Outdoor learning for children aged 2-11: perceived barriers, potential solutions.

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Abstract

The UK government is beginning to recognise value in learning outside the classroom after a period of concentration on raising narrowly defined standards through didactic teaching methods, but barriers to outdoor learning appear to remain in practice. This paper draws on a recent study of outdoor experiential learning opportunities, examining attitudes, practice and aspirations of practitioners and children in educational and care settings for children between 2 -11 years within a rural county of England. Data collection methods included a largely quantitative survey sent to all 1,933 settings for care or education of children aged between 2 and 11 in the county and rich qualitative case studies of five settings representing different types of provision for the early years.

Practitioner perceptions of the barriers to implementation of a resource which is widely believed beneficial will be presented. The paper critically evaluates the apparent differential value and uptake of outdoor learning opportunities at different ages, in different provision and across the curriculum. Barriers to implementation expressed by practitioners are also explored alongside the means that some practitioners use to overcome them. The paper will suggest some possible implications for policy, practice and research in the field of outdoor learning for early and primary years.

(This paper draws on an earlier paper given at EARLI, Budapest, 2007)

Introduction

Until modern times, learning outdoors was our only choice. In some respects, it is odd that we have come to ‘do learning’ in special buildings between certain hours with regular breaks from ‘learning’ called playtime and holidays, when, in fact, much of our learning continues to happen in the temporal and spatial interstices around that context (Waite, 2007b; Illeris, 2009). Nevertheless, the classroom or indoor setting is now so firmly regarded as the usual place for learning that significant government efforts and research evidence about how the outdoors may enable learning (DfES, 2006; Rickinson et al., 2004) are needed to redress the balance from the dominant core subject standards performativity agenda in the UK (Gorard, et al, 2002; Burbules and Torres, 2000). Learning outdoors addresses broader aims for education such as:

- physical wellbeing (Hetherington, 2001)
- emotional and social well being (Millward and Whey, 1997) and
- different kinds of learning (Laevens, 2000)

However, years of delivery modes for teaching mean that this turn to ‘nature’ may rather be perceived as ‘unnatural’ for some children and teachers. A universal welcome for its characteristics cannot be guaranteed (Waite and Rea, 2007), but many young people are reported to value relevance, enjoyment, variety and choice in their curriculum (Lord, 2006) and it could be argued that these qualities are inherent in much outdoor provision. Furthermore, one potential attraction of the outdoors may be as a contrast to traditional formal learning, more commonly found in classrooms (Broderick & Pearce, 2001). However, blunt division into formal (indoor) and non-formal (outdoor) learning fails to recognise the
complexity of many educational experiences (Malcolm, Hodkinson and Colley, 2003; Waite and Davis, 2007).

The study described in this paper examined current practice and aspirations for outdoor learning for 2-11 year olds in a rural county of England and explored how aims for outdoor learning related to practice. The research took two forms: a largely quantitative survey sent to all 1,933 settings for care or education of children aged between 2 and 11 in the county and rich qualitative case studies of five settings representing different types of provision. The research was funded by a local authority to provide recommendations for development of this area. This paper considers the barriers staff perceived in accessing the outdoors for learning and ways to overcome them.

**Methodology**

First, to gather information about what settings currently did in terms of outdoor learning, a survey with a mixture of open and closed Likert type questions was developed. The survey was sent to all settings for children aged between 2 and 11 years in the county (N=1933). We received responses from 334 settings (17% response rate). However, this masks distinctions between different providers of early years care and education with only 9% of minders responding (n=71) compared to 28% of primary schools (n=116). While this low response may reflect a low priority for outdoor learning in settings, difficulties in obtaining accurate contact details, particularly for childminders, and the pressure of other work in settings may also account for some problems in returning the survey. Nevertheless, a survey method enabled access to the practice of a much broader group of practitioners than would otherwise have been possible within the funding and timescale available and yielded both quantitative data, which was analysed using SPSS, and qualitative data, which was explored with N6 qualitative software package.

However, surveys have disadvantages in that it is difficult to explore relatively ill-defined topics, and outdoor learning is one such umbrella term (Dillon et al., 2003). Furthermore, where interesting practice is mentioned, it is impossible to probe further. We determined therefore to carry out purposive sampling for five case studies through selection of ‘good practice’ revealed through the surveys and through discussion within the research team and local authority education advisors. We used a pragmatic definition of ‘good practice’ as judged by ‘the enthusiasm both of the students and teachers involved in the […] way of working; for it to seem to improve learning; and for changes in practice to feel doable and sustainable over time’ (Fielding et al., 2005). We did not intend these settings to be examples of the ‘best’ way to provide for outdoor learning, but their engagement with outdoor learning made them especially well placed to raise issues for debate. The two-stage mixed methodology (Cresswell, 2003) was chosen to explore different perspectives, thus enabling a richer understanding of motivations underpinning outdoor learning opportunities offered in five settings: a childminder, a playgroup, a private nursery, the foundation stage within a school and a primary school as a whole.

Three visits were made to each setting. Data sources included interviews with staff and children within groups. Observations were also video recorded of three sessions involving outdoor learning and playtime. Children provided annotated photographs of areas that they valued around the school. Displays around the school, documentary evidence and conversations in the staff room also contributed to the data. All participants were given or had explained a university approved ethics protocol and were told that they could withdraw from the research if they wished. Additional permissions were obtained to allow videoing and photography on site.
Data was analysed by transcribing interviews and making notes of observations, then through a process of content analysis comparing emerging themes (Glaser, 1992) across different forms of data as a form of triangulation (Seale, 2000). The themes were collated into a narrative of the story of outdoor learning which was sent to each setting for corroboration of its authenticity. The findings presented below represent themes that emerged from the questionnaire analysis and this process.

**The experiences children have outside the classroom or indoor setting**

Some respondents to our survey included qualitative commentary on the sorts of outdoor activities they offered and their purposes and benefits. 150 of the respondents mentioned activities that primarily take place outdoors. 74 of the respondents mentioned outdoor activities that can be done indoors as well. This suggests that about two thirds of respondents valued the outdoors for its unique contribution to learning (Edginton, 2002). Nearly half the respondents (145) stated their purpose as following Foundation Stage Curriculum Guidance. This signals that governmental guidance is a strongly influential factor in the opportunities offered (Waite, 2007a & b). Benefits reported as deriving from the activities appeared to be split fairly evenly between personal (125) and learning (115). A further 67 respondents identified the benefit of the activity as social. It is fairly surprising that only 25 respondents commented on the health benefits that their chosen outdoor activity had on the children in light of concerns about obesity in children in the UK but perhaps this reflects that the activities are valued as more than simply an opportunity to ‘let off steam’. However, the broader aims for education reflected in the comments implies rich benefits are attributed to these activities beyond narrow learning outcomes. Table 1 shows the number of settings reporting that outdoor activities of various kinds take place daily.

**Table 1: Relative incidence of types of outdoor experiences taking place daily for children by different providers of childcare and education**

<table>
<thead>
<tr>
<th>Types of experience</th>
<th>Childminders (0-11 yrs) N=71</th>
<th>Pre-school (3-5 yrs) N=120</th>
<th>Primary school (4-6 yrs) N=65</th>
<th>Out of school club (5-11 yrs) N=15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical activity</td>
<td>57 (80%)</td>
<td>92 (77%)</td>
<td>37 (57%)</td>
<td>7 (47%)</td>
</tr>
<tr>
<td>Personal and Social Development</td>
<td>48 (68%)</td>
<td>78 (65%)</td>
<td>28 (43%)</td>
<td>7 (47%)</td>
</tr>
<tr>
<td>Other areas of learning, e.g. language and literacy</td>
<td>40 (56%)</td>
<td>61 (51%)</td>
<td>20 (31%)</td>
<td>4 (27%)</td>
</tr>
<tr>
<td>Environmental education</td>
<td>33 (47%)</td>
<td>29 (24%)</td>
<td>4 (0.6%)</td>
<td>1 (0.6%)</td>
</tr>
<tr>
<td>Creative activities</td>
<td>34 (48%)</td>
<td>44 (37%)</td>
<td>13 (2%)</td>
<td>4 (27%)</td>
</tr>
</tbody>
</table>
There appears to be a trend for decline in all forms of outdoor learning experiences between early years and later stages of primary education, illustrated in Figure 1. A decline in physical, personal and social opportunities with age may be because testing of core subjects in the national curriculum creates pressure on the broader curriculum for schools. It may also reflect a distinction between ‘play’ and ‘work’ in school settings, so that learning opportunities during play are not valued. The lower levels reported by out of school clubs may be due to the clubs not always taking place every day and also the data is derived from a very small number of respondents. The decrease in other areas of the curriculum being addressed may also be due to a shift from Foundation Stage areas of learning to more subject-based curricular goals within the school setting. This change is likely to be modified in the light of recent primary curriculum reviews in England. We are currently exploring the transition between the Foundation Stage and Year 1 of primary school in some Economic and Social Research Council funded research (Waite, Nichols, Evans and Opie, 2009).

Older children at primary school did not experience any of the above on a daily basis according to the 51 schools responding to the 6-11 age group survey. Physical activity was the most common activity reported as occurring weekly or more. About 80% of children aged 6-11 had experience of other curriculum areas outside a few times each term. About 60% had outdoor opportunities for personal and social education several times a term. For a quarter of children aged 6-11 environmental education outside was rare. This could be attributed to the perception that less time is available for addressing curriculum and personal, social and health goals outside in a busy curriculum.

The low incidence of outdoor environmental education is surprising given growing concern for the environment in broader society and this pattern may change in response to such concerns with time. The higher levels reported by childminders could indicate that they have greater personal control over experiences for children in their care and also may reflect a quicker responsiveness to social awareness of these issues, enabled by their greater freedom to manage their time.

Figure 1: Percentage of settings reporting types of outdoor activity
Another key feature is the low reported levels of daily outdoor creative activity reported by schools for both the 4 to 5 year olds and 6 to 11 year olds, which represents a significantly different experience for children when they move from pre-school and childminder to mainstream schooling. This finding squares oddly with English governmental initiatives to stimulate more creative teaching and learning in schools (NACCE, 1999; DfES, 2003). It supports a hypothesis that staff are reluctant to take risks beyond the prescribed curriculum (Waite, 2007b; Passy and Waite, 2008).

It is clear that there is a marked decline in the use of the outdoors between the foundation stage, early years of schooling and key stage 2 from the age of 6 years. Yet the majority of practitioners rated the potential for learning outdoors as excellent or good (see Table 2). Notably a higher proportion of teachers rated the potential for learning outdoors more positively than preschool practitioners, but this is not reflected in the activities made available for children in many schools. The higher proportion of ‘preschool’ practitioners who rated potential as low may also be attributed to some settings not having outdoor areas dedicated for their use adjacent.

Table 2: Potential for learning outdoors

<table>
<thead>
<tr>
<th>Settings/ Potential for learning outdoors</th>
<th>Excellent or good</th>
<th>Low or irrelevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childminders</td>
<td>93%</td>
<td>0%</td>
</tr>
<tr>
<td>Preschool</td>
<td>84%</td>
<td>12%</td>
</tr>
<tr>
<td>Primary school</td>
<td>96%</td>
<td>1%</td>
</tr>
<tr>
<td>Out of school clubs</td>
<td>91%</td>
<td>0%</td>
</tr>
</tbody>
</table>

From comments in the questionnaires and the case studies, the potential for learning appeared to be rooted in the following values: relevance, enjoyment, variety and choice (Lord, 2006). (For more detailed discussion of these, see Waite, 2007b and in preparation.) However, barriers prevented full uptake of that potential and in the following section we look at the reported factors that restricted settings’ tendency to use the outdoors and some of the factors which appeared to help overcome them.

**Barriers preventing learning outdoors and some solutions**

Participants in our research mentioned a number of barriers which impinged on their ability to use the outdoors to enhance learning. Funding (131) was the most commonly mentioned barrier in developing outdoor learning, but a further 102 respondents commented that ‘attitudes’ prevented the potential of outdoor learning being realised. For example, one school commented:

*Money, time, lethargy from other people and lack of motivation and enthusiasm. Too much paperwork to do and not enough time for practical child centred activities. Health and safety restrictions.*

In some settings (71), the nature of the outdoor space available to them was perceived as a barrier and a further 36 respondents commented on other external forces, such as the weather, being responsible for not meeting their aspirations. 18 respondents commented on the safety of the space available as a barrier.
All learning is important, but as we have little chance of a safe outdoor environment, as a crèche we have to place higher importance on other resources for learning.

A tension seemed to exist between inside (formal) and outside (informal) learning for practitioners in our study, despite their interrelationship (Malcolm et al. 2003). Some commonalities about how participants in the research overcame that tension can be summarised as follows:

• **Belief in the value of outdoor learning**
  Practitioners spoke of their conviction that outdoor learning offers something distinct and enriches the curriculum delivered indoors. Children spoke of and demonstrated their enthusiasm in and for the outdoors. Without a strong personal motivation (Zembylas, 2007) for offering outdoor contexts, it is suggested that its potential will be diminished (Waite, 2007a). This would mean that even if government guidance endorses the use of the outdoors, individual practitioners need to be committed to it in order for it to maximise its effectiveness for children’s learning. Currently, some respondents to our survey seemed wary of following their own convictions about its value as these were seen in competition with measured and inspected performance. Furthermore, our respondents may be a subset of practitioners interested in the potential of outdoor learning so that other practitioners may have less will to include it. Bixler et al. (2002) found that the most effective way to convince staff of the value of outdoor learning is by them experiencing it for themselves.

• **Willingness to overcome obstacles**
  Strong determination to overcome barriers could be seen in some of the case studies and questionnaires where staff showed commitment to finding ways to solve problems preventing access for children to the outdoors. In such settings, barriers such as the type of space adjacent to the setting, risk aversion or the weather would not deter the practitioners from taking children out to experience the outdoors. For example, the childminder in the case study had limited outdoor space but regularly took children in her care to woodlands and river nearby. In the pre-school case study, small groups of children were taken to experience ice on ponds to manage safety concerns. The private nursery staff in the case study developed independence in the children by modelling excitement and enthusiasm for the outdoors even if there were difficulties with access. The two primary schools involved in case studies had marshalled community and parental support, applied for funding and committed school budgets into developing rich outdoor environments for their settings. Yet, for others, these barriers appeared insuperable.

  If I had a larger outdoor area, a second pair of hands to help and more time in which to read articles regarding planning in/use of the outdoor area I feel that my practice would be better.

• **Involvement of children in planning and use of outdoors**
  Survey comments described actively involving the children in deciding aspects of their outdoor experience, thereby contributing to pupils’ sense of ownership and responsibility. One respondent (498b) noted:

  *When children learn outdoors, particularly in environments away from school they often seem more able to become fully involved in the activity and develop a necessary confidence to cope, knowing that the security of the familiar classroom is not there. Facing new challenges and overcoming obstacles, the children develop a greater self-awareness.*
This was evident in the interviews and observations in the primary school case studies where the children continued to put forward ideas and evaluate their outdoor environment for themselves and others in the school community. A sense of autonomy is instrumental in making learning which is enduring and deep (Korpela, Kytta and Hartig, 2002).

- **Sensitivity to appropriateness of free and structured activity**

Funding for appropriate resources alone was insufficient, and lack of resources was not necessarily insurmountable. The childminder in the case study had no funds to buy equipment but made resources from free boxes and used simple buckets in the forest so the children could gather objects of interest to them. In examples of successful outdoor learning, staff responded contingently to children’s interest and learning needs, making themselves the key resource in facilitating children’s access to outdoor learning resources. They allowed ample time for discovery forms of learning, which children valued for their authenticity.

For example, one respondent (92a) commented:

> I feel that some children learn more happily outdoors and particularly benefit from using large open space. For some children this large freedom increased and develops play – particularly boys whose behaviour can improve outside where there is more space. There are certain concepts which can only be learned outdoors – lying down flat in grass and gazing at the summer sky is a unique and soulful experience. Most areas of curriculum can be covered outdoors.

- **The importance of challenge and exploratory learning**

An element of risk was regarded as not only acceptable but as a positive force to create more independent and socially responsible learners. Children welcomed excitement and challenge. The need for trial and error was stressed:

> Outdoor activities are essential for preschoolers. Awareness and respect of the natural world should begin early. [They need] access to managed and open areas as [they are] different from experiences in the wild places, woodlands and moorlands where the environment is stronger and more dominant. I think it is essential that children learn in controlled spaces but also areas where they must be aware of the need to care for themselves in their surroundings as well as caring for their surroundings also. (1122a)

Outdoor learning could be particularly important for children who struggle to maintain concentration in classroom type settings and seek out ways to introduce direct experience into their learning. As one respondent (198a) explained, the outdoors is

> a place where children can be noisy, space to move and have a sense of ownership over their learning and experiences. Children should be allowed to enjoy the rain and cold if they want to, play in the mud and explore nature. Many children learn best when they can learn through direct experiences and through physical, fun activities which can take place outside. All children’s learning styles need to be addressed including those who don’t learn well sat at a table with pencil and paper.

- **Enjoyment and engagement of the whole child**

Benefits identified by staff and children included physical, personal, social and curricular. Observations often noted the complete absorption of children in outdoor activities. The freedom afforded in an outdoor context seemed to support behavioural, personal and social development. Children in the primary school case study spoke of significant
personal changes during residential trips. A questionnaire comment from one setting (672a) suggested that:

*Most children settle quicker outside, so thus able to be happy and more receptive to learn. There is freedom to explore and space for them to be physical and let off steam, also enabling learning.*

Another respondent (460b) extended the benefits of outdoor contexts to the adults who taught the children.

*Adults and pupils need to interact with the world around them in a relaxed and open manner. Learning outdoors can add awe and wonder to knowledge and experience. Chance occurrences can provide unique opportunities to observe closely and explore ideas, events, cause and effect in a highly motivating way. The rigid structure of the classroom is removed and all can participate thus generating confidence and self esteem.*

A teacher’s love for the alternative chosen learning context appears to be instrumental in creating opportunities for it (Waite, 2007a; Zembylas, 2007). The rigidity of classroom relationships appears to be dissolved in the participatory pedagogy of the outdoors, which seems to be stimulated by more open relationships and attitudes to discovering rather than delivering knowledge.

**Educational implications**

Two UK government initiatives, in particular, signal an increasing awareness of the need for broader pedagogical approaches to enrich children’s learning. The manifesto for learning outside the classroom in the UK (DfES, 2006) has major implications for the development of this area of learning, but it is still unclear how practitioners will use the guidance therein to inform their practice. The theoretical underpinning for the document is rather thin and does not make the rationale or potential methods for promotion of non-formal learning clear. More recently reviews of the English primary curriculum have suggested that cross-curricular study which makes use of learning contexts outside the classroom should gain more prominence (Rose, 2008; Alexander, 2008). The Qualifications and Curriculum Authority is working on developing guidance for teachers to support this move. Our research was therefore timely in providing some early indications of the priorities and preoccupations of children and practitioners to complement these top-down initiatives. The findings were summarised for the constituent groups and a research and practitioner conference on ‘The Great Outdoors’ for over 150 delegates was organised to support continuing professional development in this area.

Of particular concern, however, is the gap between perceived potential and the actual use of the outdoors for learning. Part of the problem appeared to lie in a risk-averse culture.

*It is a resource which has become a bit of a taboo to older children. Risk assessment is naturally a consideration but can be restrictive if overdone. Child to adult ratio can reduce this natural risk and allow children to enjoy the outdoor environment and learn to take risks as part of their development. Problem solving is developed in the greater freedom offered by the outside.* (1026)

But conflict with perceived concentration on standards also had a profound effect. It would seem that practitioners’ values are not robust in the face of perceived alternative agenda in government documentation. We have commented elsewhere (Waite, 2007a) on the tension for practitioners when rhetoric of government documents, such as the Excellence and Enjoyment (DfES, 2003), are not matched by assessment and performance measurement that reflects them. Feedback from the research and practitioner conference also indicated that
continuing professional development which has practical elements in which staff themselves get involved in the outdoors is highly effective in breaking down entrenched ways of working based on static indoor environments.

Research implications

Further research is needed on the purposes and activities out of school clubs, which are part of the government’s extended schools initiative (DfES, 2007) and on the learning afforded by residential trips, as the children in our study mentioned these as an exciting source for outdoor and adventurous activities. In addition, further research on how the barriers to more schools and settings accommodating learning outside the classroom might be overcome would also be well timed to support the changes in the curriculum following recent reviews (Rose, 2008; Alexander, 2008). It might be beneficial to focus on particular claimed benefits and track how settings accommodate them to identify whether these benefits are evident and what factors contribute. A larger sample would help to test how general the findings of this county-based study might be. Furthermore, comparative research in different countries would help to elucidate some of the cultural underpinning which affects the sorts of outdoor activities made available by settings (Takako, 2004). All these lines of research would gain from more thorough consideration of theories of learning that might better account for reported benefits.

Conclusion

The study has provided rich insights into an English context for practitioners’ thinking regarding outdoor learning. Emergent values point to ways in which utilisation of alternative contexts might support children’s learning (Waite, 2006a). Nevertheless it is clear that considerable conflict exists between those values and practice and that some of this stems from a perceived mismatch between broader aims for education and the narrow assessment criteria by which children and settings are currently judged. The sharp fall in outdoor opportunities for learning noted in mainstream schooling in our study, particularly from age 6, suggests that practitioners’ values are being diluted by other pressures. If outdoor learning is truly to become a more integrated mode of learning in the primary years as suggested by the Rose Review (2008), there needs to be closer congruence between the purpose of education and the way in which success is evaluated. Government documents suggest that broader purposes for education are being increasingly acknowledged (Passy and Waite, 2007). This may mean that assessment practice which privileges measurement over meaning and facts over understanding is increasingly modified to accommodate qualities, skills and dispositions which are less easily quantified. There is little point in measuring quantifiable, defined and discrete outcomes, if they do not align with the salient benefits of outdoor learning, which encompass an altogether more holistic and qualitative endeavour. Yet current emphases on measurement remain a barrier to the uptake of outdoor opportunities for learning for many practitioners; especially as this is compounded by reduced funding for what is currently seen as peripheral activity. English governmental initiatives tinkering with educational provision to meet perceived changing needs results in inconsistent messages and uneven practice rather than addressing the fundamental question of what sort of education is required, a debate which may yet find resolution through transformation of the primary curriculum (Rose, 2008; Alexander, 2008; ).
References


