

Learning Outside the Classroom from
Birth to Eleven

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Physical development, health and well-being: the role of physical education 'outside'

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Chapter objectives

- An understanding of the concept of physical literacy and the contribution that learning outdoors makes in the physical literacy journey
- An awareness of the additional challenge and learning opportunities offered in the outdoors in the context of outdoor and adventurous activities (OAA)
- An appreciation of the need to scaffold children's learning moving from indoors to outdoors contexts so that learning is scaffolded and success likely



In this chapter, we intend to explore the vital role physical education plays in a child's physical development, health and well-being and highlight how taking the subject 'outside the classroom' contributes an additional, very desirable, layer to a child's education. Having discussed the aims of physical education and defining terminology, we will draw on two case studies (scenarios based on actual events) to illustrate the importance of scaffolding children's learning experiences by progressing from indoor to outdoor environments. This process of scaffolding can be demonstrated across all areas of

physical education, but we have selected outdoor and adventurous activities (OAA) as a vehicle for our discussion.

Learning 'outdoors' and 'outside the classroom'

Before we embark on a further exploration of the learning opportunities offered in the outdoors in the context of outdoor and adventurous activities (OAA), it is important at this point to clarify how we intend to use the terms 'outdoor' and 'outside the classroom' in respect of our discussion. As highlighted in Chapter 1, different subjects bring particular cultural expectations, and as physical educationists we have always seen the school hall, the sports hall, the swimming pool, the playground, and/or the grass pitches as our classroom. The muddy pitch in the darkening gloom of a December afternoon is as much 'a classroom' as the well-lit, centrally heated hall, for this is where high-quality teaching and learning regularly takes place in physical education.

Indeed, one of the authors recalls the start of a games lesson when an excited Year 1 group were finding it hard to focus on the short teacher-introduction. Understandably the children wanted to get moving; but they needed to receive brief instructions first! The teacher explained that the football pitch was an outdoor classroom and the same rules regarding listening, cooperating and respect applied as in the indoor classroom. It was a message the children understood and as a consequence the children's behaviour changed and opportunities for learning increased. Here we found the power of socio-cultural norms for schooling beneficial!

If contexts such as the playground and the pitches are considered as the physical education teacher's classroom, then 'outside' the classroom must be understood as a context beyond these everyday facilities. There is then a sound case for defining 'outside' the classroom in physical education as being 'off the school site' either in the immediate outdoors of the local community, or further afield.

However, we recognise that 'outside' may be understood as equivalent to 'outdoor' and that there are important messages to be communicated about learning in physical education in any outdoor context. Thus, in this chapter, we will attempt to examine both learning 'outdoors' through the use of the school grounds and learning 'outside the physical education classroom' through the use of the local environment and residential centres.

Physical education and the concept of physical literacy

As teachers of physical education we find ourselves in a fortunate and unique position. As previously mentioned, unlike other areas of the curriculum, there has always been an expectation that physical education should take place in a variety of contexts, both inside, outside and 'outside the classroom'. Consider this statement and its implications in terms of communities of practice (see Chapter 1). Historically, however, it has been found that some teachers see the value of physical education as being merely an opportunity to provide children with a change of scenery and the chance to 'let off steam' in a large outside space and therefore evaluate the effectiveness of their teaching on the 'busy, happy, and good' principle (Placek, 1983). Whilst this view has no place in today's understanding of the value of physical education (for where is the learning if the children are merely 'letting off steam?'), it could perhaps support the idea that physical education was the first curriculum area to realise the value of learning 'outdoors' and/or 'outside the classroom'.

In order to understand the important role of physical education, it is necessary to consider its aim and to develop a rationale for it being an essential and central aspect of the primary school curriculum. The Association for Physical Education states that,

the aim of physical education is to develop physical competence so that children are able to move efficiently, effectively and safely and understand what they are doing. (2008: 32)

Physical education, then, is the principal subject in the curriculum where the focus is on developing the child's physical competence and confidence and whose core purpose is to provide opportunities for every child to learn through their physical embodiment. Whilst the 'physical' plays a central role in physical education, it should also be recognised that high-quality physical education is a holistic experience, helping the child to develop intertwined and inseparable physical, cognitive, social and emotional capacities.

During the Early Years Foundation Stage and Key Stage 1, physical education plays a crucial role in helping children to develop their fundamental movement skills. By the age of 7, children have the capacity to have reached the mature stage of Gallahue and Ozmun's (2006) fundamental phase (a developmental term relating to an approximate age span of 2 through to 7). Doherty and Bailey (2003) highlight research that indicates an appropriate level of physical skill enhances self-esteem, which creates a feeling of well-being and

confidence. Clearly, lifelong health and personal well-being, brought about by active and healthy lifestyles, are important outcomes of physical education, which are more attainable if the core purposes of physical education (e.g. developing physical competence and contributing to one's physical literacy) are achieved.

Conversely, however, a child may not develop efficient and effective fundamental movement skills and whilst this may be the result of a movement difficulty, it is just as likely to be the result of a lack of appropriate instruction, opportunity to practise and encouragement by the teacher (and/or the parents). This can inevitably result in a lack of enthusiasm on the part of the child which can further perpetuate, and contribute to, the child's movement difficulty, negative self-perception and unwillingness to participate in physical activity (Gallahue and Ozmun, 2006). It is the teacher's responsibility therefore, to ensure the physical education programme provides success orientated, developmentally appropriate instruction; opportunities for the children to practise their developing skills; and plenty of encouragement. In doing so, teachers will be able to identify children who require further support through the implementation of movement intervention programmes in order to avoid the continuation of this negative cycle, which could potentially lead to inactivity and health problems in later life.

As children enter Key Stage 2 they should be entering a period of their development in which they can begin to specialise (Gallahue and Ozmun, 2006). That is, they have become fluent in the fundamental movement skills and are ready to begin using these skills in increasingly complex situations. It is during Key Stage 2 that the children should further develop their ability to use their physical capacities in changing contexts; to be able to read the environment and adapt and respond accordingly.

An understanding, and acceptance, of the concept of physical literacy is very helpful in supporting primary school teachers to appreciate the aims of physical education. Whitehead defines physical literacy as:

Appropriate to each individual's endowment ... the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout life. (2010: 11)

Over recent years it has become increasingly accepted that high-quality physical education plays a major role in an individual's journey towards developing their physical literacy, as well as providing children with an opportunity to be active and contributing to the health and personal well-being of the children through the physical learning context that it provides (afPE, 2008).

Learning 'outdoors' and 'outside the classroom' through outdoor and adventurous activities (OAA)

Prior to the inclusion of outdoor and adventurous activities (OAA) in the Physical Education National Curriculum (DfEE, 2000) and the findings of the House of Commons Education and Skills Committee in 2005 which led to the Learning Outside the Classroom Manifesto (DfES, 2006a), children through the decades have taken part in both school-based outdoor and adventurous activities (involving problem-solving, cooperation, trust, challenge and creativity in the school grounds), and experiences 'outside the classroom', usually in the form of a residential experience, or excursion to outdoor activity centres (for more specialised activities such as orienteering, abseiling, caving, canoeing and rock climbing).

The prevalence of outdoor adventure education suggests that policy-makers, outdoor educators, teachers, parents and indeed children believe these activities to be of value (Gair, 1997). Evidence of the potential benefits of learning in the outdoors, and more particularly experiences that involve adventure, challenge and risk, has been provided by Rickinson et al. (2004), who suggest that well-managed outdoor and adventurous activities can have a positive impact on self-esteem and self-confidence. There is also evidence that these activities can have a lasting impact on participants. During her research, Waite (2007) asked practitioners in primary schools, early years settings, nurseries, preschools and play groups to describe a memory from childhood of a significant experience in the outdoors. Responses were grouped into four emergent themes, with 'adventure, risk and challenge' having 135 incidences of reported memories. Some of the sub-themes that emerged included exploration, tree climbing, camping and lighting fires. Waite concluded that 'challenge and overcoming difficulty ... appear important factors for the design of memorable outdoor learning experiences' (2007: 344).

Indeed many researchers attribute positive outcomes to the inclusion of 'challenge' in the form of actual or perceived risk and the outdoors (Boniface, 2006; Ewart, 1983; McKenzie, 2000). Boyes and O'Hare believe that the 'interrelationships of perceived risk and competence is one of the key aspects that define outdoor adventurous activities' (2003: 64) and the juxtaposition of the two elements are evident in Martin and Priest's (1986; Priest, 1990) Adventure Experience Paradigm. They suggest that optimum benefits are evident at the 'peak adventure' stage, or the 'risk threshold' (Gair, 1997: 48) when an individual's competence is equal to the risks involved and the experience is generally viewed as 'positive and educational' (Boyes and

O'Hare, 2003: 64). This argument is furthered by Whitehead, who surmises that when an individual reads their outer world (i.e. the environment) and responds to it appropriately, they are further developing their physical literacy, as the interaction is effective, and ultimately 'the interaction will have added to the individual's knowledge, self-confidence and self-esteem' (2010: 3).

Conversely however, if an individual's competence level exceeds the level of risk, it is likely that boredom will result as the individual will be under-challenged. More concerning, however, would be where risk levels exceed competence levels, as this may result in unacceptably high levels of anxiety or when facing real, rather than perceived, risk lead to 'devastation or disaster' (Martin and Priest, 1986). Mortlock (1984) claims four stages, which can be seen as a continuum, ranging from 'play' through to 'misadventure', are apparent in any outdoor journey. He highlights the role that real and perceived risk play in the development of 'frontier adventures' whereby,

the person has fear of physical harm, or physical or psychological stress ... If he succeeds, he has experienced what I term 'frontier adventure' ... He has feelings of satisfaction, if not elation, about the result. (Mortlock, 1984: 23)

Brown suggests the 'comfort zone model', which is widespread within adventure education literature, 'is based on the belief that when placed in a stressful or challenging situation people will respond, rise to the occasion and overcome' (2008: 3).



Thoughts on theory

- What sorts of learning theory perspectives appear to be operating here? On the one hand, there seems to be a community of practice in adventure education that suggests pushing beyond the comfort zone is important as a psychological breakthrough in terms of character development. Yet, the awareness of the individual's competence levels suggests that this is a personal point. How also does this optimum challenge square with Forest School pedagogy (see Chapter 12) where success is assured through breaking down tasks into achievable steps? Where too is the 'place' in this internalised experiential model?

This clearly raises a number of pedagogical issues. It is imperative that an individual's previous experiences are taken into account when planning outdoor and adventurous experiences. Whilst differentiation in

any area of the curriculum is vital, Woodhouse believes that unfortunately when planning OAA activities for children there is a 'tendency to think first that "the blindfold trust walk is a good activity, I'll do that with the pupils next week"' (2003: 114). The idiosyncrasies of each participant and the subjective nature of risk and challenge demands that there should be a variety of developmentally appropriate, success-orientated activities and approaches, as without careful scaffolding the increase in perceived risk may prove too much for some children. Teachers of primary school children know their pupils well and will have developed an understanding of each child's strengths and weaknesses (see Figure 2.1 in Chapter 2 which illustrates how the contingent facilitator manages differentiated response). It might also be pertinent to mention that where physical education is taught by outside sports coaches during planning, preparation and assessment time, the teacher's knowledge of the children's physical capacities may not be as sound as it should be. The outcomes we would be looking to achieve through OAA activities (e.g. skills, leadership, teamwork, problem-solving, creativity, trust) can be scaffolded in physical education from Early Years throughout Key Stage 1, Key Stage 2 and beyond. As with all learning, challenge and success in increasingly complex situations are the essential ingredients as this causes the pupil to re-evaluate the taken-for-granted.

Notwithstanding the level of adventure present in the activities themselves we should also acknowledge that the perceived risk brought about by an unfamiliar outdoor environment may in itself provide a high level of challenge for some, often younger, participants. Mortlock suggests, in relation to his four-stage model, that 'a cow in a field, or climbing over a gate, can be stage III [frontier adventure] for some youngsters' (1984: 25).

The Physical Education National Curriculum dictates that challenges should take place in 'familiar and unfamiliar environments' (DfEE, 2000: 133), therefore it might be appropriate to begin teaching and learning in the place the children are most familiar, the classroom. Kimball and Bacon support this view, recommending that adventure education activities should be 'structured so that success and mastery are not only possible, but probable' if the development of self-esteem is to be achieved (1993, cited in McKenzie, 2000: 21). We suggest therefore that careful planning and effective teaching will ensure that success is probable as children's learning can be scaffolded by progressing from inside, to outdoors, to 'outside the classroom', as this presents further appropriate challenge, and will extend and enhance learning. However, we should also bear in mind that children in Foundation Stage are more used to managing their indoor

and outdoor learning themselves than children in later stages of primary education (Waite, 2011).

Orienteering activities could begin in the classroom during a geography lesson with the children being taught to orientate a simple map in order to find a range of hidden objects or clues. The progression of this learning to the context of a physical education lesson, in a larger, slightly less familiar, indoor space such as the school hall and then to the school grounds, increases the difficulty and the level of perceived (because all the necessary risk assessments are in place) risk and therefore the level of challenge. This process of scaffolding allows the children to gain the skills, knowledge and understanding required to build confidence, which will develop motivated learners equipped to meet further challenges. The process also allows the teacher to monitor each child's progress so that teaching can be differentiated and learning personalised. Although at first sight this might appear an essentially psychological process, the scaffolding can clearly also be understood on a socio-cultural plane of focus, in that children are gradually accustomed to 'what we do here' (see Chapter 1 and the following case study.)

Case Study

Scaffolding outdoor and adventurous activities – playground to residential

Chloe (age 11) is participating in an OAA residential with her year group. The obstacle in front of her is a granite tor on Dartmoor; and she is halfway through her first climb. She is stuck, unable to climb higher; she is ready to give up and wants to come down. She freezes and begins to panic. The instructor begins to coax Chloe and points out where the next foothold is. The teacher accompanying the group repeats and reinforces the instructor's words. Chloe doesn't move, she has reached her 'panic zone' and is unable to think coherently.

The other children watch intently, waiting quietly because the instructor and teacher are talking. One by one, the children begin calling out words of encouragement. 'Go on Chloe!' 'You can do it Chloe!' The children become more and more persuasive and Chloe takes a deep breath and starts climbing again. She reaches the top, abseils down and receives cheers and 'high fives' from her peers.

The trust Chloe showed in her peers and the support they gave her was not a chance occurrence. It was a moment that the children had been guided towards. Throughout Key Stage 1 teachers used Sherborne Devel-

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opmental Movement (Sherborne, 2001) as a platform for activities designed to help children understand 'caring, sharing and against' relationships and to develop an understanding and appreciation of their physical capacities. In Year 3, the children had worked on team-building in OAA lessons in the playground and on the playing field. They also had an over-night stay at a residential centre just a few miles from the school. In Year 4, their OAA lessons took place in a local park, with the children working in small groups building on their orienteering skills which sometimes took them out of view of the teacher, thus developing a sense of group responsibility. In Year 5 and 6, the children accessed outdoor pursuit opportunities provided by the local school sport partnership. By the time the Year 6 week-long residential arrived, a whole school approach, a knowledgeable subject leader, receptive class teachers and well-prepared children had resulted in a common understanding that each individual would be travelling their own journey and might need support along the way. As a result of participating in high-quality physical education, the children already had respect for each other and understood that they all have personal strengths and areas for development. They were supportive of their peers as they challenged themselves to achieve their individual potential.



Thoughts on theory

- Consider what aspects of the case study throw light on how learning might be taking place in this series of outdoor experiences.
- What is the learning that is happening and who is doing it?
- How is it being facilitated?
- What theoretical planes of focus are helpful in understanding the pedagogy employed here?



Points for practice

- How might you scaffold the children's learning so that activities are developmentally appropriate and success is not only possible, but probable?
- How could you balance the competence of the children with the risk of the task and involve the children in the assessment of risk, so that they begin to learn how to keep themselves safe?
- How might you utilise the resources that are available to you in your school, its grounds and the local area?

Overcoming the barriers to learning in the outdoors

If the benefits of learning outdoors in both familiar and unfamiliar environments are so widely accepted, why are we not exploiting the opportunities available to us? Perhaps some teachers are not as ready and willing to commit to the outdoors as their pupils are. Waite et al. suggest that some adults may 'be averse to getting cold or wet in the name of learning' and that these attitudes are barriers to learning beyond the confines of the classroom walls (2006: 52). Paradoxically, as highlighted in Chapter 1, this may be as a result of their own childhood and schooling, as children who had not had access to the outdoors in their childhood were far less likely to choose to spend time in the outdoors as adults. In addition to this it could be argued that a lack of appropriate hours spent on physical education during initial teacher training may also contribute. If trainees are not convinced of the special nature of physical education, if they feel they lack the expertise to organise (and manage) children in the outdoors, or if they feel being outdoors is outside their comfort zone, then it is little wonder some teachers use avoidance strategies.

This makes it even more important that practitioners break this negative cycle and venture outside, avoiding excuses that it is too hot, too cold, too wet or too windy. Children want to move; they need to move. They need the relative freedom that the outdoors provides. They are remarkably resilient and can cope with the changing environment as long as they are appropriately prepared and appropriately dressed, as we see below.

Case Study

The challenge of a changing environment

Jonny, age 10, is participating in an OAA residential with his year group. The fourth day is a 4-hour trek on Dartmoor. Accompanied by a suitably qualified instructor from the activity centre, and a class teacher, the group of 12 pupils are responsible for map reading and guiding themselves around a course. During the trek, the group experiences four changes of weather – it begins as a clear sunny day, rain falls after 30 minutes and by the hour mark, heavy mist has descended. By the time the pupils stop for lunch, snow is falling and continues to do so as children eventually find their way back to the mini-bus. Jonny finds the trek exhausting. It is the farthest he has ever walked; he was late to sleep the previous night, and the terrain was difficult. By the end of the trek he is tired and wet, but happy. The instructor comments on how well the children took the changes in weather in their stride.

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However, the children were used to working outside in all weathers, because of actions taken during a unit of work using invasion games, when they were in Year 4. The first lesson, focusing on practising dribbling skills, took place during the first week after the summer break. It was a hot sunny afternoon and Mrs Bell, the class teacher, ensured the children had applied sun screen, that they were appropriately dressed and had access to drinking water. Two weeks later it was raining and whilst the children had basic kit, they did not have a full change of clothes, nor did they have track suits or towels, so Mrs Bell reluctantly stayed in the classroom. Whilst she was quite happy to stay dry, she was uneasy about the loss of physical education time. In consultation with the head teacher and the physical education subject leader, Mrs Bell discussed the effect of the inclement weather on outside games with the children in her class. They discussed reasons for and against going outside whatever the weather and created a list of things they needed to address if they were to play in the rain. Guided by Mrs Bell the children wrote a letter to their parents, which resulted in everyone bringing in a kit bag with a complete change of clothes and a towel.

Next time it rained, the lesson went ahead as planned. Everyone got soaked and to begin with several of the children were not happy (they later explained they were anxious because they felt they were doing something wrong). By the end of the lesson, which was shortened so no one became too cold, everyone was laughing and jumping in puddles. The original learning objective was achieved, but more importantly, the children understood the need for them to dress appropriately in order to cope with the unpredictable British weather.

It was of no surprise to anyone therefore that when it snowed in the spring term Mrs Bell and the children once again 'dared' to go ahead with their outside lesson. Despite 3 inches of snow, Wellington boots, hats, gloves and coats were donned and Mrs Bell endeavoured to teach the planned lesson. Within minutes, the footballs began to 'grow' and became heavy as the snow stuck to them. Instead of the planned 'three versus three' games of football, a snowball fight became the vehicle through which the learning objective of how to outwit opponents was achieved. The lesson ended and everyone returned to the classroom to change into dry, warm clothes. It was a lesson the children would never forget and one that would serve them well on their OAA trek a few years later.

This case study highlights the quandary that exists for practitioners as they gaze out the window at the ever-changing UK weather conditions. Some, like Mrs Bell, will see the value of learning outdoors despite (or because of) the weather and choose to think creatively and see the

potential difficulties presented by the elements as opportunities to develop the children's learning (Waite et al., 2006). Unfortunately, however, other practitioners will cancel their physical education lessons, choosing instead to stay warm and dry inside. The English government set a target that all children (aged 5–16) should have 2 hours of curriculum physical education and the opportunity to access a further 3 hours of sport or physical activity beyond the curriculum per week. These targets (often referred to as the 'Five Hour Offer') are designed to lead children into lifelong participation in physical activity and, with the expertise of the teacher and significant others, can support each child on their physical literacy journey. They reinforce the importance of taking physical education 'outside the classroom' in the broadest sense so that it becomes 'what we do' for children throughout their lives. As previously mentioned adults are more likely to spend time in the outdoors if they were encouraged to do so as children. Activities that don't involve any equipment, such as walking and running, can be enjoyed throughout life, especially when the demands of work and family impinge upon an adult's time.

Waite and Rea highlight the important role that outdoor adventure centres play in developing this love of the outdoors and respect for the elements that come with it, stating that 'overcoming difficulties presented by the weather is embedded in the principles espoused by outdoor centres' (2007: 57). Children who are away from home on residential experiences are given the responsibility of packing their own 'kit' for the day's activities and have to live with the very real consequences of forgetting anything. Davis et al. believe that such responsibility offers 'powerful learning opportunities ... about learning to live with their mistakes' (2006: 8) (see also Chapter 11).

Reading the environment

A changing outdoor environment, brought about by the weather that typifies each of the UK's seasons, provides a further challenge for children. Life indoors is more regulated, while outdoors is unpredictable. Skills and learning developed in an indoor 'closed' context can be transferred to an outdoor 'open' context and further refined and developed. For example, running on wet grass requires additional and different skills to those required for running on dry grass – increased awareness, balance and an understanding of how to control the body (perhaps by slowing down and/or anticipating changes in direction). Likewise, on rock hard ground in the summer, when the grass may become rutted, the runner will need to make adjustments. Trying to run with, or against, a powerful wind is a unique

experience (a following wind helps children experience pure speed, whilst running into the wind requires strength and determination). Fascinating discussions will result, as children begin to analyse what happens to their body and to their performance. Understanding and reading the environment are an important part of developing one's physical literacy, but the skills required need to be learned, experienced and practised. We should not deny children an opportunity to develop an appreciation of the natural environment; a wet, cold or windy day should be seized on by the teacher as a special learning opportunity for their pupils.



Points for practice

- Avoid cancelling lessons when weather conditions are inclement.
- Encourage children to become accustomed to the wonderful variety of weather and make the right choices in terms of clothing and equipment.
- Encourage children to take responsibility for their own kit at school and ensure they understand that having the correct clothing and equipment is an essential precursor to the residential experience and to being physically active in the outdoors.
- Ensure that the children you teach are receiving 2 hours of high-quality physical education; plus one hour of extra-curricular school sport; plus access to 2 hours of community-based sport and/or physical activity, in order for them to continue on their journey towards becoming physically literate.



Summary

This chapter has outlined a number of factors that need to be taken into account during a child's physical education in the early years and primary setting. Physical education is important if we are truly concerned about children's holistic development. Physical education will often be a child's only regular experience of learning 'outdoors' and provides numerous opportunities for the experience to be scaffolded. Learning can begin in a closed familiar indoor environment and can ultimately be transferred to an open unfamiliar outdoor environment. Challenges can be enhanced by working outdoors and ultimately 'outside the classroom' – these challenges

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encourage children to move outside their comfort zones, where they utilise skills such as reading the environment and personal risk assessment.

Physical activity in the outdoors should be an essential element when planning a curriculum that addresses physical development, health and well-being, as it encourages children to develop an appreciation for our environment and provides an opportunity for them to develop physical competence and confidence in their physical literacy journey.

Further reading

- afPE (Association for Physical Education) (2008) Manifesto for a World Class System of Physical Education. *Physical Education Matters*, 3 (4).
- Gallahue, D.L. and Ozmun, J.C. (2006) *Understanding Motor Development*. Madison, WI: Brown & Benchmark.
- Physical Literacy website: www.physical-literacy.org.uk
- Sherborne, V. (2001) *Developmental Movement for Children*. London: Worth Publishing.
- Whitehead, M. (2010) *Physical Literacy Throughout the Lifecourse*. London: Routledge.