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The role of play

Play outdoors as the medium and mechanism for well-being, learning and development

Felicity Thomas and Stephanie Harding

This chapter explores:

- Finding stimulation, well-being and happiness through play
- The development of children intellectually, physically and emotionally
- How children learn outdoors: physically, cognitively, emotionally, socially and spiritually

Value: Play is the most important activity for young children outside.



Outdoor play matters to children because it offers alternative opportunities for physical, emotional, cognitive and spiritual growth compared to the built environment. Play is the means through which children find stimulation, well-being and happiness, and through which they grow physically, intellectually and emotionally. Play is the most important thing for children to do outside and the most relevant way of offering learning outdoors. The outdoor environment is very well suited to meeting children's needs for all types of play, building upon first-hand experiences.

What does 'play' mean today? It is a word that is used all the time and because of this has little meaning. The Collins dictionary has 38 different definitions. There is much to read about play theory, but not a lot of definition. Perhaps this is because play is individual and elusive and therefore cannot be generalised in a definition. Helenko, as quoted by Holme and Massie (1970), saw as an essential difficulty of defining play that it could not be isolated from other more definable activities.

However, whatever we mean by play there is a long tradition of valuing the educational importance of play, nature and the outdoors, and this became most explicit when

Friedrich Froebel's students started to settle in England and establish kindergartens from the middle of the 19th century (Garrick, 2009; Lawrence, 1969). At this time, the *garden* was seen as a place to nurture children's spiritual as well as their cognitive and physical understandings and skills. Margaret McMillan (1919) continued this tradition in her work with young children, but her emphasis was on building up their emotional and physical health and resilience. Susan Isaacs' (1930) work at the Malting House School in Cambridge continued to value the particular importance of the outdoors as a context for cognitive and affective development. In the later part of the 20th century this emphasis was lost for a while but is now reasserting itself in England through the mechanism of the Early Years Foundation Stage (EYFS) curriculum (DCSF, 2008b). The Forest School movement, which strives to support children's confidence and self-esteem as well as co-operative skills (Knight, 2009; Murray and O'Brien, 2005), and government-funded initiatives, such as the Play Builder programme, that are addressing the need for unstructured play and physical exercise (Brady et al., 2008), both recognise the role of outdoor play in supporting children's learning and development.

Tina Bruce has very much informed the view of play developed at our centre and her definition of *free-flow play* below explains how play is utilised as a mechanism for learning:

We can say that free-flow play seems to be concerned with the ability and opportunity to wallow in ideas, experiences, feelings and relationships. It is also about the way children come to use the competencies they have developed. It is the way children integrate all their learning... (Bruce, 1991: 42)

This idea of play being a mechanism for the integration of learning is especially relevant to what takes place outdoors, and the reason for this is the greater autonomy children have both to direct their learning and to interpret their sensory experiences. The natural world is more controlled by the weather, season and temperature than by the human hand, and this means that the learning potential is both broader and deeper because it has not been limited by one or more person's ideas or ethos relating to the process of education.

'Playfulness' is one of the most important dispositions to support children's learning and we feel children have to be able to be doing the following to be 'playful':

- understanding imaginary worlds
- being a playful partner with both children and adults
- exploring opportunities for imaginary or pretend play with a range of materials and found objects
- observing positive and mutually respectful relationships
- actively taking risks in playing and developing self management
- developing the ability to make choices
- playing spontaneously initiated games

- moving towards a sensitive awareness of verbal and non-verbal play signals
- embracing creative thinking.

Every day children play in the garden doing these things. The outdoors provides an environment which allows children to freely explore their feelings, ideas and relationships, supporting their learning and development through using the natural world to stimulate and shape their play.

So what does learning and developing through play look like in the outdoors?

In considering play and its role in learning it can be useful to focus on different areas of development, while still acknowledging the holistic nature of play and that any episode of play would be embracing more than one, and possibly all of these areas at the same time.

Physical learning

Physical learning in the outdoors has been given heightened importance recently with current concerns around child obesity, but physical exercise and movement is closely linked to cognitive development. Physical activity increases the flow of blood to the brain and thereby benefits brain activity, and the use of tools and large equipment or resources encourages the development of fine motor skills and hand/eye co-ordination. Just as importantly, children learn about the world around them through movement – what Piaget called ‘thought in action’. Children need to experience the world through their senses and movement before they can develop ‘mental maps’ and abstract thought. The outdoors as a place to learn offers more, and a greater range of, sensory and movement opportunities. In particular, it allows for larger scale movements and more spontaneous, faster, louder expression of these. In addition it offers whole-body experience of cause and effect, such as the influence of gradient on movement when sliding down a slide in different ways. These opportunities for access to fresh air and whole-body movement also encourage increasing robustness, spatial understanding, muscular control and *proprioception* (body awareness). In play outdoors there are opportunities for using large whole-body movements in imaginative and symbolic play, and particularly in superhero play. It also provides a context for rough and tumble play which is closely linked to self-management, self-control and collaborative play. In the outdoors children can set their own challenges, which are often complex and requiring problem solving and creative thinking rather than a fixed outcome. This supports what Craft (2002) describes as ‘little c creativity’ and ‘life-wide resourcefulness’ which strongly underpin more formal approaches to learning.

Cognitive learning

Problem solving around real activities promotes cognitive learning. The garden encourages greater observation and attention, and stimulates curiosity by its provision of a great diversity of sensory information that changes on a daily and sometimes



Image 1.1 Stamping in a puddle

hourly basis. For example, a child visiting the same site six times may see it differently each time because of changes in season, vegetation, weather and temperature. This can prompt a range of observations, investigations, questions and hypotheses. An increased understanding of the natural world springs from closer experience and is associated with observation skills. Outdoor provision which is diverse and varied includes support for this area of knowledge at a sensory level as well as at a knowledge and skills level. Children are able to feel the wind on their face, hear the grass whispering, see leaves changing colour, appreciate the fragility of flowers. They can smell rain, flowers and herbs. They can gain an understanding of the food chain by planting seeds, watching them grow, harvesting them and savouring and comparing the tastes, and they can observe, handle and care for living creatures. With this quantity and great diversity of sensory information they are more likely to be able to make connections with other sensory experiences and learning in other contexts.

Case study – Jake went up the hill

Jake, aged 3 years, constantly played with the water at the top of the hill. He spent a long time pouring water down the pipe and running down the hill to see it arrive in the beach area. However, the water always got there first. Jake wanted the water to constantly go down the pipe so he could watch it arrive in the beach. The adult asked him questions to provoke his thinking.

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A: Why doesn't the water go down the pipe?

J: Because it goes down there (pointing down the hill.)

A: Why does it go down there?

J: Because it does.

A: How could you stop it going down there?

J: Make a wall.

A: What could you make a wall with?

This started Jake experimenting with things in the garden which might make a wall. Firstly he collected dandelions and daisies in a wheel barrow and tipped them in place. They were washed away. The adult asked more provoking questions. He next tried twigs, leaves and grasses. These also were washed away. He then brought bark chippings and these too were washed away. Over a number of weeks he looked for heavier and heavier things to make into a wall until he decided to try the large logs that were scattered around the garden. These were heavy and took a lot of effort to move. He got his friend Cassie to help him. When the logs were in place, he found that the water washed around them and under them. Again the adult asked more questions and encouraged him to observe what was happening. Eventually he started to transport the sand from the beach area up to the stream, again with Cassie's help. Together they made walls with wet sticky sand which kept the water from flowing down the hill, but as the dammed water got higher and stronger the sand started to crumble and parts of the dam would flow away. Again the adult asked questions around,

A: I wonder how could you stop the sand falling down?

A: I wonder what would keep the sand together?

These were difficult questions. The adult produced some different materials such as plastic, leather, felt and paper. Jake wrapped the materials around the walls of sand. The adult made some bags of different sizes and left them in the beach area. Jake saw them at once and told his friend Cassie to fill them up with sand. He then carried the bags of sand up to the stream and positioned them across the stream to make a dam. The bags and sand held. He had found a way to make the water go constantly down the pipe.

Jake continued for the rest of the year to work with the sand bags and stream. He had understood that by positioning the bags in different places he could make the water in the stream flow down many various paths. Through real experience he had learnt about water flow and how 'man' can divert and change this flow. Jake had been supported by an adult who was sensitive to his play, who had informed her understanding through close observation and who guided, but never directed or inhibited, his thinking.

Jake demonstrated many of Froebel's principles as defined by Bruce (2009):

- *Practice should begin where the learner is.* It was Jake's interest that started and sustained this learning.

- *We must link, and interconnectedness is crucial.* Jake was learning about all the properties of the objects he found to build his dam and how some of them worked better together.
- *Children need both freedom and guidance, according to the laws of opposition.* Jake was free to follow his own ideas but was supported in this through guidance, not instruction, from the adult.
- *Children should, at every stage, be that stage.* The expectation of the adult was completely led by Jake's growing understanding.
- *We should live with our children.* The adult had closely observed Jake throughout the year to enable her to support and guide his thinking and learning.
- *Play holds the source of all that is good.* This activity consumed Jake's play for a whole year and led to deep level learning.
- *The only competition is with yourself.* It was Jake's desire to know and understand more that led to him fulfilling this task. It had nothing to do with anyone else's requirement of him.

Jake learnt through his play about making choices; he took risks and organised a friend to help him. He made real discoveries through experimenting and observing.

The larger the area and more varied the topography, the more opportunities are provided to develop and consolidate increasingly complex mental mapping of the area and spatial awareness (Palmer and Birch, 2004). For example:

Harvey takes a group of children into the woods, 'follow me' he says.

He turns to the adult and says, 'we are finding the dragon'.

Harvey is being a leader. He is using his imagination and creating a dragon story which other children can take part in. He is confident and assured. He is able to communicate his own thoughts and ideas. He understands that 'the woods' may hold danger and is clear about leading the other children into this area. This was a spontaneously initiated game.

Complementing this are the opportunities to support individual children's learning styles and schemas (Athey, 1990), especially transporting (using bags, buggies and wheelbarrows), connecting (using ropes), trajectory (using wheeled vehicles and tools such as hammers and spades) and enclosure (den-making and role play). It also provides a context for making many collections of items and thereby supporting the beginning of the concepts of classification and ordering.

Role play in the garden has a different quality in that it can involve more travelling and more physical movement and expression. It also stimulates more imaginative transformations. For example, Ellie found some straight twigs and then looked carefully to find some circular seed heads. She attached the seed heads to the twigs and presented them to a friend as a gift of a lollipop. Other children used sticks as wands and as their superhero weapons. There is also more flexibility in the play in terms of being able to move and flow easily from investigative to imaginative play and back. For example, on a dewy autumn day children carefully observed the spiders' webs in the bushes and trees and then these became the evidence of



Image 1.2 Pattern making with natural materials

'baddies'; but when they saw the spiders move on the webs, they returned to observation and hypothesis regarding the spider's role. Associated with role play is the different quality and use of language in the garden. Large distances and the opportunity to use loud sounds without offending others gives language use other dimensions. Often children who use little language indoors are encouraged to be more verbal by the space and quality of the outdoors, while those who are articulate use a richer range of language and are stimulated to engage in conversation inspired by their sensory experiences (Murray and O'Brien, 2005). Children can transfer their play from the indoors to the outdoors in a way that deepens and enriches their learning.

Case study – Bill's xylophone

Bill enjoyed playing the xylophone in the classroom, spending time watching adults and children play. He went into the garden and collected lots of logs of a similar cylindrical shape and size. He carefully arranged the logs around the inner ring of a large tractor tyre. He found himself a stick and sat in the middle of the logs to play his xylophone.

Bill was making his own imaginary world and exploring opportunities for pretend play with a range of found objects. He was transferring his knowledge from one experience to another. He was developing the ability to make choices. He carefully selected the sizes of logs he needed. He was embracing creative thinking.



Image 1.3 Exploring the properties of snow

Linked to the sensory nature of the garden is a more scientific aspect of learning; the opportunity to observe changes in materials, such as ice melting, compost decaying, seeds sprouting and clay hardening. Often these have an element of time or sequence related to seasonal change or life cycles, and this too is an important aspect of learning and acquiring knowledge.

Emotional learning

Emotional learning is supported in the garden through a direct link with sensory experience, as Tovey (2007: 16) explains: 'We learn about a place by touching, feeling, seeing, smelling, hearing it and responding emotionally. The connection between our sense and our emotions can remain powerfully evocative throughout our lives.'

In the outdoors children can also re-live experiences through their most natural channel, which is movement. This is supported by the autonomy that is more readily provided outdoors, and this in turn promotes trust and therefore rising self-esteem and confidence in their abilities. Children are more likely to be encouraged and supported to take risks and to self-manage their behaviour, enabling them to challenge themselves, to set and test their own boundaries, to understand more clearly about assessing risk, and to build resilience. Relationships with other children and with other living things are different in the outdoors. There is a necessity to appreciate other living things and their needs in a natural environment, but also opportunities for more physical testing of relationships with each other, as in rough and tumble play. The older children support and encourage the younger children by being aware of their needs, for example:

On the large climbing apparatus a child says, 'the little ones can't reach the bars, I'm going to get some blocks for them to stand on'.

This child is showing understanding and empathy with the younger children; she wants to help and encourage them. She knows how to do this as her learning in this area has been very recent. She is motivated to help and support them. She has a positive and mutually respectful relationship with them. She is supporting them to actively take risks.

Importantly, because of its size and the variety of spaces it can provide, the garden should offer opportunities for solitude and reflection (Storr, 1989). For some children, the furniture, noise, enclosed space and busyness of the classroom limits their access to quiet space in which they can be reflective or actively engaged in imagining and exploring. The garden should be able to provide for solitude and tranquillity in terms of its flexible space and its openness to the sky.

Social learning

Social learning is supported in the garden by the need to co-operate and work together, often on the real and meaningful tasks associated with maintaining the environment, such as moving sand or manure and cultivating and watering plants. These real tasks give opportunities for authentic questions, collaboration and the co-construction of ideas between children and adults, and help promote a community of learners. The best provision for outdoor play allows children more freedom



Image 1.4 Making soup together

to experiment, trusting them to do things for themselves. Because the adults are not able to control the environment in every way there is potential for a more relaxed approach to observing, rather than controlling, children's play. Children are often teachers both to their peers and to adults in terms of knowledge, but also in their uninhibited awe in response to the natural world.

Spiritual learning

In the garden there are also opportunities for spiritual learning and this provides a direct link with Froebel's thoughts about the unity of all things. Children can experience being part of an organic whole, understanding the importance of sustainability as well as developing a relationship with the natural world; they are able to feel and understand the interconnectedness of living things and appreciate their place in the world (Carson, 1998). Outdoor environments offer opportunities for engaging with and appreciating the natural world and its diversity in a way that indoors cannot. This sort of experience helps children respect life in a general sense, giving a perspective and sense of scale about how people fit into this world. Opportunities for experiencing awe and wonder at life abound in the natural environment and outdoors can also provide, if carefully planned, places to experience tranquillity and space for reflection, which are important for those children whose lives are especially noisy and chaotic.

Moving forwards



Things to think about and do

- Share memories of the things you most liked to do outside in your childhood play and your favourite places for play. What were these places like; what materials were best for this play; who else was involved in your play? How do these memories make you feel now?
- Consider how this kind of play has contributed to the person you are now and the attributes, skills and dispositions you now have. Does the way you view and deal with life now have roots in the learning and development that took place through your childhood play outdoors?
- Review the examples of play outdoors given in this chapter and discuss just how much significant learning was taking place, especially regarding the development of positive, playful dispositions.
- Review how much unstructured and uninterrupted time the children in your setting have for their own play in the outdoor environment and whether this should and could be extended.
- Observe and document what takes place in some sustained play episodes (video is very useful). Analyse these collaboratively with other practitioners and parents to gain perspectives and understanding as to what is really

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significant for the child and what deep level learning is occurring. What elements of the environment and adult support stimulated and sustained the play – could these be harnessed further to support children's play?

- Use the list from page 13–14 to help you make the outdoor play experiences of the children in your setting more 'playful' and to develop playfulness as a learning disposition.

Key messages

- Play is the most important thing for young children to do outside.
- Outdoor play matters to children because it offers alternative opportunities to the indoors that best match their ways of playing.
- Play is the means through which children find stimulation, well-being and happiness.
- Play is the most relevant way of offering learning outdoors, and is the medium and mechanism through which children grow physically, intellectually and emotionally.
- Play is the way children make connections in their learning and understanding.
- The outdoor environment is very well suited to meeting children's needs for all types of play, building upon first-hand experiences.

Further reading and resources

- T. Bruce (1991) *Time to Play in Early Childhood*. London: Hodder Stoughton.
- S. Harding (2005) 'Outdoor Play and the Pedagogic Garden', in *The Excellence of Play* (2nd edn), edited by Janet Moyles. Maidenhead: Open University Press.
- M. Ouvry (2003) *Exercising Muscles and Minds: Outdoor Play and the Early Years Curriculum*. London: National Children's Bureau.