

Learning in Early Childhood: experiences, relationships and ‘Learning to Be’

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Introduction

The earliest phase of life, from pre-birth to about eight years of age, constitutes a period of extraordinary developmental growth and of promise regarding human potential and opportunity. These very early years are of intense interest to those engaged in social and educational policy because of the conviction, supported by research, that ‘a good start in life’ lays the foundations of wellbeing, health, learning and social care. For decades, it has also been recognised that a child’s very early experiences determine whether the developing brain architecture provides a strong or weak foundation for future learning, behaviour and health (Center on the Developing Child, 2011; Currie, 2009). It is a time when ‘none of the talents which are hidden like buried treasures in every person must be left untapped’ (Delors, *et al.* 1996, p. 23).

The very young child grows and develops in a dynamic 21st century social context. The digital age produces interactive environments that extend children’s immediate, day-to-day physical environments, in which even very young children can learn information navigation, retrieval and composition skills that were hitherto considered part of formal learning in school (Zevenbergen & Logan, 2008). Yet, despite the broad context and opportunities for learning, the core mechanism through which understandings are achieved is the intersection of biology and environment within each child’s day-to-day experience (National Scientific Council on the Developing Child, 2007; McCain *et al.*, 2007; Shonkoff & Phillips, 2000). Everyday experiences are integral to mental development and the bedrock of self-awareness, social interaction and personal identity formation.

From infancy, children’s experiences involve play. There are numerous subtleties in the enactment of children’s play and learning (Tayler & Sabastian-Galles, 2007), reinforced by relationships between the child, other humans and objects within a child’s environment. While solitary play with objects serves a child’s exploration of phenomena, it is the interpersonal nature of play and engagement that shapes a child’s intra-personal being and promotes social development. Play and human relationships form the context for learning in early childhood, with each child’s experience at the heart of ‘Learning to Be’ (Delors *et al.*, 1996). Learning to be — one of the four pillars of education (learning to know, to do, to live together, and to be) — is characterised as the quest to ‘... develop one’s personality and be able to act with greater autonomy, judgement and personal responsibility’ (p. 97). This is a far-reaching goal in the context of life-long learning.

The abundance, power and range of children’s experiences are fundamental to their socio-emotional and intellectual outcomes over time. Importantly, experiences can be susceptible to change and improvement, and hence governments of all persuasions have policies related to very young children and the promotion of their learning and development in early childhood education and

care settings. For example, The Australian *Early Years Learning Framework* (Australian Government Department of Education, Employment and Workplace Relations, 2009) sets broad learning outcomes for children addressing personal identity, community participation, well-being, learning, and communication. This *Framework* also promotes the principles of inclusion and practice pedagogies that include intentional teaching in the context of play and informal learning. There are links between the directions within this *Framework* and the concepts of learning throughout life and the realisation of a common future that are presented in the Delors Report (1996) to the International Commission on Education for the Twenty-first Century.

These matters are the subject of consideration in this article. The way in which learning is supported and promoted from the earliest moments of life — at times when memory, reasoning, communication skills and physical and aesthetic capacities are being formed — affects who children become in the world. The article considers the relationship between learning and development and then summarises some key research into early learning and the influences on children's personal, intellectual and social development. The phase from pre-birth to age three is the time when positive life trajectories are established — in many countries long before universal or easy access to kindergarten programmes — and hence the home learning environment is a primary site of children's learning and development. The research is then used to distil a range of preferred practices in order to provide optimum support for children's progression and enactment of the ideals encapsulated in *learning to be*. Learning to be, the fourth pillar of education, is 'an essential progression which proceeds from the previous three [learning to know, learning to do and learning to live together] . . . these four paths of knowledge all form a whole, because there are many points of contact, intersection and exchange among them'. (Delors *et al.*, 1996, p. 86).

Attention is also given to the realities of unequal human genetic and environmental endowments and to the issue of the equity of learning opportunities early in life so that all children might be able to thrive. Many children who are at risk of poor outcomes do not experience the early childhood education interventions that raise personal, social and intellectual achievements because such programmes are unavailable, inaccessible, unaffordable, or may be seen as unnecessary. The fundamentals of early intervention are embraced as protective factors surrounding children, and a key plank of their right to learn, develop, and experience well-being. The formation of a person with a strong sense of well-being and security, as well as capacity to learn, change and to be self-sustaining over time, is an interrelated personal, social and educational process.

Linking Early Learning and Development

Learning and development are connected and complex. Hatch (2010) criticises an over-emphasis on young children's *development* compared with the higher goal of attending to their *learning*. Theorists subtly profess different ways in which learning and development interact, though broadly with development being viewed as largely conditional on necessary maturation of the brain, whereas learning, particularly of skills, is linked primarily to a child's environment and to interactions within the environment.

Over the last quarter of the 20th century, attention to the work of Vygotsky has brought learning into prominence as necessary to activate the development process

(Vygotsky, 1978). Learning is theorised to lead cognitive development and be influenced by a child's activity and culture. Awareness of what children can do without help and what they can do with the support of someone who is more experienced and knowledgeable is recognised in Vygotsky's work as the 'zone of proximal development' – a zone for relational activity that can further advance a young children's learning. Both the child's level of development (abilities already mastered) and the child's potential development (the active zone for learning promotion) are of great interest for educators. This conception raises a challenge for the adults in contact with infants and very young children – to be concerned with leading and supporting children's learning and concurrently with understanding their culture. For adults to understand their culture it is necessary to be sensitive to children's behaviours, interests and ways of communicating, and their everyday customs. Paying attention to these matters enables supportive adult-child engagement and brings opportunities to promote children's further learning.

Being active in leading and prompting learning help infants and young children to advance more rapidly than through their solo devices – the interactions and experiences they have with others matter significantly. For example, in the development of language, neuro-scientific analyses have shown that the refining neural processes occurring in the brain during language acquisition and speech development are not simply a matter of age. Some regions are active in early childhood but not later in development, often described as a 'diffuse-to-focal' pattern change, which is consistent with interactive specialisation (Klingberg, 2014, p. 577). This kind of research relies on measures of the brain's response to sensory, cognitive or motor events as they occur, in other words human 'event-related potential'. Slow and effortful mental processing is a hallmark of one's early learning effort and is illustrated in ERP graphics by broad distribution of activity in the brain. In contrast, when a word or a new skill becomes known and automatic brain activity changes from broad distribution to locally-focused activity, called 'focally-distributed' activity, which speeds response to known events and objects. For example, as the strength of object-associations increases for a very young child, the amount of brain activity to discriminate learned words for the objects decreases – the mental activity of discriminating known from unknown words becomes 'focally distributed' and more rapid. Studies of very young children's event-related potential have found that 20-month-olds with vocabularies of more than 150 words have more focally-distributed brain activity than young children whose language develops at a slower pace and, with age held constant, these shifts (to focal activity) in brain response relate to vocabulary size (Johnson, 2011). The rate of growth of vocabulary is sensitive to the inputs children receive in their environment. Such findings further underscore the importance, for parents and teachers, of having rich verbal engagements with infants and young children. Heckman (2008, p. 4) encapsulates this broad picture of the growth of human understanding, noting: 'Skill begets skill; motivation begets motivation. Motivation cross-fosters skill and skill cross-fosters motivation. If a child is not motivated to learn and engage early on in life, the more likely it is that when the child becomes an adult, it (sic) will fail in social and economic life'. In sum, children's language and skill development depend upon and become more efficient and automated with social experience.

Research on how young children learn the knowledge and skills of core subjects such as mathematics and science shows the importance of innate ability and experience with knowledgeable others. These findings suggest that children cannot

be expected to construct complex understandings only through their own independent exploration, free play and discovery, by relying on maturation and development alone. For example, Ginsburg *et al.* (2006) and Butterworth (2005) note that typically-developing young children are competent in a wider range of mathematical abilities than Piaget's theory (1952) gave them credit for because, with teaching, young children are able to learn rather complex mathematics: 'There are no age norms for the milestones described . . . the ages are those at which most of the children tested demonstrate these capacities with reasonable reliability. Bear in mind that the studies described are not focused on ages, but on stages; different children can reach the milestones at very different ages' (Butterworth, 2005, p. 15).

The relational and social nature of learning came into greater focus through work bridging neuroscience and education, particularly in the study of mirror neurons (Tayler & Sabastian-Galles, 2007; Blackmore, Winston, & Frith, 2004), and in further exploring three general aspects of development — maturation, skill learning, and interactive specialisation (Klingberg, 2014). These are not mutually exclusive, and involve both concurrent and sequential processes. Klingberg's analysis concludes that skill-learning and development mechanisms are partly the same, as are the mechanisms underpinning skill-learning and maturation. There is general agreement on the importance of finding conceptual and practical mechanisms to help to understand human learning, and address mind, brain and education conundrums (Ansari & Coch, 2006).

Theory and research on human learning and development recognise that young children's observations of others, and the behaviours and actions they take derive from a common cognitive and neural framework (Somerville & Decety, 2006). In brief, relationship and reciprocity are at the heart of interaction, and learning is a relational process. For example, in order to engage in reciprocal activity, an individual mentally creates self and other's feeling ' . . . our ability to represent our own thoughts and represent another's thoughts are intimately tied together and may have similar origins within the brain. The fact that there seems to be a partial overlap between self-processing and processing of others fits well with the old adage of 'putting ourselves in another person's shoes' (Decety & Somerville, 2003, pp 532). These pathways between perception and action are the essence of learning and the basis of social cognition, yet the fields of education, psychology and neuroscience are at an early stage in combining to address the fundamental causes of developmental change (Johnson & De Haan, 2011). This effort needs to be pursued in ways that provide a clear direction for educational practice, particularly as it pertains to supporting the learning and development of infants, toddlers and pre-schoolers (Goswami, 2006).

Given the diverse disciplines and research fields addressing human learning, development and education, it may not be surprising that early childhood educators experience difficulty in articulating the theoretical bases for their pedagogical practices, and they frequently revert to broad developmental theories to guide their practice (Hedges & Cullen, 2012; Stephen, 2010). Levers of development such as age and maturation have long influenced the way in which educators set up the environments for infant, toddler and kindergarten-age children's play — natural materials, equipment and objects are selected having regard to stages of development and the indoor and outdoor play spaces within any early childhood setting. These spaces, both indoors and outdoors, become the context for children's free play and learning. Ideally, play spaces afford rich engagements with objects and

people, and spontaneous learning is facilitated according to the interests of the very young child. However, the optimal ways to promote young children's learning of knowledge, skills and attitudes, in both informal and formal settings, are contested: teachable moments may be embraced and interwoven into informal play settings, and formal group-based learning may be adopted or not, depending on the philosophy and purpose of early educators.

The Advancement of Young Children's Personal, Social and Intellectual Capabilities

Early Childhood Education and Care (ECEC) programmes typically embrace the space between the personal and the collective as they operate to ensure a child's personal wellbeing, social participation and education. Because early childhood is a phase of life and hence very broad, research that enlightens understanding of this phase emanates from many disciplines, such as psychology, neuroscience, education, health, sociology and social welfare. Each and all have potential for shaping the training of professionals working with children, and with their own suggestions for optimal practice to advance children's personal, social and intellectual development. Outcomes for a child are heavily influenced by what surrounding adults pay attention to and do, whether at home or in an ECEC setting.

A Child's Attachment and Engagement — Pathways to Well-being and Sociability

Very young children learn how to behave with others and the kinds of behaviours that attract positive and negative attention from parents and other caregivers. The child's early attachment and separation behaviours influence later social competence and play a role in the development of aggression and antisocial behaviour (Renken *et al.*, 1989). So too do parental levels of coercive behaviour towards the child and the quality of the relations between the adults living with the child (Tremblay, 2004). In short, the kind of early attachment behaviours children experience affects who they become. A recent meta-analysis by Fearon *et al.* (2010) confirms the association of primary caregiver-child attachment insecurity and children's externalising behaviour. The quality of parent-child attachment influences the sense of security and safety in children and affects the way they behave when they are with others. Using a sample of over 1,000 families, McElwain *et al.* (2008) identified mechanisms through which mother-child attachment security at age 3 associated with the quality of children's friendships at primary school at age eight. Three-year-olds who had greater attachment security with their mothers had greater language ability by age four-and-a-half and fewer hostile attributions by first grade. Hostile attributions were tested through scenarios of ambiguous acts by a peer, such as taking a toy, being tripped or hit by a ball, or having a drink spilled, and whether the child determined such acts as accidental or intended (i.e. hostile attribution). Better friendship quality at grade three was mediated by inter- and intra-personal mechanisms, including matched-affect between mother and child at earlier stages (i.e. affective mutuality, a free-flowing exchange of verbal and non-verbal emotions as opposed to stifled or non-reciprocated emotions between the pair), child expressive language, the level of hostile attributions by a child, and peer competence.

Hostile behaviour and poor peer relations prevent young children from learning together and getting along, and, in the long term, set patterns for violent behaviour

later in life. In order to understand young children's hostile behaviour, Heberle *et al.* (2014) studied the impact of family, neighbourhood and individual risk factors on toddler disruptive behaviour. They concluded that the proximal factors of parenting behaviour, violence exposure, family disadvantage and parent depressive symptoms better explained the child's behaviour than more distal neighbourhood factors. Tremblay *et al.* (2004) stress that, by 17 months, most children are physically aggressive towards others and learn to use alternative strategies in the years before school. Prevention programmes require the surrounding adults to demonstrate control over their physical aggression and teach young children how not to resort to this.

Infants, toddlers and young children who enjoy warm attachments and whose parents and early educators are aware and responsive to their emotional state are best placed to become socially competent, learning human beings. By toddlerhood, children have expectations about the quantity and quality of parent responsiveness they may receive, which can be gauged using attention-seeking measures (Gosselin & Forman, 2012). Studying video-taped evidence of 109 pairs of parents and their children at play, during skill-learning and at snack-times, the researchers confirmed that attention-seeking and collaboration were influenced by a child's expectations of adult responsiveness. Importantly, the quality of parent responses when they are busy also matters. Attention-seeking behaviours by a toddler reflect an effort towards collaboration and can be acknowledged and affirmed even when parents are busy. In other words, acknowledging a child's attention-seeking and noting they are busy helps the child to understand interpersonal relations and wait for the attention or find a different resolution: 'It may matter a great deal to busy parents [or other caregivers] that their toddler is willing and able to leave them alone on request rather than persistently seeking attention from them' (Gosselin & Forman, 2012, p. 722).

Furthermore, infants who experience insecure-avoidant attachments (measured at 15 months) have also been found to engage better with a new social partner: they may compensate for reduced social contact with a primary caregiver by initiating more interaction with other social partners (Meins *et al.*, 2011), indicating a basic need for connection and positive social contact. This also affirms the agency of the very young as they operate within their social world, and illustrates opportunity for early childhood educators to establish secure attachments with toddlers who may not have such attachment with their primary caregiver.

In the course of early childhood learning and development, the responsiveness of adults matters. Interventions geared towards fostering children's positive socialisation exchanges and collaborations enhance each child's capacity to take a meaningful and skilful part in their social world. For example, Vaughn Van Heck *et al.* (2007, p. 66) noted that 'lower levels of externalizing behaviours at 30 months were uniquely predicted by higher levels of 12-month initiating and responding to joint attention and 15-month inhibitory control'. Children's social competence and expressive language are enhanced by adults who are sensitive to joint-attention episodes from very early in life. Joint-attention — the shared focus of adult and child on something — is fundamental to building human relationships. Some children rapidly become adept at engaging with someone else, thereby building communicative and social competence, in contrast to other children with relatively

low early levels of joint-attention and expressive language. Activities that involve closely-connected interaction between child and adult — symbol-infused engagements — include noticing what the child is seeing and jointly engaging in the moment, narrating the actions of an infant or toddler so that language describes the actions, and communicating in back-and-forth exchanges where the child hears language that he or she cannot yet express, influence the onset of expressive language and contribute to differences in a child's language facility by 30 months (Adamson, Bakeman, & Deckner, 2004).

Furthermore, the researchers recorded change in both the focus and form of these symbol-infused engagements in the toddler and preschool periods (Adamson, *et al.*, 2014). This change indicates that children's attention to shared topics moves progressively from the here-and-now to include the past and future. Importantly, caregivers scaffold these engagements. Where the scaffolding behaviour matches and continually updates to the child's next level of achievement, the caregiver's use of contingent prompts and cues helps to drive the next level of child understanding. Such interventions are especially important to the optimal development of preschool children with autism spectrum disorder — the earliest possible intervention activity that focuses on imitation, joint attention and play helps to promote the social-communication abilities of these children (Warreyn, Van Der Paelt, & Roeyers, 2014).

A Child's Behavioural and Emotional Self-regulation — Pathways to Learning in Groups

Young children who are able to regulate their behaviour and emotions are better able to relate to others and benefit from early social and academic experiences in group settings such as preschool and school. The ability to moderate and manage one's behaviour in different social settings helps a young child to feel included and to 'get along', and self-regulation skills make a contribution to school readiness and achievement. There is a strong case for helping to build the foundations for citizenship by thoughtfully promoting children's engagement and participation during pre-school activities. Such promotion helps to build each child's executive functions, including inhibitory control, mental flexibility and working memory. Blair and Diamond (2008, p. 908) conclude that 'in acquiring the capacity for self-regulated learning, social-emotional skills that foster the [child's] relationship [with caring trusted others who model the process] and executive function skills that promote self-regulation are quite literally foundational for learning'. In pre-school, the fundamentals of self-regulation and internal executive control are encouraged through informal activities of interest to the child. Importantly, the interactions that encourage perseverance when tasks become difficult, maintain attention to goals, and hold information in mind in order to complete preferred steps and sequences are catalysts for promoting a child's self-regulation capacity. Such behaviours have been linked to mindfulness (Kabat-Zinn, 2003), and referred to as 'contemplative practices' (Willis & Dinehart, 2014). Neurobiological conceptions of children's functioning suggest the value of preventing children from falling into patterns of response that are highly reactive, but rather encourage effortful regulation (Blair, 2002). In a longitudinal study of 217 four-year-old urban and rural children, McLelland and colleagues (2007) assessed the behavioural regulation of the children and their vocabulary, emergent literacy and mathematical skills: they found that growth in behavioural regulation predicted

increases in vocabulary, mathematics and emergent literacy skills prior to school. Shonkoff (2011, p. 982) illustrates the point: ‘The same neuroplasticity that leaves emotional regulation, behavioral adaptation, and executive functioning skills vulnerable to early disruption by stressful environments also enables their successful development through focused interventions during sensitive periods in their maturation’.

Executive problem-solving approaches such as the Promoting Alternative Thinking Skills (PATHS) curriculum for early primary school (Greenberg *et al.*, 1995) and its preschool adaptation (Domitrovich, Cortes, & Greenberg, 2007) are examples of approaches to foster effortful regulation. In randomised control trials, children exposed to a year of the preschool PATHS programme were rated as having higher emotional knowledge, being more socially competent and less socially withdrawn than same-age peers. Bierman *et al.* (2008) studied 356 four-year-old children in 44 Early Head Start classrooms using PATHS alongside an interactive reading programme. The researchers conclude that the ‘improved socio-emotional functioning produced by this program reflects gains in the biological substrates that support self-regulation, such as improvement in children’s ability to imitate and store representations of social-emotional scripts, tolerate delays and frustrations, regulate feelings under conditions of excitement or conflict, anticipate the future consequences of alternative responses, and plan out behaviour before acting’ (Bierman *et al.*, 2008, p. 840). Capacities such as these can be developed by educators working with children in group learning situations and can enhance children’s everyday ‘being’ in the world. There are opportunities for on-line coaching that assists educators with implementation strategies that build children’s social competence (Hamre *et al.*, 2012).

The Growth of Language and Learning — Pathways to Social and Intellectual Achievements

The acquisition of language is the major achievement of the early years of human development. Expressive language broadens a child’s opportunity to connect with others and convey thoughts and ideas; taking part in conversation helps to develop the necessary skills of attending, listening, turn-taking, and expressing thoughts and ideas. The steps to expressive language occur in the first two years, shaping the kind of speakers that children become. From infancy, the sounds heard shape the way infants hear speech and the sounds of a native language can be discriminated by age six months (Johnson & De Haan, 2011). Phonological development can be viewed as having two components — a biologically-based component and a cognitive-linguistic component. These are distinguished by Stoel-Gammon (2011) as the establishment of the speech-motor skills needed for adult-like pronunciation of words (biological) and the processes of memory and pattern-recognition that are associated with the storage and retrieval of words (cognitive-linguistic). Different theories nuance the associations differently: ‘Among these are their views regarding: (1) innateness; (2) the role of pre-linguistic development; (3) the influence of input; (4) the effects of language use, including frequency of occurrence; and (5) the nature and number of underlying phonological representations that form part of the “mental lexicon”’ (Stoel-Gammon, 2011, p. 5). Stoel-Gammon concludes that there are bi-directional links between children’s phonological and lexicon development from birth to age four. Both social processes and computational mechanisms promote child language development (Hoff & Naigles, 2002), and the

relationship between children's concept and vocabulary development appears to be mutually reinforcing (Kaefer & Neuman, 2013).

Children's language development offers an excellent example of how children can learn through keen observation and listening. Akhtar, Jipson and Callanan (2001) found that two-year-old children had the ability to learn novel words when overhearing those words used by others. The findings demonstrate the power of overhearing as a means of learning language and highlight the active role played by toddlers in their vocabulary acquisition. Evidence of this can be found in many communities where young children monitor and follow the language of others and learn appropriate use of language, including appropriate respect forms and pronouns with which to address adults, even though these are different from the language forms used by adults towards them as children (Ochs, 1988 & Oshima-Takane *et al.*, 1996, cited in Rogoff *et al.*, 2003).

Young children's language usage changes rapidly as their vocabulary acquisition increases. Social context accounts for the particular language or languages that a child develops, and has a significant influence on the rate of increase and size of a child's vocabulary. In addition, rates of vocabulary growth and vocabulary size prior to school have long been found to predict a child's ongoing intellectual achievements (Fenson *et al.*, 1994; Hutardo, Marchman & Fernald, 2008), while also being associated with socio-economic status (Hart & Risley, 1995; Hoff, 2003). For example, a child's vocabulary at school-entry is a strong predictor of reading comprehension in the second and third grade (Hemphill & Tivnan, 2008), and the quality of language input that a very young child receives affects the rate of vocabulary development. In a study of 14–58 month-old children, Cartmill *et al.* (2013) found that the quantity of the linguistic inputs of parents was not the main predictor of vocabulary growth; rather, the degree to which the meaning of a word could be inferred from the context (i.e. referential transparency) was critical. Adults who provided a greater number of high-quality word-learning opportunities produced better vocabulary outcomes for their children: 'Some parent inputs to their children rarely contained highly informative contextual clues to meaning, whereas other did so relatively often' (*ibid.*, p. 2), and this input variation impacted a child's vocabulary size three years later. In effect, very young children benefit from being able to detect word meanings *from the situation* — supported by looking at, pointing to, or manipulating a referent to the word (Brooks & Meltzoff, 2008).

Minimising the Risk of Poor Development

A young child who develops advanced language skills experiences a plethora of positive child outcomes, including increased reading and writing ability and academic and social-emotional development (Oades-Sese & Li, 2011). Slower language performance is partially explained by 'a combination of early neurobiological and genetic factors (e.g., male gender, birth weight, and prematurity), and concurrent family variables such as maternal distress and/or depression' (Schjølberg *et al.*, 2011, p. 375). High-quality home learning environments can accelerate children's social and cognitive achievement at the foundation, and have been found to change the social gradient of health and wellbeing (Pungello *et al.*, 2010). Adult engagement in children's everyday activities can promote specific play abilities which, in turn, enhance social, cognitive and language growth (Bennett, Wood & Rogers, 1997; Smilansky & Shefatya, 1990): when parents (or

other important adults) choose not to interact with children at play, they are missing opportunities to foster children's language and learning.

Within early childhood programmes, high-quality teacher-child relationships and interactions are associated with improved child language skills, including enhanced child verbal ability (Oades-Sese & Li (2011). Mashburn *et al.* (2008) used the Classroom Assessment Scoring System (Pianta, La Paro, & Hamre, 2008) to assess the instructional and emotional domains of adult-child interaction in the preschool classrooms of nearly 2,500 children in different parts of the US. The results of the study revealed that the teachers' instructional interactions were positively associated with all measures of academic or language skills in the pre-school children, instructional interactions being characterised by giving attention in play settings to concept development, the quality of feedback, and language modelling in the presence of the child. High-quality emotional interactions, characterised by a positive room climate, minimal negativity, having regard for the child's perspective and being sensitive to children's emotional states, were associated with children demonstrating higher social competence and lower problem behaviours, as reported by teachers (Mashburn, *et al.*, 2008). Hamre and Pianta found similar positive results in classrooms where children were identified at age five or six years as being at risk 'on the basis of demographic characteristics and the display of multiple functional (behavioral, attention, academic, social) problems' (Hamre & Pianta, 2005, p. 949). Positive experiences in classrooms can therefore promote positive adaptive behaviours that support learning and well-being. These authors, with others, extended their research to develop a general factor of effective teaching in the early years — 'responsive teaching'. Studies in classrooms of four-year olds established that responsive teaching was associated with children's development across social and cognitive domains (Hamre *et al.*, 2014).

The education of young children is much more, however, than the acquisition of skills and knowledge. 'A broad encompassing view of learning should aim to enable each individual to discover, unearth and enrich his or her creative potential, to reveal the treasure within each of us' (Delors, *et al.*, 1996, p. 86). All children, no matter their nationality, family background, language group or developmental status have a right to be supported to live a meaningful life and maintain positive social outcomes. Relating to the very young with sensitivity and skill both at home and in group settings such as ECEC centres, and routinely providing positive early learning challenges and opportunities, can activate meaningful experiences for a child that are personal and communal, all calling for well-designed early childhood programmes.

Fostering the Development of 'Learning to Be'

Early childhood programmes operating in the period from infancy through to school entry are numerous in type and varied in duration, yet they all typically address the all-round development of children. Some emphasise socialisation and the building of personal esteem and social responsibility, others children's thinking and language and yet others may feature the body in space and children's artistic and aesthetic sense, and spiritual values.

The research reported in this article provides rich information about what promotes early learning and development. Strategies to support and promote learning in early childhood were summarised in an earlier paper that considered

the brain, development and learning (Tayler & Sabastian-Galles, 2007, pp. 175–176), and the recent research evidence continues to build our understanding of how adult roles, through everyday conversations with infants toddlers and young children, are vital. Knowledge gained from education and social welfare, neuroscience, health sciences and psychology facilitates the development of a mosaic about learning in the early childhood stage of life — for pre-birth to age eight years. Early childhood educators' responsibilities for children's development have increased, with young children spending more time in non-family-based settings, as women's labour force participation has increased (UNICEF, 2008). This, combined with new policies related to early years' curriculum, a general increase in staff qualifications and skills, and programme quality standards, has positioned early childhood educators as key catalysts in the improvement of educational outcomes.

There is more information than ever for early childhood educators on how to enhance children's learning and development, capturing diverse perspectives on how best to promote children's learning, and navigating this information is complex. Yet, the principles of respect and having regard for others, and taking responsibility for one's actions remain unchanged. Effective early educators are skilled in facilitating learning from birth and working closely with children, families, and colleagues to optimise educational outcomes.

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