Chapter 1

What Do We Know about Children Under Three?

This chapter will discuss:

- The need for research and what it tells us about:
  - Literacy, language and communication
  - Learning, development, cognition and play
- Little voices – important messages

Why we need to know about research

In this first chapter we consider some of the things that research tells us about the needs and development of babies and toddlers. It is often the case that practitioners working with the youngest children know the children well, know the activities and environments which work best for babies and toddlers, and have learned alongside other colleagues how best to support young children’s developmental and learning needs. There is much good practice to be shared and celebrated in the birth to three field of early years provision and such practices have often remained hidden. For it is only in the last decade or so that work with children under the age of three has been regarded as part of the field of ‘education’ – and even now some still struggle to acknowledge that children under three need ‘education’ as well as ‘care’.

In the last two decades successive UK governments have recognized the importance of early education for children under five, and babies and toddlers are now firmly fixed in the education and care agenda of
government in the UK and other countries around the world, with issues relating to the quality of provision made for them becoming central to policy (COAG, 2009; Dalli et al., 2011; DfE, 2012a; French, 2007; Learning and Teaching Scotland, 2010; Tickell, 2011; Nutbrown, 2012; Welsh Government, 2011). With these shifts in policy, come new responsibilities for all those who work with and for young children. There is increased accountability (DfE, 2010, 2012a, 2012b; HMSO, 2006; Munro, 2011) – an inevitable consequence of increased recognition and funding (DfE, 2012b) – and there are added pressures to provide high-quality care and education which has the capacity to meet all children’s learning and developmental needs (Penn, 2011; Sylva et al., 2004; Tickell, 2011). With this increased responsibility and accountability comes the need for all practitioners not simply to rehearse effective practices and to provide good experiences for babies and toddlers, but also to know why they do what they do. This is even more important in an ever changing world where economic policy levers and drivers can result in a shift in funding priorities, almost overnight. Practitioners must be ready to respond to change but, more importantly than ever before, practitioners must understand the research and theory which underpins their day-to-day work and decisions; for without such theoretical knowledge what they do can lack rigour and a rationale. It is like a building without foundations. Practice without theory, though it might look acceptable on the surface, is empty of a fully justified basis for what happens, and thus carries the danger of doing things ‘because we do’ rather than adopting (or rejecting) practices because there is a clearly understood basis for that decision.

**Research is for all practitioners**

Research is for everyone who work with young children. It is important to know what research can tell us about babies and toddlers and to know how others have observed and interpreted the things young children do. It is important to understand different viewpoints on work with children under three so that a variety of ideas can be considered and developed to inform modern practice. Research can provide a basis for challenging ideas or for adapting practice. Research-informed
practice can make practitioners more secure in their practice, and more open to self-reflection in the light of new thinking and knowledge. Drawing on research as well as practice and experience can, in effect, help practitioners to draw a more detailed ‘map’ of the terrain in which they work. They can use the knowledge generated by others as well as their own knowing to guide their practice and develop their own unique pathway of interactions with young children.

What does research tell us about babies and toddlers?

In recent years studies of babies and toddlers have come more sharply into focus, particularly since UK government policies have begun to embrace the learning and development needs of babies and children under three within statutory provision. See for example: the English Early Years Foundation Stage (DfE, 2012a), and the Scottish Pre-Birth to Three (Learning and Teaching Scotland, 2010). The same is the case in Australia, where the first nationwide Australian Early Years Learning Framework (COAG, 2009) is now in place.

The landscape is changing. The boundaries of ‘education’ are no longer fixed at the school starting age. Therefore, we suggest that all research on and with our youngest children is important, regardless of its disciplinary origins. However, many studies are still concerned with literacy, language and communication and learning, development, cognition and play. There is still a need for more research on how babies and toddlers learn and develop, and for studies that help us learn more about the lives of our youngest children. Research that informs us about how babies and toddlers spend their time and who they spend their time with, helps us to understand how to plan for their individual and holistic needs. Early childhood education and care in the twenty-first century is informed, as Penn (2011) says, by a shifting global perspective of children and childhood. Nevertheless, the way in which young children learn and develop is central to our understanding of their needs, so in order that practitioners can plan for the specific needs of very young children they must have a thorough knowledge of child development.
Literacy, language and communication with babies and toddlers

In recent years studies in Australia, New Zealand and the US have focused on aspects of literacy (Dearing et al., 2009; Lee, 2010; Ravi, 2007; Riedl Cross et al., 2011). As Communication and Language is now recognized in the EYFS (DfE, 2012a) as one of the prime areas for learning alongside Physical and Personal, Social and Emotional Development, it is vital that the messages from research are utilized. In her research overview for the National Literacy Trust, Hamer (2012: 19) concludes that, ‘The home learning environment, and in particular the communication environment, for babies and toddlers during the first 24 months influences their language acquisition and their performance at school entry’. Thus Hamer reinforces that it is what parents do in the early stages of development that really has an impact on the outcomes for children as they progress through life. In this overview Hamer recommends that practitioners be aware of this fact and work in partnership with parents to promote early literacy at home as well as in the setting, a strategy that has long been argued for and developed by Nutbrown et al. (2005).

This emphasis on the home learning environment is also seen in the UK where the attention paid to literacy and its importance in the early years has been evidenced by the Bookstart Programme which has grown over the years and has now become an established feature of early literacy promotion within the UK from birth (Bookstart, 2011).

In the US, Barlow (1997) reported on the effectiveness of the Born to Read programme which targeted children deemed to be ‘at risk’ of reading failure and developmental delay. In her review of the project, Barlow claims that the programme reached children ‘during the years most crucial to brain development’ (1997: 20). Most studies claim that early engagement with books is a ‘good thing’ for babies and toddlers. Many suggest ways in which parents might engage more fully in their young children’s exploration of books, and emphasize the importance of spending time in talking with their youngest children. This is true of practitioners too. However, Macrory (2001) claims the emphasis needs to be on knowing and understanding how individual children make sense of language and how they use it, thus avoiding using books in a meaningless way with young children that they are unable to relate to.
Research into the development of language and communication includes studies of the beginnings of speech (Caulfield, 2002), the development of language in bilingual babies and toddlers (Pearson, 1998), the use and development of baby signing (Acredolo and Goodwyn, 1996; Goodwyn et al., 2000; Thompson et al., 2007; Vallotton, 2009, 2010, 2011a, 2011b) and communication with babies with hearing impairments (Yoshinaga and Stredler-Brown, 1992). In a recent study of babyrooms in England, (Goouch and Powell, 2012: abstract) found that: ‘many of the practitioners were not routinely, incidentally or intuitively talking to the babies in their care, nor were they aware of the importance of doing so’. This highlights the continued need for those working with young children to understand the crucial importance of talking with babies and toddlers.

Learning, development, cognition and play

In a study of nearly 50 toddlers aged around 18 to 30 months in full day care, Kowalski et al. (2005) examined the toddlers’ emerging pretend play. Using videotaped observations the research team assessed the play environment in terms of (a) the provision of play materials, (b) the quality of care and (c) staff attitudes towards play. The toddlers’ weekly attendance pattern was taken into consideration when observations were analysed. They found that toddlers who attended childcare for at least four days a week had better play encounters with pre-school-aged peers than those who had less frequent attendance. Perhaps there is something to learn from this study about the benefits to young children of spending time in mixed age group settings rather than being confined to the ‘toddler room’ where they are separated from the older pre-school children. In a study of the experiences of children under three in day care, Clare (2012) found that children also benefited from the time they were able to spend with the older children in nursery settings. The benefits were recognized in the opportunities for children to become scaffolders of each other’s learning as well as in the opportunities for children to engage in play and learning within a more family-like structure. Siblings were able to play alongside each other, younger
children were able to be exposed to more challenging resources, and there was often less need for children to make high numbers of transitions as they moved through the nursery.

In a study of mathematical development of 50 one–three-year-olds, Miyakawa et al. (2005) conclude that it is important to present young children with developmentally appropriate tasks to better support their development in meaningful ways. They say, ‘If an activity is at just the right level, children think deeply with intrinsic motivation’ (2005: 300).

**Little voices – important messages**

Children’s views are increasingly being seen as an important focus of educational research (Atherton and Nutbrown, 2013; Christensen and James, 2008; Grieg et al., 2007; Holmes, 1998; Lancaster, 2010; Lewis and Lindsay, 2000; Nutbrown and Clough, 2009; Nutbrown and Hannon, 2003).

Listening to young children’s views and to their expressions of their needs and wants brings them ‘into the centre’ of discussions about policy, purposes and practices of early education and care. Ways of understanding children’s learning have mainly relied on observation, of watching them (Drummond et al., 1992; Elfer, 2005; Nutbrown and Carter, 2010), but far less attention has been given to listening to children, and to the development of other ways of soliciting their views on matters of daily life and learning. It is the case that the ‘voices’ of vulnerable children have sometimes been attended to with the pioneering of specifically designed interview techniques, mainly in areas of difficulty, such as child protection and child witnesses in court (thus reflecting the interest in ‘voice’ in relation to oppressed and minority groups). But until recently there has been relatively little interest in understanding the perspectives of children on what we might call the ‘ordinary, everyday aspects’ of their own lives (Dyer, 2002; Filippini and Vecchi, 2000). Listening to babies and young children is an important role for practitioners.

For us, respectful relationships point to (and require) an inclusive approach to education and care where ‘inclusion’ means more than
the shared location of children, families and practitioners. For us, inclusion means ensuring that all the children in the setting ‘belong’ in the fullest sense of the word. This means never ignoring or dismissing a small child’s cries, and always investigating the protests of an ebullient toddler, as we see in the example below, and paying attention to the always quiet child, who never seeks attention – they belong too.

Billy was a lively two-year-old boy who enjoyed nothing better than being outside in the nursery garden playing with the big wheeled toys. He was fascinated with the ‘big blue car’, it was his favourite and he got very cross when it was time to come inside for a snack or to have his nappy changed. The nursery practitioners were finding it increasingly difficult to encourage Billy to come inside and he had started getting very angry – kicking, screaming and hitting out at anyone who came near to him, and the other children had begun to keep their distance. Billy’s key person, Eliza, had gently broached the subject with Billy’s mum who said she had been rather upset when she overheard another child refer to her son as ‘angry Billy’. Eliza reassured Billy’s mum that at two years old Billy was demonstrating his very powerful feelings and that it was perfectly ‘normal’ for children of Billy’s age to find difficulty in regulating their emotions. Eliza talked with Sally, Billy’s paired keyperson, who had noticed Billy was primarily becoming distressed when he had to leave the ‘big blue car’ behind to come inside. Eliza and Sally agreed they needed to try to reduce the reasons for Billy to come inside, thereby empowering Billy to feel that his ‘voice’ was being heard. They agreed that there were certain times of the day when Billy had to come inside, e.g. to have lunch or to have his nappy changed. However, they acknowledged that they did not always provide Billy with enough warning of a change to his routine. After further discussion Eliza and Sally decided to play a soothing classical piece of music to indicate it was time to start tidying away. Gradually, over time, Billy came to recognize that when the music came to an end (the track had been deliberately chosen because it was around six minutes long) he was expected to ‘park’ his car and come in from the garden. This solution worked well, not just for Billy but for all the toddlers.

A couple of weeks later Billy’s mum told Eliza that she and Billy had attended a friend’s wedding. As the bride began walking down the aisle Billy had said to his mum ‘put car away’. She was puzzled at first then suddenly
realized that the wedding music was in fact ‘Pachelbel’s Canon’, the same tune that Eliza and Sally used at nursery to indicate the end of outside play-time. The toddler team decided that now that Billy was familiar with the principle of the routine they needed to gather a range of music to use at tidy-up time. They wanted to ensure they gave the children an opportunity to appreciate music for pleasure as well as using it at key times in the day to help the toddlers to recognize when there was going to be a change to their routine.

Questions for reflection

1. How do you help infants and toddlers to have a choice about how they spend their time in your setting?
2. What strategies do you use in your setting to help young children to recognize a change is about to occur in their routine?
3. Supporting ebullient two-year-olds can sometimes be a challenge for parents and practitioners. What support is in place in your setting to help adults to recognize the norms of children’s behaviour?

Nuttbrown and Clough (2009) report a study of a professional development programme which involved 16 early years practitioners in small-scale action research projects to change aspects of the settings in which they worked, and, importantly, to involve the children in identifying the changes that were needed. The practitioners each developed an action research project in their setting and the following issues were addressed:

- involving parents in the setting
- making the outdoor play space a place where all children felt comfortable and secure
- reviewing the arrangements for transition from pre-school to the Foundation Stage unit
- changing the toilet area so that the children who were frightened were able to feel more at ease
- helping children to settle their disputes

1 Canon in D composed by J. Pachelbel.
finding ways to allow boys to have access to the home corner play space
including children’s views on their own progress and achievement in their assessment profiles
making lunchtimes more peaceful and positive social times
offering healthier mid-morning snacks
developing new and workable practices on violent weapon play
developing key person approaches with babies and toddlers so that their care is more attuned to their needs
introducing baby signing to give them more autonomy and enable them to better communicate their needs and wants
consulting children on new all-weather clothing to be purchased
introducing Persona Dolls to help children learn more about other children’s lives
including more fathers on outings
reviewing the pace and opportunities provided for children in day care from 8 a.m. to 6 p.m.

Reporting on the study, Nutbrown and Clough observe that:

One of the things which is clear in all the examples in this study, is the implicit underpinning beliefs which practitioners hold about the children for whom they are responsible. And it is this crucial underpinning which, we suggest, enables practitioners to tackle the difficult, subtle and complex issues in order to create inclusive early years communities. The children’s views on ‘belonging’ and practitioners’ interpretations of how such views can be drawn upon to create more inclusive early years environments and communities are central. (2009: 21)

Following a review of the practitioners’ projects Nutbrown and Clough (2009) conclude that:

- It is possible to learn children’s views of inclusion and belonging, that young children have clear views which can be different from those held by adults.
- Children’s own voices are central to any study of their perspectives,
and studies must find ways to ‘listen’ to those voices so that the views that young children offer can often be considered when making changes in practice.

Children’s personal sense of ‘identity’ and high ‘self-esteem’ appear to be the two most important issues to be addressed through curriculum and early years pedagogy. If young children are to successfully experience a sense of inclusivity and belonging in their early years settings, those settings must ensure that, at the heart of their work lie opportunities for young children to feel good about themselves and secure in their developing sense of who they are and how they ‘belong’ in their learning community. Having opportunities to express views about the things that affect them is crucial to their ‘belonging’ in their early years community. (Nutbrown and Clough, 2009: 30)

The concepts of ‘belonging’, ‘being’ and ‘becoming’ are at the heart of the Early Years Learning Framework for Australia (EYLF) (COAG, 2009). These concepts value children’s sense of identity, thus being part of a family and community is to belong. When children belong this builds the notion that they are safe and free to explore in the ‘here’ and ‘now’, therefore valuing the distinct stages of childhood in their own right as opposed to as a preparation for adulthood. Finally, there is also the recognition of the rapid pace of change and the ever-evolving sense of identity which represents all that children are capable of and will eventually become. There are important messages contained within the EYLF, about listening to children and the development of a culture of participation (Lancaster, 2010; Sumsion et al., 2009). The Coram Family Listening to Young Children (Lancaster and Broadbent, 2003) project developed a framework for listening to and acting on the views and needs of children from birth to eight years. Lancaster argues that:

For every child to really matter, early years professionals need to develop a listening culture; they need to build a set of RAMPS:
- Recognising children’s many languages;
- Allocating communication spaces;
- Making time;
- Providing choice;
- Subscribing to a reflective practice.
Working with Babies and Children

These principles provide a sound framework to empower children in participatory processes. (Lancaster, 2006: 1)

In promoting this culture of listening to young children, Lancaster suggests that: ‘The five principles constitute indicators that professionals can employ to steer how they involve children in making a positive contribution to their learning and well-being’ (2006: 2).

Participatory learning is perhaps a term more generally associated with slightly older school-aged children (Cremin and Slatter, 2004; Fraser et al., 2004; Levy, 2008, 2009a, 2009b). Nevertheless, as Pascal and Bertram (2009) point out, since the ratification of the UN Convention of the Rights of the Child in 1991, practitioners have been keen to find ways to listen to the views of young children. Subsequently, there has been a growing interest in participatory approaches with three- and four-year-olds (Clark, 2005; Clark and Moss, 2011; DfE, 2010). The ‘mosaic approach’ (Clark and Moss, 2011) utilizes a range of methods such as observation, interview, activity-based games, and visual data as the basis for consulting with children. Clark (2005) suggests that listening to young children in a respectful manner can be a complex process and that young children respond best to familiar adults. Clark’s point fits with an approach that Nutbrown (2010) adopted when she worked together with practitioners across England to find out about the likes and dislikes of 188 three- and four-year-old children in their early years settings. A key finding of the study highlighted the value children place on relationships with their familiar adults, as well as with their peers. Similarly, Stephenson (2009) combined the tools of conversation and observation over a five-month period to study a group of two- to four-year-olds in their childcare centre. Using a process of reflection, Stephenson found that she was able to ‘stand back’ from her initial interpretation, to allow for more meaningful themes to emerge from the data. She concluded that adult–child relationships played a significant role in the experiences of the young children at the centre.

There is a growing interest in research that considers the lived experiences of babies and toddlers (Berthelsen et al., 2009; Sumtion et al., 2011), and considers the development of the child within the context of their family and their own community. These studies are important if
we are to make sense of what it is like for a child to grow up in an international society. We need to know more about babies and toddlers who spend time in home and group settings, for example. How we value very young children will undoubtedly shape their experiences. Therefore, as Bertheslsen et al. (2009: xiv) suggest, ‘children’s participation ultimately is the responsibility of adults and society … To let someone take part in something also means that we (as educators) need to step back and give power to the participant (the child)’. As Nyland (2009: 32) points out, ‘In early childhood group settings, many interactions are based around routines. Children have little freedom during the day but are constantly organized through daily schedules’.

Children’s involvement in their play and their participation in the culture of learning and care in which they spend their days is essential if they are to maximize their potential. This culture of listening, really listening, can begin when babies are very young. Appell and David (1973) discuss the work of the Pikler Institute which advocates an approach to child-rearing and development based upon key principles whereby staff give their fullest attention to the children. The Pikler principles include:

- the value of independent activity
- the value of a special, favoured, affective relationship and the importance of giving it a form suitable to an institutional setting
- the necessity of fostering the child’s awareness of themselves and their environment
- the importance of good physical health as fundamental to realizing other principles.

Appell and David (1973) note a fifth, and fundamental, principle of ‘free movement’ which is an essential underpinning to the other four. Pikler (1971: 57) argued that a young child had always to be free to move themselves, and their freely initiated movement led to babies’ and toddlers’ initiatives being in play ‘every moment of the life of the young child, in every activity, including the moments of intimacy with the adult’. Pikler (1973: 61) also promoted a dialogue of mutual respect, created in the relationship between adult and child, if the child was ‘able to pursue his or her desires with competence’.
Emmie Pikler’s work in Hungary was built around her belief that babies and young children need to be offered an environment where they are respected and nurtured to become emotionally and socially mature individuals, able to adjust to the needs of others and of society. She believed that movement lay at the heart of cognition:

While learning ... to turn on the belly, to roll, creep, sit, stand and walk, [the baby] is not only learning those movements but also how to learn. He learns to do something on his own, to be interested, to try out, to experiment. He learns to overcome difficulties. He comes to know the joy and satisfaction which is derived from this success, the result of his patience and persistence. (Pikler, 1940: 73)

A team of early childhood researchers in Australia have been involved in a two-year project studying the lives of babies and toddlers who attend childcare. Through the use of an innovative technological approach, Sumsion and colleagues at Charles Sturt University have been attempting to see the world through the eyes of infants and toddlers. By using a webcam attached to a headband or hat and worn by the children in the project for brief periods of time, it has been possible to gain what has been described as a ‘baby’s eye view’. Early indications suggest some fascinating findings about how young babies socialize with one another in quite sophisticated ways. Yet, perhaps for professionals who spend their days in the company of infants, these early findings from Australia about children’s interest in one another may not be so very surprising. Communication between babies in the first year of life is not a new subject of interest, for example a film of the same name was made by Goldschmied and Selleck in the 1990s, long before the technological explosion of more recent years. However, the everyday minutiae of young children’s lives captured on film, over a two-year period, is original and distinct. The Australian project will undoubtedly contribute to our understanding of life from a baby’s perspective.

In England, two researchers (Goouch and Powell, 2010) have been working with a group of baby room practitioners across two local authorities. The uniqueness in this particular project has been the
introduction of a social network site, NING, set up as a private space where those in the project can discuss elements of their practice.

When we talk of babies, toddlers and young children, we must think of learning in a broad sense. When we talk of babies’ learning, it is not necessarily talk about ‘curriculum’, in the traditional sense of the word, that we think of, but something else, something different. Infant-appropriate pedagogies are pedagogies of listening (Rinaldi, 1999; Scott, 1996), of looking (Elfer, 2005, 2011) and of loving (Lally and Mangione, 2006; Page, 2011a). It has also been long established that it is the warm, responsive and interactive relationships that key adults make with young children that enhances their disposition for language and learning (Bruner, 1983; Landry et al., 2006; Rogoff, 2003; Vygotsky, 1978). For little children, learning is about self and place and space and relationships. The traditional language of education does not always enable us to say what it is we need to say when we are trying to conceptualize, identify and articulate the intricate, moment-by-moment development of young babies. It is not always enough.

In the next chapter we reflect on how research affects our understanding of the learning and development of infants and young children.

Further reading