appear to have been systematically explored in the developing world, particularly in South Africa, is the promotion of early and interactive book-sharing between carers and their infants. It is surprising that literacy initiatives in South Africa have not more readily employed this dialogic method as it possesses the potential to alleviate much of this country's psychosocial burden. (Vally 2012)*

## 5.4 Physical activity

Attention is given in the literature to the role of physical activity in children's development. Physical activity is known to contribute to children's health and physical wellbeing. However, it is also understood to support important fine and gross motor skills and coordination involved in learning activities, as well as wider cognitive development.

*Worldwide, recognition is increasing that young children need to be physically active in order to support their health and development. Once they begin to walk, children need opportunities for physical play and everyday activities which allow them to use large muscle groups and support the development of loco-motor, stability and object control skills, within different environments and spaces indoors and out. (Mathers et al 2014)*

*Physical activity in childhood is important for many reasons and a variety of sources indicate a direct relationship between physical activity and children's health (Hope and others 2007). In early childhood physical exercise helps build strong bones, muscle strength and lung capacity (Lindon 2007). It may also increase cognitive function, improve academic achievement and accelerate neurocognitive processing. (Gleave and Cole-Hamilton 2012)*

## 5.5 Pedagogy

The term pedagogy is used here in its broadest sense to refer to the understanding of how children learn and develop, and the interactions, opportunities and environments that enhance that process (Stewart and Pugh 2007).

There is considerable discussion in the literature on practitioner practices and methods that are thought to be more and less effective in supporting children's early development and learning. Research by Mathers et al (2014) identified four key dimensions of good quality pedagogy for all children under three, and the literature would seem to support these same characteristics for four and five year-olds as well.

- *Stable relationships and interactions with sensitive and responsive adults.*
  - *A focus on play-based activities and routines which allow children to take the lead in their own learning.*
  - *Support for communication and language.*
  - *Opportunities to move and be physically active.*
- (Mathers et al 2014)

### Who's in charge?

Siraj-Blatchford et al (2002) describe the three main approaches to teaching and learning in early years settings:

- *The teacher-directed, programmed learning approach.*

- *An open framework approach where children are provided with 'free' access to a range of instructive learning environments in which adults support children's learning.*
- *A child-centred approach where the adults aim is to provide a stimulating yet open-ended environment for children to play within.*

*We argue that effective pedagogy in the early years involves a balance of the first two approaches, both the kind of interaction traditionally associated with the term 'teaching', and also the provision of instructive learning environments and routines. We argue that where young children have freely chosen to play within an instructive learning environment, adult interventions may be especially effective.*  
(Siraj-Blatchford et al 2002)

*The best outcomes for children's learning occur where most of the activity within a child's day is a mixture of:*

- *child-initiated play, actively supported by adults*
- *focused learning, with adults guiding the learning through playful, rich experiential activities.*

(DCSF 2009)

Sylva et al (2007) have found that quality is associated with spending more time with highly involved teachers, and that in low quality programmes children spend more time in either solitary play or large-group teacher-directed activities.

*Effective pedagogy includes some structured interactions between adults and small groups of children, traditionally associated with the term 'teaching'. Also notable in more effective settings was the provision of planned learning environments and 'sustained shared thinking' to extend children's learning. Trained teachers were most effective in their interactions with children, using the most 'sustained shared thinking' interactions. Adults in excellent settings had a good grasp of the appropriate 'pedagogical content knowledge' knowing which curricular content was most relevant to the needs of individual children. This required a deep understanding of child development.* (Sylva et al 2012)

There is considerable discussion in the literature of the importance of maintaining children's *agency* in their learning and the proper balance therefore of adult-initiated and child-initiated activities. Across both types of activities, there is support for a child-centred approach, although this is interpreted and applied in different ways in different programmes.

*The relevant evidence from these studies suggests that preschool programs based on child-initiated learning activities contribute to children's short- and long-term academic and social development, while preschool programs based on teacher-directed lessons obtain a short-term advantage in children's academic development by sacrificing a long-term contribution to their social and emotional development. On this basis, research supports the use by preschool programs of a curriculum approach based on child-initiated learning activities rather than one based on teacher-directed lessons.*  
(Schweinhart 1997)

*In the excellent and good settings the balance of who initiated the activities, staff or child, were very equal, revealing that the pedagogy of these effective settings*

*encourages children to initiate activities as often as the staff. (Siraj-Blatchford et al 2002)*

It is suggested that for the sake of both effectiveness and child enjoyment, parts of the daily programme that are child-initiated and adult-initiated are clearly delineated, and the adult is cognisant of their different roles at different times.

*It is important for practitioners to consider how best to ensure that children benefit from both child-initiated and adult-led opportunities. It may be possible for the day to involve moving seamlessly between one emphasis and the other. There are risks, however, in not distinguishing between these elements of the routine.*

- *Where adults focus on supporting particular planned opportunities during child-initiated time, there may be children who regularly do not opt into these activities and so miss the adult stimulus and support for learning.*
- *When practitioners plan and lead small group activities while other children play, they are not available to observe, engage with and support play.*
- *If this organisation involves calling children away from their child-initiated activities to join in with adult-led activities, children's control over their play and sustained time to develop their interests is compromised.*

*Practitioners may instead develop a clear structure ensuring that all children participate in focused activities and that child-initiated activity is valued and supported. (DSCF, 2009)*

Children are likely to have individual preferences for different kinds of environments and opportunities, again suggesting the importance of providing both adult-led and child-led playful learning opportunities in the same setting in order to cater for a wide range of learning styles.

*Children differ between those who respond well to open-ended, child-initiated tasks and those who like a supportive structure established by an adult; both kinds of opportunities need to be provided. (Whitebread et al 2005)*

The premature introduction of formal instruction may stymie rather than encourage important dispositions because it is less enjoyable for the child. There is also the risk that it creates a sense of incompetence in a child because there is less sensitivity to what is and is not developmentally appropriate for each individual child (Katz 1987). The case for not introducing formal teaching too early is being made increasingly assertively and consistently (Mathers et al 2014, Hofkins and Northen 2009, Siraj-Blatchford et al 2002).

*While all children should be provided with the opportunity to develop literacy and numeracy skills in the early years, the setting of specific literacy and numeracy targets at too early an age runs a risk of labelling children as underachievers before they even start school, also depriving them of the necessary sensory-motor and play experiences which are needed to develop the physical skills, which support all higher aspects of learning. (Ellyatt et al 2014)*

*There is no evidence that a child who spends more time learning through lessons – as opposed to learning through play – will 'do better' in the long run. In fact, research*

*suggests the opposite; that too formal too soon can be dangerously counterproductive. In 14 of the 15 countries that scored higher than England in a major study of reading and literacy in 2006, children did not enter school until they were six or seven. And more children read for pleasure in most of those countries than do so in England. (Hofkins and Northen 2009)*

*Some longitudinal studies have also shown us that children provided with direct or 'programmed' instruction sometimes do better in the short term than those provided with other forms of pedagogy (e.g. Millar & Bizzell, 1983, Karnes et al, 1983). But the studies also suggest that even when apparent, these gains are short lived, with all significant differences having 'washed out' within a year of the provision ending. Direct instruction has also been found to result in children showing significantly increased stress/anxiety behaviours (Burts et al, 1990). A more recent and rigorous longitudinal study conducted by Schweinhart and Weikart (1997) showed little difference in the academic performance of children provided with direct instruction but significantly more emotional impairment and disturbance which later required more special educational provision. More importantly, the Schweinhart and Weikart study showed that the direct instruction group experienced more suspensions from work and more than double the rate of arrests than either of the other two groups by the age of 25. (Siraj-Blatchford et al 2002)*

The evidence pertaining to the role of 'teaching' in early years settings is somewhat confused by different definitions of what constitutes teaching. However, there is generally agreement that large-group direct instruction is not an appropriate method for building both learning and love of learning at such a young age.

*Children in high-quality care spent more time in adult-led activities, and in activities involving numeracy, reading, writing and listening. While this might seem contradictory to the findings of Wiltz and Klein (2001), who found that the low quality centres put a stronger focus on direct teaching, one has to bear in mind that direct teaching in Wiltz and Klein's study took place mostly in the context of the whole group and was 'instruction'. In the current study direct teaching was more varied and included questioning and modelling. Also, there were no differences in the amount of time children spent in large-group activities, but compared with children in adequate pre-school settings, children in high-quality settings spent more time in small groups. The additional amount of direct teaching and learning therefore took place in the context of small groups where children had more frequent access to informal teaching. (Sylva et al 2007)*

*Like many early childhood classrooms where adults do more telling than demonstrating and much of the instruction is often delivered in whole group formats, many of the activities in the Tools curriculum are targeted, delivered in whole group or half group (i.e., groups of 8-10 with one guided by the teacher and one by the teacher assistant). These instructional groupings may make it difficult to for children to generalize learning or do anything other than mimic exactly what has been taught. (Farran and Wilson 2014)*

There is not however total consensus on the merits or otherwise of more didactic teaching in the early years. One study found that children who participated in 'academically directed'

preschool models were half as likely to repeated a grade by Grade Three than children who participated in 'child-initiated' or 'middle of the road' preschool models (Marcon 2002, Lonigan 2003).

*Whereas I do not think a priori that academically oriented preschool experiences are harmful to children, I also do not believe that preschools should look like first- or second-grade classrooms with children spending most of their time sitting at desks or tables engaging in "academics" or "drill and kill" activities. There is a significant difference between thinking that preschool teachers can provide children with directed activities designed to promote the development of some skill and thinking that children should be engaged in some activity more appropriate for a first- or second-grade student. (Lonigan 2003)*

Two key points can therefore be drawn from the literature:

- Time with highly involved practitioners is an important ingredient of quality.
- Good quality provision has a balance of child-initiated and adult-initiated activities, with both underpinned by a child-centred approach.

### Teaching and learning practices and techniques

Scaffolding emerges from the literature as one of the most important techniques for supporting early learning. The term scaffolding refers to adult-child interactions where the adult uses questions, comments and prompts to encourage a child to articulate their findings, reflect on their discoveries, evaluate their approach and explain their thinking.

Scaffolding allows children to be co-constructors of their own understanding rather than passive recipients of knowledge, and as such is likely to help children to internalise their learning and to grow as independent learners. For the practitioner, it may involve some or all of discussion, modelling (and parallel play) and apprenticeship (guided participation).

*Good teachers acknowledge and encourage children's efforts, model and demonstrate, create challenges and support children in extending their capabilities, and provide specific directions or instruction. All of these teaching strategies can be used in the context of play and structured activities. Effective teachers also organize the classroom environment and plan ways to pursue educational goals for each child as opportunities arise in child-initiated activities and in activities planned and initiated by the teacher. This panoply of strategies provides a tool kit from which the teacher can select the right tool for the right task at the right time. (Bowman et al 2000)*

*'Cognitive apprenticeship' models of teaching and learning whereby, using various techniques, adults help to make the processes of learning explicit to children. (Whitebread et al 2005)*

*Co-construction is more than the teacher just telling the child what to do. The teacher must be as active in the process as the child. While the child constructs the concept, the teacher is constructing the child's unfolding understanding through questions, probes and actions. (Bodrova and Leong 2007)*



Scaffolding must also take place within what Vygotsky described as ‘the zone of proximal development’ – in other words, it helps take a child one stage on within the range of their existing competence.

*Scaffolding derives from Vygotsky’s notion of the ‘zone of proximal development’, a zone that includes everything that is achievable with assistance, that would otherwise lay beyond individual capability. This zone varies with culture, society, and experience but it must be fostered in joint activity that creates a context for child and expert interaction within a social context. (Siraj-Blatchford et al 2002)*

*Vygotsky added something new, pointing out that there are problems that a child cannot solve independently, but can solve with assistance. For example, a child might complete something the teacher or a peer has started, or use cues to solve a problem. The distance between the child’s current functioning and what the child can do with assistance is the child’s potential functioning. This is the Zone of Proximal Development, the area in which development occurs. (Kritt 2013)*

*Parents, teachers, and caregivers promote development when they create learning experiences that build on and extend the child’s competence – experiences that are challenging, but within reach. To do so, these adults must be sensitive to individual and developmental characteristics of the child. (Bowman et al 2000)*

Understanding the level of extension and amplification that might be within a child’s existing range of competence requires careful observation of individual children. This observation allows practitioners to determine what is developmentally appropriate for the child. Amplification then encourages understanding and abilities that are on the edge of emergence (Bodrova and Leong 2007).

*Appropriateness is defined as the extent to which a learning activity:*

- *Exercises and challenges the capacities of the learner*
- *Encourages and helps the learner to develop unique patterns of interest, talents and reach goals*
- *Presents experiences in which the learner is able to master, generalise and retain concepts, skills and knowledge and which relate to previous experiences, whilst linking to future learning expectations.*

*(Adapted from Hohmann and Weikart 1995, in Siraj-Blatchford et al 2002)*

*The basic process of guided instruction casts the teacher and learner as interdependent. The teacher’s primary function is not the presentation of new information. In the early years, a major responsibility of the adult is properly directing the child’s attention. A good teacher must carefully observe how a child approaches a task and intervene in a way that not only validates and encourages correct aspects of the performance, but also re-directs whatever is not successful by suggesting an alternative approach. (Kritt 2013)*

The UK EPPSE study coined the term ‘sustained shared thinking’ to describe episodes ‘when two or more individuals work together in an intellectual way to solve a problem, clarify a concept [or] evaluate an activity ... Both parties must contribute to the thinking and it must develop and extend the understanding’ (Sylva et al 2004).

*Our observations show that ‘sustained shared thinking’ was most likely to occur when children were interacting 1:1 with an adult or with a single peer partner. Freely chosen play activities often provide the best opportunities for adults to extend children’s thinking. (Siraj-Blatchford et al 2002)*

*In the centres with the highest scores on the ECERS-E, teachers engaged the children more in sustained shared thinking and in social conversations. Furthermore, they used more direct teaching which included modelling, questioning and demonstrating. In centres with adequate quality on the other hand, teachers spent more time monitoring children’s play but not participating in it; when engaging with children they carried out more physical care rather than explaining or questioning, or extending and scaffolding children’s learning. (Sylva et al 2007)*

*In the most effective (excellent) settings the importance of staff members extending child-initiated interactions is also clearly identified. In fact, almost half of all of the child-initiated episodes which contained intellectual challenge, included interventions from a staff member to extend the child’s thinking. (Siraj-Blatchford et al 2002)*

Fleer and Raban (2006) argue that children learn from the concrete to the abstract, and from the abstract to the concrete. This means that adults need to maximise opportunities to interlace everyday concepts with scientific (or schooled concepts) that allow for new forms of thinking and application.

The role of scaffolding does not deflect from the importance of children’s individual agency in choosing and pursuing tasks. Furthermore, scaffolding is not only about discussion, comments and open-ended questions. There are some warnings in the literature against the over-use of questioning (particularly closed questioning) to extract learning, which may make children feel quizzed and tested, and have a demotivating and disempowering effect. Modelling and playing in parallel rely less on talk to foster learning, and can also help to emphasise the shared and playful nature of the activity. In addition, because children tend to enjoy being involved in ‘grown-up’ tasks and having the chance to imitate ‘grown-up’ activities, apprenticeship and guided participation (with an adult or older child) are effective ways of supporting children to learn new skills. These should all be part of a repertoire of scaffolding skills and approaches employed by ECD practitioners.

*Caregiver’s functions vary from facilitating, modelling, partnering, collaborating, communicating, negotiating, creating, observing, recording, assessing, listening, supporting and investigating to mention a few. For the caregiver to function effectively in the ECD learning environment, he or she must be able to demonstrate knowledge of the child’s growth and development, environment and its resources, parental or societal expectations and values. (Awopegba, Oduolowu and Nsamenang, 2013)*

The physical environment plays a key role in creating the conditions that foster play, learning and development. It is important that spaces are arranged and resourced to encourage a range of playful activities. (See also 7.4 below.)

*The physical environment is considered to be an important structural predictor of quality, and includes indoor and outdoor spaces, equipment and learning materials.*

*Spaces and resources should be appropriate, stimulating and safe; and issues of hygiene and nutrition are also important. Environments should also be non-stressful: feel calm, with spaces for quiet as well as active play, and designed to allow enclosed spaces for play whilst maintaining supervision. A physical environment which fulfils all these criteria will facilitate children's learning opportunities, physical activity and general health. (Mathers et al 2014)*

Children themselves have an important role to play in supporting each other's learning. This is particularly relevant in South Africa, where older siblings often help in the upbringing of younger children and there are routinely opportunities for child-to-child stimulation and learning activities (Awopegba, Oduolowu and Nsamenang, 2013).

*The African peer culture is a commonplace child-to-child space, which, in spite of its liability to abuse and the fact that it has indeed been abused, deserves objective understanding, enhancement and incorporation into school curricula, including ECD programmes. (Nsamenang 2010)*

*Sometimes when an adult became involved in an activity the children were more inclined to say they couldn't do something, but if they were working with another child they were less likely to question their ability, and often mimicked the other child, gaining confidence in their abilities. The most effective response the practitioner can give to a child asking for help is to refer them to another child who has greater competence or expertise in the particular area. (Whitebread et al 2005)*

In the South African context, pedagogy also needs to draw on cultural knowledge and practices and creatively deploy local materials as learning objects and activities (Marfo et al 2008).

*Resources required by the providers of the IECCE [Indigenous Early Childhood Care and Education] must come from local sources. The materials should be creatively collected (with the involvement of the children and their parents and guardians) and used by teacher and caregivers who are local native speakers or versatile in the local language in order to ensure the appropriateness of their use. (Awopegba, Oduolowu and Nsamenang, 2013)*

The literature therefore supports an overall curriculum approach that emphasises understanding how children learn, appropriate pedagogic practices, and harnessing local knowledge and resources, over defined content and prescribed learning areas.

This points to a pedagogy that empowers practitioners by equipping them with a proper understanding of how children learn and furnishing them with a range of methods and strategies, which are resonant with their context and culture, from which they 'can select the right tool for the right task at the right time' (Bowman et al 2000).

*Work towards a pedagogy of repertoire rather than recipe, and of principle rather than prescription. (Hofkins and Northen 2009)*

## 6. Building effective relationships with parents and families

The importance of involving and capacitating parents and primary caregivers (hereafter included in the term 'parents') through centre-based early years provision is consistently emphasised in the literature. Loving and responsive parent-child relationships are crucial to children's healthy development and learning (see section 4.2). In addition, a stimulating home learning environment is likely to increase the impact of centre-based interventions, particularly for children from disadvantaged homes (Baker-Henningham and López Bóo 2010, Engle et al 2007, Sylva et al 2004). ECD practitioners are therefore understood to have an important role in strengthening parents' capacity to support young children's learning and development in the home.

*The family seems to be the most effective and economical system for fostering and sustaining the child's development. Without family involvement, intervention is likely to be unsuccessful, and what few effects are achieved are likely to disappear once the intervention is discontinued. (Urie Bronfenbrenner, in Weiss et al 2006)*

*Evidence suggests that parental involvement in early learning has a greater impact on children's well-being and achievement than any other factor, such as family income, parental education or school environment. Supporting parents to help them provide a positive home learning environment is therefore a vital part of improving outcomes for children, particularly those from disadvantaged backgrounds. (Hunt et al 2011)*

*An investment in children's development and ability to engage actively as young people and adults involves strengthening the family environment to support the physical, emotional, psycho-social and cognitive development of the child. [...] The role of an ECD practitioner is vital in the development of a child and prepares children for lifelong learning. However, without continued development in the home and community environment a child may not develop the necessary competency to fulfil his or her potential later in life. Therefore the inclusion of building the capacity of parents and caregivers to complement and reinforce the learning that takes place in the crèche is an important step in the journey of the child's development. In addition, the training of parents is contributing to positive parenting skills, improved baby care and, importantly, the holistic development of the child in the home setting. The focus is on strengthening what is taught in the crèche with practice in the home. (Roper 2014)*

Effective partnerships with parents are seen to have particular relevance in developing countries, where many families are confronting multiple challenges and deprivations. Evangelou et al (2008) identify strong relationships with parents, parental involvement in education with high expectations, and positive role models, as three protective factors 'which can help children overcome their initial disadvantage and ultimately prevent social exclusion.'

*Many caregivers in South Africa are parenting under extreme conditions. Poverty, exposure to violence, health conditions such as HIV, as well as single parenthood, are all factors that may increase the stress of parenting, and make poor outcomes for children more likely. [...] Unfortunately, many (if not most) parents in South Africa face exactly these conditions. Yet positive parenting (warm, affectionate parenting that provides appropriate boundaries for children without using violent discipline) can buffer*

*the effects of risk factors, such as poverty, on children. Recent South African work suggests that improving parents' knowledge about caregiving may improve child outcomes, even in families where there has been intimate partner violence. (Ward and Wessels 2013)*

*The fact that the parenting process has been disrupted for a major segment of the world's population makes it imperative that even more attention be given to creating programmes that provide information and support to all those who parent, particularly those who are parenting children during their early years. (Evans 2006)*

One reason why parenting interventions are seen to be particularly efficient is because they tend to be oriented towards prevention rather than remediation. By helping to develop protective factors for disadvantaged families and children, interventions to support parents and the early home learning environment are more effective and cost-effective than later intervention in terms of equalising life chances (Evangelou et al 2008).

Many parents have high aspirations for their children, but this does not necessarily translate into parenting practices and behaviours that support the desired outcomes (Aboud 2007). In the South African context, parents often lack both confidence in their ability to support their child's learning, and knowledge about how best they can do this (O'Carroll and Hickman 2012).

Simple information and skill-sharing can help to increase parents' sense of efficacy and alter practices and behaviours in the home, to the benefit of a wide range of child outcomes. Close collaboration with parents also helps to ensure that knowledge about how children learn and develop is spread more widely and becomes embedded in the community. In these ways, parenting interventions are understood not only to benefit children, but parents too. As their sense of self-esteem and self-efficacy grows, parents become better equipped to take control of their lives and achieve their goals.

*Involving parents in their children's literacy activities not only benefits their children. There are also numerous benefits that have been reported for the parents themselves, including greater skill acquisition, greater confidence and self-esteem, a better parent-child relationship, and increased engagement with learning. (McCoy and Cole 2011)*

*The impact for parents (mothers) has to do with changes in how she feels about herself; this leads to changes in behaviour. Words such as increased self-confidence, self-esteem are sprinkled throughout the results. This leads to mothers being more independent and better able to make decisions. With greater self-esteem, mothers become more capable of being responsive to her children. Through the programmes the mother comes to understand how important she is in the child's life. She is more aware of the child's development and her role in supporting that development and the mother's interaction with the child changes. She engages with the child through reading, talking and playing with the child, and providing opportunities for learning and she is more supportive of children's participation in school. Overall she is warmer with and closer to the child – a stronger bond is created. (Evans 2006)*

## The importance of the early home learning environment

The quality of the early home learning environment (EHLE) has been shown to influence a range of later outcomes for children. Furthermore, the benefits appear to persist over time (Sammons et al 2007, and Sylva et al 2012).

*Families who reinforce educational concepts introduced in programs at home increase their children's chances for academic success (Bouffard & Weiss, 2008). For example, McWayne et al. (2004) found that families who (a) promoted learning at home, (b) structured the home environment to support children's learning, and (c) spent time talking with children about their school-based activities were more likely to have children with higher academic functioning, greater academic achievement, and higher academic motivation. In addition, Bradley, Corwyn, Burchinal, McAdoo, and Garcia Coll (2001) found that home-learning stimulation and parental responsiveness were significantly related to motor and social development, language competence, and achievement test scores across poverty levels and different ethnic groups for children birth to age 13. Research has also found that parent engagement in child learning at home predicted greater academic achievement in children than any other form of parent involvement (Harris & Goodall, 2008; Downey, 2002; Izzo, Weissberg, Kaspro, & Fendich, 1999). (Halgunseth 2009)*

*Fantuzzo and his colleagues (2004) recently showed that practices associated with responsibility for learning (e.g. providing a place for educational activities, asking a child about school, reading to a child), above and beyond aspects of the home-school relationship, are related to children's motivation to learn, attention, task persistence, and receptive vocabulary and to fewer conduct problems. (Weiss et al 2006)*

*Parenting behaviour was related to child developmental outcomes. Controlling for other observed factors we found:-*

- *The frequency of mother-child interactions was significantly related to higher scores for children's **future fine and gross motor development***
- *A more stimulating home environment was significantly related to higher scores on children's **concurrent social and fine and gross motor development**.*
- *Greater use of outside activities was significantly related to higher scores for children's **concurrent and future social and fine motor development**.*

*(Gutman and Feinstein 2007)*

*At age 14 the early years HLE still predicted academic outcomes. Also those who had experienced better early years HLE show better social-behavioural outcomes at age 14. (Sylva et al 2012)*

Significantly, studies suggest that the EHLE has a more powerful influence on children's academic success than other relevant factors, including socio-economic background.

*For all children, the quality of the home learning environment is more important for intellectual and social development than parental occupation, education or income. What parents do is more important than who parents are. (Sylva et al 2004)*

*Parental involvement in their child's literacy practices positively affects children's academic performance (Fan and Chen, 2001) and is a more powerful force for academic success than other family background variables, such as social class, family size and level of parental education (Flouri and Buchanan, 2004). (McCoy and Cole 2011)*

*The most important finding from the point of view of this review is that parental involvement in the form of 'at-home good parenting' has a significant positive effect on children's achievement and adjustment even after all other factors shaping attainment have been taken out of the equation. In the primary age range the impact caused by different levels of parental involvement is much bigger than differences associated with variations in the quality of schools. The scale of the impact is evident across all social classes and all ethnic groups. (Desforges and Abouchar 2003)*

One meta-review of studies of responsive parenting found evidence of positive emotional, cognitive and health outcomes for children, particularly for those from the most disadvantaged backgrounds.

*In rural Ethiopia, mothers' verbal responsiveness predicted concurrent vocabulary development in their children. Similarly, in rural India, stimulation by the mother was associated with greater behavioural development and intelligence in 196 malnourished three year-old children. (Eshel et al 2006)*

However, the causal link between certain parenting behaviours and positive outcomes for children is not straightforward. This understanding underscores the importance of changes in parenting practices becoming embedded in family life, rather than confined to particular interactions.

*This project paints a picture of the complexity of the relationships between parenting behaviour and children's development. In general terms, a more engaged parenting style has benefits for children's development, but different aspects of parenting behaviour have different effects, and while some appear to have immediate impact, (e.g. the provision of a stimulating home environment), the positive effects of others, such as the general level of mother-child interactions, only manifest themselves over a period of time. Therefore, interventions that encourage continuous engagement may prove to be more successful than those that focus on isolated incidents of engaged parenting. (Gutman and Feinstein 2007)*

### Dimensions of an effective early home learning environment

Parents are able to provide a more effective EHLE when they understand young children's health, growth and development. In particular, interventions can support parents to provide appropriate stimulation, language, hygiene and nutrition (Aboud 2007). Alongside theoretical knowledge, parents need to have opportunities to practice the kinds of interactions and activities that are understood to be more effective in supporting children's learning.

*What parents and carers do makes a real difference to young children's development. The EPPE project developed an index to measure the quality of the home learning environment (HLE). There are a range of activities that parents undertake with pre-*

*school children which have a positive effect on their development. For example, reading with the child, teaching songs and nursery rhymes, painting and drawing, playing with letters and numbers, visiting the library, teaching the alphabet and numbers, taking children on visits and creating regular opportunities for them to play with their friends at home, were all associated with higher intellectual and social/behavioural scores. (Sylva et al 2004)*

*Parenting practices such as reading to children, using complex language, responsiveness, and warmth in interactions have been shown to be associated with better developmental outcomes. (Sylva et al 2012)*

Parents' beliefs and attitudes are also understood to have a bearing on the quality of the EHLE by shaping parenting styles and behaviours. These beliefs are likely to differ between cultures, and will lead to different perspectives on child development.

*There is emerging evidence that parents' ideas, beliefs, and perceptions concerning child development, in general, and their ideas, beliefs, and perceptions concerning the origins of children's acceptable and unacceptable behavioral and emotional styles, in particular, contribute to, predict, and partially explain the development of adaptive and maladaptive behaviors in childhood. [...] The values, beliefs, and attitudes that help define a particular culture also serve to shape and influence values and beliefs about that which is normal or abnormal, acceptable or unacceptable, and typical and atypical. (Rubin et al 2006)*

*The beliefs family members share with their children at home regarding education, their children's educational program, and their children's abilities are other areas in which families can influence their children's academic success. Research has found that family expectations for their children and their beliefs about school are strongly related to children's academic outcomes. (Halgunseth 2009)*

*It is likely that mothers had a low estimation of the language abilities of their children and so talked down to them. Given the proclivities of mothers to use an instructional rather than a scaffolding type of interaction with their children, programmes need to focus more on the know-your-child theme. (Aboud 2007)*

Again, prevalent definitions of 'quality' in the EHLE have been strongly influenced by western values and research. Yet all cultures have their own deeply-rooted understandings of parenting and child development. These wisdom traditions may not always be in line with the approaches and practices that dominate the literature.

*African children live and develop into culturally competent citizens in their ecologies and cultural circumstances. African parents are not ignorant; they recognize, define and assign different developmental tasks on the same biological agenda. [...] The foundational precept of Africa-centric developmental ethos is not educate but emergence, wherein in African family traditions a child is not actually 'raised' but primed to 'emerge' into maturity considerably through his or her own developmental learning in self-generated efforts. Accordingly, indigenous African parenting values and practices foster children's self-education in participative learning processes in their*



*families and communities, especially in the peer cultures of early childhood.*  
(Nsamenang 2010)

### Evidence on parenting interventions

While there is substantial evidence for the importance of the EHLE, there have not been many evaluations of the types of parenting programmes that are implemented widely in developing countries (Aboud 2007). This means that there is less evidence for the specific types of intervention or methodological approach that change parenting behaviours (Desforges and Abouchaar 2003).

*In sum, there is very little evidence of the effectiveness of parent training programmes in South Africa. [...] Most parenting programmes in South Africa have not yet been tested and their effectiveness must therefore be established before considering taking these to scale. The same applies to established programmes adapted from other contexts: adaptations can affect a programme's effectiveness, and the adapted programme needs to be tested to ensure that it continues to be effective in the new context. (Ward and Wessels 2013)*

*Less agreement is found on the methods needed to change maternal behaviours. According to some reviews, programmes are more likely to change behaviours if they include some information, opportunities to observe role models and to practise the skills, participatory problem-solving, focused goals, use of peer educators, and a minimum of 14 hours of contact. [...] Much needs to be learned about the effectiveness of parenting programmes around the world to develop a model that benefits children and mothers. Organizations offering such programmes are encouraged to allocate a percent of their budget to evaluation research to contribute to this effort. (Aboud 2007)*

On the hand, at least three research reviews have found evidence of improved outcomes for children resulting from parenting interventions (Eshel et al 2006, Kaminski et al 2008, Engle et al 2011).

*We argue that while more research needs to be done to maximize success, current interventions are capable of boosting responsiveness and promoting child health and development. (Eshel et al 2006)*

*Parent training programmes were effective in changing parenting behaviour and in preventing or ameliorating early child behaviour problems. Increasing positive parent-child interactions and emotional communication, teaching time out and the importance of parenting consistency, and requiring parents to practice new skills with their children were found to have the greatest impact on outcomes. (Kaminski et al 2008)*

*Substantial positive effects on child development were identified in all 11 effectiveness studies; nine on cognitive or social-emotional development, and two on parent knowledge, home stimulation, and learning activities with children which are associated with child development. [...] The most effective programmes were those with systematic training methods for the workers, a structured and evidence-based*

*curriculum, and opportunities for parental practice with children with feedback. (Engle et al 2011)*

The British EPPE study also found positive benefits for children who attended early years settings that actively shared information with parents (Sylva et al 2004).

*There were more intellectual gains for children in centres that encouraged high levels of parent engagement in their children's learning. The most effective settings shared child-related information between parents and staff, and parents were often involved in decision making about their child's learning programme. More particularly, children did better where the centre shared its educational aims with parents. This enabled parents to support children at home with activities or materials that complemented those experiences in the Foundation Stage. (Sylva et al 2004)*

*Positive family-program connections have been linked to greater academic motivation, grade promotion, and socio-emotional skills across all young children, including those from diverse ethnic and socioeconomic backgrounds. (Halgunseth 2009)*

The association between improved parent knowledge levels and altered parenting practices is complex. A study of a parenting programme in Bangladesh (Aboud 2007), found that while the programme appeared to improve parents' knowledge levels and increase stimulation opportunities in the home, these opportunities were still limited. Furthermore, these changes did not translate into higher scores on a parent-child interaction task compared to other parents, or into higher receptive vocabulary scores for children. The lack of appropriate materials within the home with which to replicate the activities and practices parents had been shown, was understood to be an influencing factor. It was also observed that recommended activities and games were not consistently modelled to parents and there were not sufficient opportunities to rehearse the activities during the sessions.

*In conclusion, the mothers in the parenting programme achieved higher levels of knowledge than the control mothers and provided more stimulation for their children. However, the children did not show benefits in nutritional status or language development. This may be due to limitations in the curriculum, which focused more on increasing knowledge of mothers than on improving their practices. Strategies for behaviour change need to be part of the curriculum, such as role plays and rehearsing the practice with one's child, and peer support in solving each mother's specific problems in implementing advice. (Aboud 2007)*

Research also provides insights into some of the important dimensions of effective parenting interventions.

*Programmes that work best provide regularity and intensity of inputs through one-to-one home visits and/or parenting groups over at least a year; two to three years of intervention are more likely to sustain gains over time. Parenting programmes are most efficacious for at-risk families. (Evans 2006)*

*Broadly speaking, programmes should have:*

- *a clearly defined target population;*
- *a programme design and delivery system that is tailored to the*

- *needs and cultural background of participating parents;*
- *a programme theory that is plausible and based on evidence of what works;*
- *realistic and measurable goals;*
- *a sufficient amount of intervention;*
- *well-trained and well-supervised staff; and*
- *rigorous monitoring and evaluation processes to ensure that the programme is implemented as intended and that it is, in fact, effective.*

(Ward and Wessels 2013)

Successful interventions must also address barriers to involvement. These may include cultural and language differences, as well as parents' personal sense of inadequacy or negative associations with formal education and care systems (Tucker et al 2008).

*Early years settings could address barriers to engaging parents in home learning, such as: lack of parental time; parents' negative experiences of schools; parents' lack of confidence or lack of understanding of learning; parents' lack of resources; parents' English language difficulties; and parents' reluctance to engage in home learning. The open-door policies operated by the best-practice settings in this study enabled many of these barriers to gradually be overcome. (Hunt et al 2011)*

Furthermore, interventions that are focused on home stimulation need to be cognisant of other fundamental issues in the family background (such as multiple deprivation, substance abuse, domestic violence, and mental health problems) that may act as barriers to change (Desforges and Abouchar 2003). This requires a proper needs analysis of the target group.

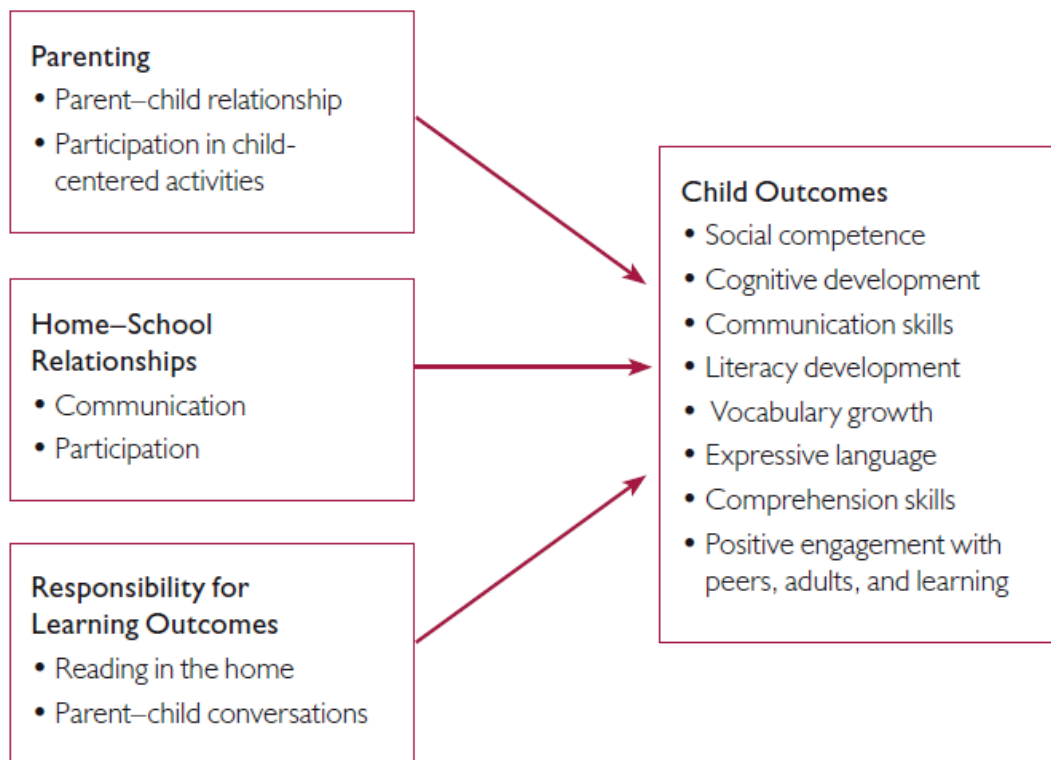
### The different types of parenting intervention

Interventions that seek to involve and build the capacity of parents may take one or more approach, depending on their objectives. The different approaches include parental engagement and communication, parental partnership, parental education and training, and parental support (Roper 2014, Evangelou et al 2008).

*Early childhood practitioners can and should approach family involvement in overlapping and multiple ways. For example, early childhood practitioners can help promote warm and nurturing parenting through workshops, trainings, and parent-child groups. To develop home-school relationships, teachers can communicate with parents frequently about their young children's learning patterns and provide opportunities for parents to visit the classroom. Moreover, early childhood practitioners can help parents take responsibility for their children's learning outcomes by providing materials and ideas for activities that parents can do at home and in the community with their children. (Weiss et al 2006)*

## Processes of family involvement and young children's outcomes

(in Weiss et al 2006)



Appendix B shows another schema for the mechanisms by which parental involvement and capacity-building yield positive outcomes for children.

### Parental engagement and communication and parental partnership

Evidence suggests that the benefits of good home-school relationships persist over time, buffering the negative effects of poverty (Weiss et al 2006, Tucker et al 2008) and amplifying positive outcomes for children.

Effective communication is at the heart of trusting and productive relationships between ECD practitioners and parents. Strategies for fostering parental engagement therefore include creating a welcoming environment, promoting respectful two-way dialogue and involving parents in decision-making (Halgunseth 2009). These require inclusive approaches that are sensitive to different cultures, languages and perspectives. Such approaches presume parental interest and concern, and therefore address parental non-involvement in terms of shortcomings on the part of the service provider, not on the part of the parent (Tucker et al 2008).

*The relationship between parent and practitioner is at the heart of effective services to involve parents in their children's early learning. For a parent who lacks the confidence and trust to access services, forming a warm and positive relationship with a practitioner can be the bridge to available help and information. (Hunt et al 2011)*

*Relationships between providers and families are the key to successful and continuing engagement with families, suggests the literature. Arnold (2007) argues that many of*

*the barriers to access are connected to the feelings of the user, and accepting the families as they are; being scrupulously fair; acknowledging feelings and explaining decisions can be valuable ways of engaging those who are lacking self esteem or confidence. (Evangelou et al 2008)*

*The frequency of parent–teacher contact and involvement at the early childhood education site is also associated with preschool performance. Parents who maintain direct and regular contact with the early educational setting and experience fewer barriers to involvement have children who demonstrate positive engagement with peers, adults, and learning. In addition, teachers’ perceptions of positive parental attitudes and beliefs about preschool are associated with fewer behavior problems and higher language and math skills among children. (Weiss et al 2006)*

*Family engagement occurs when there is an ongoing, reciprocal, strengths-based partnership between families and their children’s early childhood education programs. [...] we have created a comprehensive definition of family engagement that features six factors:*

- 1. Early childhood education programs encourage and validate family participation in decision making related to their children’s education. [...]*
- 2. Consistent, two-way communication is facilitated through multiple forms and is responsive to the linguistic preference of the family. [...]*
- 3. Families and early childhood education programs collaborate and exchange knowledge. [...]*
- 4. Early childhood education programs and families place an emphasis on creating and sustaining learning activities at home and in the community that extend the teachings of the program so as to enhance each child’s early learning.*
- 5. Families create a home environment that values learning and supports programs. [...]*
- 6. Early childhood education programs create an ongoing and comprehensive system for promoting family engagement by ensuring that program leadership and teachers are dedicated, trained and receive the support they need to fully engage families.*

*(Halgunseth 2009)*

Parents are an important source of information about individual children’s development, preferences and interests, as well as relevant issues in their home-life. This knowledge can help practitioners to support individual children more effectively (Halgunseth 2009). Drop-off and pick-up times provide useful opportunities for information-sharing and discussion of progress and issues. These dialogues give recognition to parents’ expertise and resourcefulness, as well as reinforcing their crucial role as children’s first teacher. In some cases, they may also help to encourage a different perspective among parents, and implicitly challenge any sense that their responsibilities are discharged when they leave their child at the programme.

*Early care and education knowledge, skills and practices are not the prerogative of professionals; African parents, even their children, possess knowledge and skills of early care and education. For example, LeVine (2004) claims that African parents possess*

*practical understanding of infant care and development in sharp contrast with the knowledge of early childhood practitioners and child development experts.*  
(Nsamenang 2010)

*Thušanang ECD trainers indicated that a key to engaging parents is during the time when the ECD practitioner in a crèche gives feedback to a parent on the progress and development of his or her child. This process is part of the practitioner's assessment of the development of the child, which is done against the expected age appropriate ECD outcomes. The purpose of this interaction is to give specific feedback on the child, raise any potential problems, and discuss how the parent can stimulate the child at home. During this engagement the parents and practitioners are able to share about the progress of a child and raise concerns or problems, the parent and child can be referred to additional services (such as eye screening at a health facility), and the practitioner can influence ECD practice at home. This may be done by, for example, asking a parent to encourage a child to tie his or her own shoelaces, rather than this task being done by the adult.* (Roper 2014)

Home visits by practitioners (as opposed to dedicated home visiting programmes) can contribute to strong programme-family relationships and enhance outcomes for children.

*Research on home visits have found positive short- and long-term effects for children, families, and teachers. Compared to control groups, home visits have been associated with higher scores for children in math, reading and classroom adaptation (Baker, Piotrkowski, and Brooks-Gunn, 1998; Kagitcibasi, Sunar, & Bekman, 2001). Children who receive home-visits are also found to have greater engagement in literacy activities and are more likely to choose and participate in group activities (Logan & Feiler, 2006).* (Halgunseth 2009)

Good home-school relationships can also help to promote service integration, when ECD practitioners proactively help to link families to other services from which they may benefit.

Parental partnership and collaboration refers to the meaningful inclusion of parents in programme design and delivery. This requires a generative approach to programme planning which seeks to reflect and harness local knowledge, values, traditions and practices (Awopegba, Oduolowu and Nsamenang 2013). It also implies a participative approach to programme delivery, involving parents as volunteers and creating opportunities for their active involvement in aspects of the programme. For instance, some early years settings offer 'Stay and play' sessions at the end of the daily programme as a way of both involving parents and sharing information and ideas that can be used in the home (Hunt et al 2011).

*Both participation in preschool based activities and regular communication between families and teachers are related to young children's outcomes. Parent participation practices can include attending parent-teacher conferences, participating in extended class visits, and helping with class activities. Such participation is associated with child language, self-help, social, motor, adaptive, and basic school skills.* (Weiss et al 2006)

Importantly, all of the above forms of parental engagement and involvement must be deliberate and planned, and require ECD practitioners to receive training and guidance on effective approaches (Tucker et al 2008).

*Training teachers to work collaboratively with parents appears to be a widespread, if not global, need. Educating new teachers to think in systems models and to relate to parents as equals is another crucial piece of the puzzle. Research clearly shows that parent involvement is a key to increasing academic achievement. In order to accomplish this goal, teachers must see parents as equals, treat them with respect, and form enduring partnerships if student achievement is to be raised. (Tucker et al 2008)*

### Parental education and training and parental support

Parental education and training usually takes the form of workshops and discussion groups, often supported by written resources. Parent workshops can provide a non-threatening setting in which to share information and practical ideas, discuss issues and dilemmas, and build skills and understanding. They may cover a wide range of topics relevant to effective parenting and healthy child development, or focus on a particular area, such as creating an effective home learning environment.

*Parenting programs are interventions designed to enhance or change parental role performance through training, support or education, and their main goal is to influence the well-being of the children of these parents. In order for a service to be considered a parenting program, it should provide active skills training or coaching to parents involving video or live modelling skills, practice of skills, feedback following direct observation of parent-child interaction, between-session homework, and contingency management principles. (Mejia, Calam and Sanders 2012)*

*Parent programmes focus on topics that build the essential skills, knowledge and attitudes that are important in raising babies and young children. The aim is to encourage parents and caregivers to become more involved in the development of their children and improve their capacity to cater for their child's well-being. This includes a focus on health, on the child as an individual, and their emotional, cognitive and spiritual well-being. (Roper 2014)*

*In parenting classes, parents learn ways to enhance their relationship with their children and use techniques that promote learning. Past research has found numerous benefits for children whose family members participated in parenting classes. (Halgunseth 2009)*

*Parents are often uninformed about the need for stimulating experiences to enhance development. Parenting programmes can fill this gap by providing new information and demonstrating new practices for mothers of young children. (Aboud 2007)*

Parenting programmes can also have wider benefits for the family when they include information and advice on accessing employment and training opportunities (Sylva et al 2004) or address wider themes such as stress management, substance abuse, and money management (Halgunseth 2009).

Crucially, parent education and training helps to build parents' sense of competence and agency, helping them to understand and embrace their role as children's first teachers. A

strengths-based approach recognises that parents already bring considerable expertise, and sometimes simply need to be helped to understand the significance of the things they already do as well as ways of extending and deepening everyday interactions and activities.

*It is important to operate from the assumption that those engaged in parenting are doing the best possible job that they can, given the context and their own experiences. This needs to be respected and acknowledged before people are open to alternatives.*  
(Evans 2006)

There is general agreement in the literature on the importance of parenting programmes being culturally relevant and locally appropriate. This may require providers re-examining the assumptions behind the programme content, and shifting some of the power and control over the programme to the local community (Evans 2006, Engle et al 2011). It also requires a deep appreciation of the cultural values and child-rearing practices of the beneficiary group, which may not always sit comfortably with approaches preferred in the literature. A key challenge therefore, is to ensure a high degree of local relevance and ownership while maintaining evidence-based approaches.

*African parents and peer mentors use tacit cultural techniques and strategies that provoke cognitive faculties and induce behavioural adjustment to prime children's agency, such as not providing direct answers to children's queries. For example, if a child seeks parental explanation for an ongoing activity, a typical response would be: 'Don't you see or hear?' This translates into: 'You're expected to observe, notice, learn, and understand what and how to do what you've seen or heard' (Nsamenang, 2009). Accordingly, Africans expect observational and participative learning from an early age.*  
(Nsamenang 2010)

*Incorporate families and communities as active partners in the development of early child development programmes to integrate relevant child-rearing practices and cultural beliefs.* (Engle et al 2011)

*The cultural adaptation of evidence-based interventions is an essential aspect: the intervention must strike a balance between "fidelity" to existing evidence-based practices, while achieving a suitable "fit" with the local population. While there are many evidence-based interventions in developed countries, the majority of families requiring assistance are living in the developing world and it is here that new and appropriate interventions need to be piloted.* (Ilifa Labantwana 2014)

The Sinovuyo Caring Families Project has been piloted in Khayelitsha, Cape town. It has sought to enshrine both culturally appropriate approaches and core principles found in evidence-based parenting programmes from around the world. To facilitate replication, Sinovuyo uses paraprofessional workers to deliver the programme and low-cost, user-friendly materials. Feedback has indicated that group discussion, traditional stories, role-play, peer support and illustrated stories are all effective ways of building parents' understanding and skills.

Sinovuyo's key approaches:

- Collaborative approaches to problem-solving
- Developmentally appropriate activities for parents to engage with their children



- *Culturally sensitive forms of communication and interaction including African storytelling, dance, and music*
- *Importance of child-led play and praise to develop nurturing relationships*
- *Establishing clear limits, house rules, and appropriate forms of supervision*
- *Alternative means of discipline including ignoring, distracting, and redirecting*
- *Parental self-management, care and stress relief.*

(Ilifa Labantwana 2014)

Peer support and discussion are often both a goal and mechanism of parent programmes. Social support has been identified as an important benefit by parents attending parent workshops (Sylva et al 2004). Some parent programmes choose to focus solely on support and discussing and addressing the current needs and challenges of group members. These kinds of sessions may play a role in improving parental mental health, which is likely to have consequential benefits for children (Ilifa Labantwana 2014).

*Effective behaviour-change programmes provide problem-solving skills and peer support. As was learned in the past with nutrition-education programmes, mothers run into barriers when implementing the advice; yet, they are the ones to generate solutions that make sense to them. Friends and peer educators are most useful not simply for information support about alternative solutions but also for emotional support that builds confidence in one's problem-solving efforts. (Aboud 2007)*

### Valuing and promoting the role of men

Studies suggest that father involvement makes a significant contribution to young children's cognitive development, emotional wellbeing, behaviour and school achievement (Richter and Morrell 2008). It is important therefore that parent interventions do not work from the assumption that the target recipients are women rather than men. Rather, programmes need to proactively test and incorporate culturally appropriate ways of engaging fathers.

*Direct effects are exerted on children by the father's presence, by the amount of time men spend with children, and in the kinds of activities in which men engage children. [...] Efforts to improve the care, protection, and education of children need to acknowledge the many ways that fathers can be involved in their children's lives and the many men who can provide fatherly support and protection for children. It is crucial to adjust services so that they draw men into children's care, health, and education by developing training materials that address men's interests and concerns, by counseling women on the benefits of including men in parenting, and by reaching out with men's forums into the community, where men feel more at ease. (Richter and Morrell 2008)*

*Increasingly people have recognized the importance of working with fathers and exploring the ways to do so. An important strategy is to look at how fathers are involved traditionally to figure out what roles fathers currently play in the culture. (Evans 2006)*

*Factors that may help boost the participation of fathers include training male facilitators, and recruitment from sports clubs and organisations that work with men.*

*Additional programme content is required to address issues and challenges that men face as caregivers. (Ilifa Labantwana 2014)*

## 7. Structural factors in early years settings

*Our review of the research evidence suggests five 'key conditions' for quality:*

- *Knowledgeable and capable practitioners, supported by strong leaders*
- *A stable staff team with a low turnover*
- *Effective staff deployment (e.g. favourable ratios, staff continuity)*
- *Secure yet stimulating physical environments*
- *Engaged and involved families.*

(Mathers et al 2014)

### 7.1 Practitioner education and skill levels

There is a strong consensus that adults working with young children should have a good level of education and be well-trained. Good pay and conditions are also emphasised, and the link is made between these and the ability to attract and retain appropriate adults.

*All adults working with young children should be of the highest standard, they should be recognised for the vitally important role that they play, and their professional status and remuneration should reflect this fact.* (Ellyatt et al 2014)

*The professional development of teachers is related to the quality of early childhood programs, and program quality predicts developmental outcomes for children. Formal early childhood education and training have been linked consistently to positive caregiver behaviors. The strongest relationship is found between the number of years of education and training and the appropriateness of a teacher's classroom behavior.* (Bowman et al 2000)

*Programs that cost less because they employ less skilled staff are a waste of money if they do not have the expertise needed to produce measurable impacts.* (Centre on the Developing Child 2007)

*There is a clear consensus among research reviews that staff qualifications and training are important for quality and have a direct impact on the ability of staff to provide sensitive, responsive and stimulating care and education, which in turn enhances children's learning and development. In short, good quality staffing underpins good quality practice. The following factors have been identified within the literature as having a positive impact on quality: general educational level, specialised early years training, both formal and informal training, continuing professional development after initial training and on-the-job supervision.* (Mathers et al 2014)

*Higher levels of education are associated with increased knowledge in children's development and stronger understandings of how development and learning can be facilitated in age-appropriate ways. [...] Qualification levels also explain significant variations in important caregiver cognitions, such as adherence to non-authoritarian caregiving beliefs and the presence of complex levels of reasoning about infant development and behaviours.* (Degotardi and Cheeseman 2014)

Some of the literature offers a qualification to the generally accepted view that early years practitioners must be well-educated and well-trained, by emphasising the importance of certain intrinsic qualities. Furthermore, there is evidence for the effectiveness of interventions conducted by paraprofessionals in developing countries.

*Proof of academic learning does not necessarily guarantee the skills needed to be a good early years provider. Young children need someone who understands sensory as well as verbal language, who is emotionally mature and who can give love and affection. We need a workforce with a sound understanding of child development in the early years, which includes the physical, emotional and psychosocial aspects. (Ellyatt et al 2014)*

*But “quality” is perceived differently when we view child care as a prominent feature of the environment of relationships in which young children develop. The importance of ensuring that relationships in child care are nurturing, stimulating, and reliable leads to an emphasis on the skills and personal attributes of the caregivers, and on improving the wages and benefits that affect staff turnover. (Center on the Developing Child 2004)*

*It is encouraging that interventions conducted by paraprofessionals produced these widespread benefits to children and mothers in developing countries as the cost of using professionals would be prohibitive in many countries. (Baker-Henningham and López Bóo 2010)*

*Issues around the training and qualifications of early childhood workers, and the structuring of the workforce itself, are inextricably linked to fundamental questions about the nature and purpose of early childhood services. Different countries (or even groups within countries) do, and will, come up with different answers to these questions. (Munton et al 2002)*

Finally, it is recognised that ongoing support and mentoring for ECD practitioners also influences the quality of practice and may be key in ensuring that new understanding and techniques are applied consistently and effectively. This is likely to be especially the case where initial training is brief or practitioners have low prior education and skill levels.

*Thušanang has found that it cannot leave a crèche to continue the momentum on its own because over time crèches often seem to degenerate despite the training, if they are left unsupported. This is a huge challenge as Thušanang must continue to provide assistance. As a result, the focus for some crèches is now on working towards a peer and mentor programme. [...] Empirical evidence from Thušanang trainers and facilitators indicates that the main issue that stops ECD practitioners from maintaining momentum is that they feel isolated. (Roper 2014)*

## **7.2 Group size and adult-child ratio**

Both overall group size and adult-child ratios are seen to be key factors in the quality of early years provision. This is because they have a significant bearing on the nature and quality of adult-child interactions. Adults who have to look after more children are not physically able

to spend significant periods of uninterrupted time with individual children. This in turn can make the implementation of the kinds of scaffolding and deep interaction approaches discussed in the last section challenging or even impossible.

*Research shows that the adult-child ratio is one of the strongest influences on quality for this age group, particularly in relation to care routines and support for children's individual needs. [...] There is strong evidence that more favourable adult-child ratios (fewer children per practitioner) promote better adult-child interaction (responsiveness, stimulation, availability, reduced restrictiveness) and are associated with better outcomes for children, including cognitive and behavioural development, health and attachment security. (Mathers et al 2014)*

*Low adult-child ratios are associated with more extensive teacher-child interaction, more individualization, and less restrictive and controlling teacher behavior. Smaller group size has been associated with more child initiations, and more opportunities for teachers to work on extending language, mediating children's social interactions, and encouraging and supporting exploration and problem solving. (Bowman et al 2000)*

*Research evidence is consistent with the view that staff:child ratios can have a significant impact on the quality of care that children receive. Broadly speaking, the more staff that work with children, the better the quality of care is likely to be. [...] When staff work with fewer children, they are more able to provide sensitive, responsive care. However, the influence of staff:child ratios cannot be considered independently of other factors including staff education and training, staff salaries and group size. Because of these complex interactions, it is impossible to draw precise conclusions from the research concerning optimum staff:child ratios. (Munton et al 2002)*

### **7.3 Intensity and duration**

Intensity and duration of the intervention have both been found to affect outcomes (Baker-Henningham and López Bóo 2010, Engle et al 2007). For older children (three and four year-olds), frequent and longer participation in high quality early years provision is likely to yield better results. For younger children, some of the literature suggests that detriments may be suffered if they spend too long away from their primary caregiver.

*Provision of preschool services for a longer period each day is linked to greater cognitive gains. Children in full-day classes in Head Start showed larger fall-spring gains in letter recognition and early writing skills than did children in part-day classes. (Zill et al 2003)*

It is not possible, however, to state with any certainty exactly what length and frequency of interventions produce the best outcomes for children, not least because this is likely to vary depending on the child and their home circumstances.

#### **7.4 Physical environment**

The physical environment is understood to play an important part in creating the right conditions for an effective early learning programme. It is important that the setting is orderly, uncluttered and child-friendly, and that it contributes to a calm and conducive learning environment. Space is needed for children to move and play freely. In addition, some activities may be difficult to deliver without particular furniture – specifically tables and chairs for small children.

Many short early learning programmes stipulate a period of outdoor play and the literature supports this as a key contributor to children’s health and physical development. However, this presupposes an appropriate outdoor space.

Finally, in the South African context, some ECD settings may not have access to appropriate toilet and water facilities, with implications for nutrition, sanitation and hygiene (Roper 2014).

## **Appendix A**

### **The opportunities created by play**

Play provides opportunities for children to:

- have fun
- take physical exercise
- explore
- be sociable
- experiment and create
- practise autonomy and independence
- take the initiative and make choices
- learn new language and practise communication
- use private speech
- collaborate and negotiate
- de-centre and understand different perspectives
- take on roles
- understand and use symbolic representation
- control and direct behaviour - move from impulsiveness to intentionality
- concentrate on tasks
- persevere
- test theories
- take risks and have a go
- confront challenges, reason and solve problems
- develop and use working memory
- reflect and adapt
- explore different feelings and behaviours
- construct new understanding
- represent ideas and emotions
- use new materials and equipment
- understand and follow implicit and explicit rules

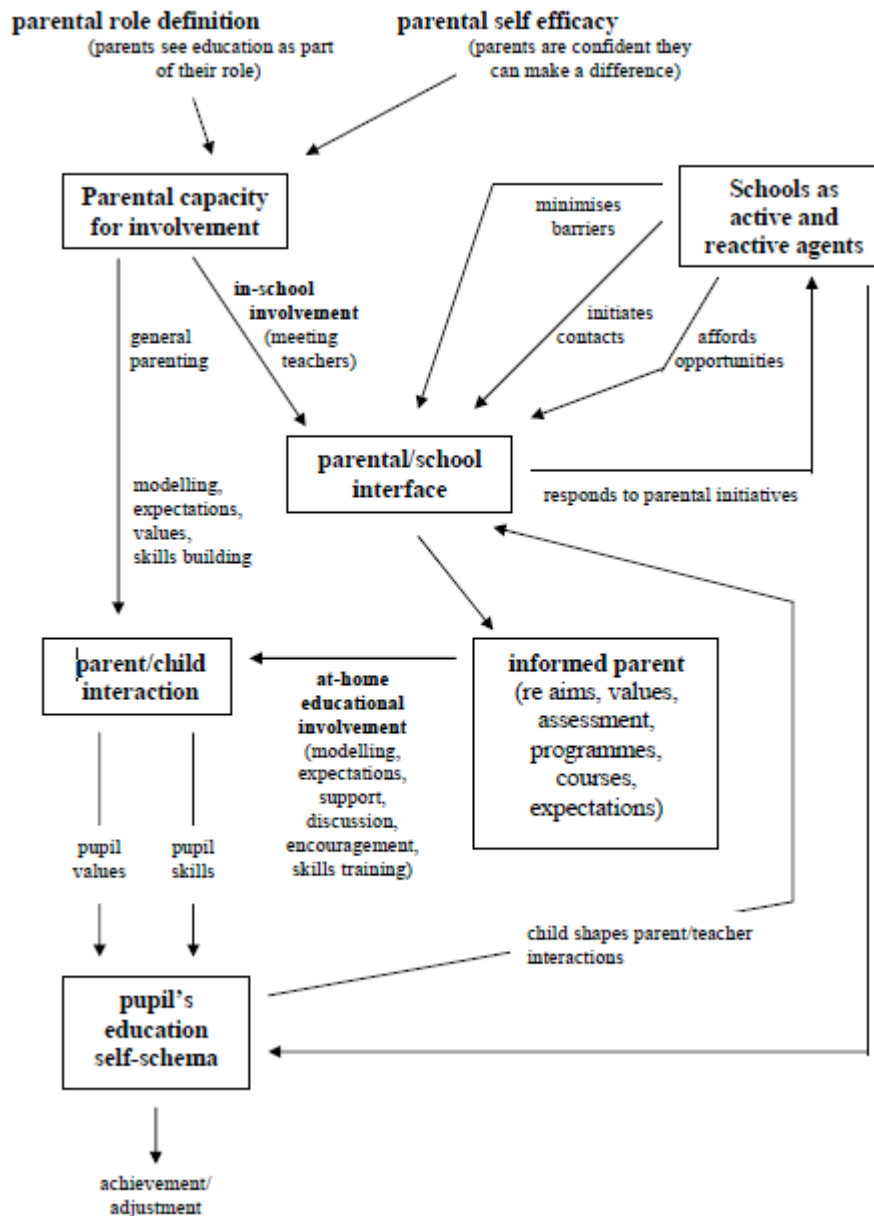
And in so doing fosters:

- emotional wellbeing
- identity formation
- self-confidence and a sense of efficacy
- social competence and empathy
- language and communication
- self-regulation
- physical health
- fine and gross motor skills
- the acquisition of knowledge, understanding and skills

(McCain et al 2007, Bodrova and Leong 2007, Gleave and Cole-Hamilton 2012)

## Appendix B

### A research based model of effective parental involvement in schooling (Desforges and Abouchaar 2003)





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