

Outdoor Education Provision in Scottish Schools

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ABSTRACT

This paper examines the frequency and nature of outdoor learning provision in Scottish schools, with specific attention paid to teachers' approaches to learning outdoors, and it considers what further support and professional development teachers need to progress their practice. This enquiry is timely as limited data has been gathered over the past ten years (see Higgins *et al.* 2006 and Mannion *et al.* 2007) and little is known about how the policy document *Curriculum for Excellence through Outdoor Learning* and associated Education Scotland support has influenced outdoor learning provision. Questionnaires were administered to primary and secondary schools (n=90 returns) across four local authority areas. The results indicate that secondary schools are keen to develop outdoor learning provision and they need support to do so. Also, there is an increased use of school grounds as a context for learning within the primary school sector. In light of these findings and recent developments within national education, recommendations are made for both in-service and pre-service teacher training.

INTRODUCTION

Outdoor learning in Scotland is explicitly positioned as a pedagogical approach to delivering 'experiences and outcomes' from all eight curricular areas (Learning and Teaching Scotland, 2006: 2)¹. Despite a growing body of literature concerning the potential of outdoor learning experiences, and a number of positive developments in outdoor learning and classroom-related activities throughout the UK at policy level (Department for Education and Skills, 2006;

¹ See Education Scotland (2013) for curriculum area specific experience and outcomes guides for outdoor learning.

Learning and Teaching Scotland, 2007) the overall picture is variable in Scotland (Higgins and Nicol, 2013; Nicol *et al.* 2007; Mannion *et al.* 2007; Higgins *et al.* 2006) and the rest of the UK (Rickinson *et al.* 2004).

In Scotland, despite Curriculum for Excellence (CFE) having been implemented in 2009, the policy document *Curriculum for Excellence through Outdoor Learning* (CFEOL) only surfaced in April, 2010. The 28 page document uses stronger language than has been seen before in outdoor learning policy, arguably anywhere in the world. For example, it states that, ‘the journey through education for any child in Scotland must include opportunities for a series of planned, quality outdoor learning experiences’ (Learning and Teaching Scotland, 2010: 5). This statement indicates that schools and teachers should begin to develop outdoor learning experiences as part of a child’s formal schooling and it appears that there is a growing imperative to do so.

Additionally, recent national educational policy advocates teachers to incorporate outdoor learning into their practice. For example, the report and recommendations from the One Planet Schools Working Group has led the Scottish Government to adopt a national programme for ‘Learning for Sustainability’ (see Scottish Government (2012a) for further details). The intention is that ‘learning relating to sustainable development, global citizenship and outdoor learning is experienced in a transformative way by every learner in every school across Scotland’ (Scottish Government, 2012a: 11). In parallel with this development the General Teaching Council for Scotland (GTCS) recently revised their Standards for Registration and require (from September 2013) that all teachers in Scotland must now incorporate ‘Learning for Sustainability’ (as above) into their practice (GTCS, 2013). As such the message from the Scottish Government and the GTCS is clear; outdoor learning alongside global citizenship and education for sustainable development is an integral, everyday experience for all children who pass through the Scottish education system (see Higgins and Lavery, 2013). Therefore a review of current outdoor learning provision in Scotland is timely.

The rationales for this research inquiry are twofold. First, as limited data has been gathered in this area during the past decade an audit on outdoor learning provision in Scottish schools is overdue (see Higgins *et al.* 2006; Mannion *et al.* 2007). Second, it is unknown how the advent of the CFEOL policy guidance has influenced outdoor learning provision. Specifically, we sought to understand the frequency and nature of outdoor learning provision in Scottish schools and, in particular, teachers’ approaches to learning outdoors. We also asked teachers what further support and training they needed to develop their practice. Rather than surveying schools within each of the 32 local authorities, all schools in four local authorities were targeted. Therefore, the audit reflects outdoor learning provision in those areas rather than national provision *per se*. The local authorities selected afforded a mix of urban and rural (as defined by the Scottish Government urban rural classification system using figures from their 2010 study) (Scottish Government 2010) and deprived and non-deprived schools (according to the percentage of children receiving free school meals). We do not intend to conduct a strict comparative analysis between the 2006 study and the current research, due to their inherent differences, which includes: differing

sample sizes; various geographical locations; and, most obviously that the 2006 study focused solely on geography and biology teachers, whereas the current study includes teachers from all subject areas. Instead we refer to the 2006 study as a key reference point in our understanding of the provision for outdoor learning and the development of teachers' attitudes towards this approach. Further, the authors of the 2006 study form part of the research team for the current study and their contribution has ensured that we have built upon the previous study and provided an accurate representation of both the previous and current approaches.

BACKGROUND

Current outdoor learning research context

Research interest in outdoor learning is relatively recent, with the first peer-reviewed journal in the UK (Journal of Adventure Education and Outdoor Learning) being launched as recently as 2001. While there is a substantial body of literature surrounding possible benefits and unexploited potential of outdoor learning (see Amos and Reiss, 2006; Dillon *et al.*, 2006; O'Donnell *et al.*, 2006; House of Commons Education and Skills Committee, 2005), high quality empirical UK studies are scarce. Much of the literature cited in such reviews is not UK-based, despite the established significance of local contexts. Furthermore, there are 'blank spots' in the literature, which, according to Rickinson *et al.* (2004: 56-57), include studies of teachers' understandings of the outdoor learning process. Recent studies in Scotland have identified the lack of 'outdoor confidence' among teachers and the difficulties they experience when trying to get children out of the classroom (see Higgins *et al.*, 2006; Nicol *et al.*, 2007; Dillon, 2010; Mannion *et al.*, 2013). Further, Ross *et al.* (2007: 169) reveal that teachers felt that 'effort and cost' were being weighed against curricular objectives, which prompted their question: 'how are teachers' claims of non-curricular benefits to be legitimised in teachers' professional contexts, and what weight should be given to them anyway?'. They go on to claim that the idea of legitimacy 'can be understood in teacher decision-making as helping to prioritise the expenditure of 'effort' and, more widely, the expenditure of money' (p. 169). This paper addresses aspects of Ross *et al.*'s question as it acknowledges the teachers' professional context by highlighting contemporary national educational policy developments (for example 'Learning for Sustainability' and GTCS revised Professional Standards) which lend legitimacy to the use of outdoor learning within all schools in Scotland.

Current outdoor learning provision

The inconsistent and generally limited access Scottish children have to practical activities outdoors has been identified by Mannion *et al.* (2007), who in a study of 51 Scottish primary, secondary and pre-schools in the 2006 summer term found that provision (opportunity, duration, location) was highly variable. While primary children's opportunities were often greater than those of secondary pupils, many of the latter had no outdoor learning during the survey, and the average for those

who did was 13 minutes per week. There are less widely reported, but significant inequities in the access to these kinds of educational experiences. These apply between and within schools in England, Wales and Scotland, and in relation to indicators of social inequality (again, such as proportion of free school meals), key stages, and proportions of pupils with special educational needs (Mannion *et al.*, 2007; O'Donnell *et al.*, 2006; Dillon *et al.*, 2006).

The reasons for this variable picture are complex, but the general tenor within the literature (see Mannion *et al.*, 2007; O'Donnell *et al.* 2006; Higgins *et al.*, 2006; Dillon *et al.*, 2006) refers to 'wholehearted support' from teachers for outdoor learning. However this support exists within the context of a 'crowded curriculum and a rigid assessment system' alongside 'increased perception of the risks' (Rickinson *et al.*, 2004: 9) of children being harmed by hazards outside the school building.

The extant literature informed our two principal research questions. The first question had two parts: How often are teachers delivering the formal curriculum outside the classroom? Where are these lessons taking place (in the school grounds, local neighbourhood, residential centres)? The second question asked teachers what additional support, resources, and professional development they required to more effectively teach outdoors. Additionally, we are using this study as a foundation for a further theoretical investigation that features aspects of Bronfenbrenner's Ecological Systems Theory (1979) and elements of complexity theory (see for example, Davis and Sumara, 2006). This framework will enable us to more deeply examine how outdoor learning experiences can be contextualised within the broader socio-cultural systems that influence young people and teachers within and between schools, and at a personal, social and familial level.

METHODOLOGY

Sample

Four local authority (LA) areas were strategically sampled to ensure that there was a balanced geographical representation across Scotland. The four areas were Angus, Edinburgh, Highland (sub-region: Inverness, Nairn, Badenoch, Strathspey), and West Dunbartonshire.

Further, a stratified sampling system was developed to ensure adequate representation across the population range. Four key strata were included. First, we considered urban and rural locations based upon the Scottish Government's Urban Rural Classification System (Scottish Government, 2010). This classification system was applied to the four LA areas alongside figures taken from the 2010 Scottish Government *6-Fold Urban Rural Classification* by Local Authority. This process ensured that each classification type was accurately represented. In summary, the range comprised very rural (Highland), rural (Angus), urban (West Dunbartonshire) and very urban (City of Edinburgh). We acknowledge that there are degrees of variability within such a classification system as there will be pockets of urban areas within areas classified as rural.

However, it is an effective classification system for the purpose of managing a study population and reducing a sample to a reasonable size.

Second, we considered the relative balance between primary and secondary schools, as well as the variability between school sizes. To enable this investigation, the Scottish Government Analytical Services Unit (schools) provided current school roll figures for primary and secondary schools taken from the 2011 Scottish Government School meals supplementary data (Scottish Government, 2011). After analysis, the final sample covered approximately 10% of primary schools and 12% of secondary schools in Scotland and featured a range of school sizes.

Finally, the degree of deprivation (taken from the registration for free school meals (FSM) figures) within each local authority was considered. Despite FSM figures being a slightly contested index for deprivation, it is still widely accepted within the education sector and was deemed appropriate for use in this context. The range of degree of deprivation within West Dunbartonshire is consistently above the Scottish average (for FSM registration) in both the primary and secondary school sector. Edinburgh is closest to the national average, and Angus and Highland fall slightly below that, respectively (Scottish Government, 2011).

Questionnaire Design

Two separate questionnaires were developed for primary and secondary school settings in order to reflect the terms used to describe the range of curriculum levels. For example, primary schools refer to Early (pre-school to end of P1), First (to end of P4) and Second level (end of P7), whereas secondary schools cover Third and Fourth level (S1-S3) and the Senior phase (S4-S6). For clarity, Early through to Fourth level is referred to collectively as the Broad General Educational phase. Both primary and secondary versions of the questionnaire aimed to identify current outdoor learning provision and current practitioner needs (for example, further support and practical training, both pre- and in-service). To achieve this both questionnaires covered four main areas: frequency and type of outdoor learning within school; enabling or inhibiting factors that influence teachers' decisions to be out of doors; what, if any, type of support and practical training would help teachers to develop outdoor learning; and, teachers' awareness of the guidance document (CFEOL) and its influence, if any, on their practice. The contexts for outdoor learning were pre-defined as school grounds, local area within walking distance of school, local area out with walking distance of school (requires transport) and residential (involving at least one overnight stay e.g. outdoor education or field study centre). Free-text response spaces were offered throughout.

This structure reflects Higgins *et al.*'s (2006) original line of questioning, which asked Scottish geography and biology teachers what they did, what they would like to do, and what motivated or hindered them in doing it. In 2005, when they were collecting data, there was little research in the area, and the authors of the Higgins *et al.* (2006) study specifically highlighted how the learner-outcomes of such learning experiences are not well-researched, a point which becomes important when we 'consider processes of legitimising teacher motivations that

lie beyond the fulfillment of the official curriculum' (Ross *et al.*, 2007: 160). These questions have received little attention since their original audit in 2006 until recently when there has been a renewed interest prompted, in part, by the change in curriculum and the increase in advocacy for outdoor learning (see Higgins and Nicol, 2013; Mannion *et al.*, 2013; Scottish Government, 2012a; Beames and Ross, 2010; Beames *et al.*, 2009). As such, this study contributes to this developing body of knowledge.

Pilot study

The questionnaire was piloted within Gorebridge Primary School, Midlothian Council, with seven school-teachers and a deputy head teacher. This school was not one of the sample schools, therefore the pilot study informed, but did not become part of, the study proper. The pilot study established that the questionnaire was clear, legible and capable of providing accurate and reliable data. Consequently no changes were made. The secondary school version of the questionnaire was not subject to a pilot study as, apart from adapting the terminology to suit the secondary school environment, no other changes were made.

A small number of ad-hoc, informal interviews were carried out with primary and secondary teachers. These data are not included here.

Questionnaire distribution

The questionnaire was administered to the head teachers of all schools in the sample: primary (n = 228) and secondary (n = 44). They were given the option to either complete the questionnaire themselves, or pass the task onto another senior member of staff. We also included an option to be contacted for further follow-up work. The response and the follow-up rates are summarised in Table 1. A 32% (primary) and 41% (secondary) response rate was deemed more than reasonable.

Table 1: Response and follow-up rates

Local Authority	Primary schools			Secondary schools		
	Out	In	Follow-up	Out	In	Follow-up
Angus	53	17	8	8	3	2
City of Edinburgh	87	23	17	21	7	6
Highland	54	22	10	10	4	2
West Dunbartonshire	34	10	7	5	4	1
Study total	228	72 (32%)	42 (19%)	44	18 (41%)	11 (25%)

FINDINGS

There were five key findings:

1. Positive secondary school response and follow-up rate

We were encouraged by the high response rate from secondary schools, as previous work in Scotland (see studies contained within Nicol *et al.*, 2007) had found it difficult to access this sector. We also observed that support and interest in outdoor learning has developed at secondary school level. Christie's (2004) extensive evaluation of one Scottish local authority's residential outdoor learning initiative at secondary school level, found mixed reactions to outdoor learning from staff and head teachers; much work was done to develop functioning relationships with the individual schools. In 2006, Higgins *et al.* encountered a similar situation, noting that secondary schools were 'still hard to reach' due, in part, to the rigidity of their discipline and timetabling structures which provide fewer curricular opportunities for outdoor learning than do primary schools (p. 18). O'Donnell *et al.*'s (2006: 11) research reveals similar results; they state that while most primary school students (within their sample in England and Wales) were offered 'Education outside of the Classroom' experiences, secondary provision was 'more mixed and there were differences between subject areas'.

In contrast to these findings, however, the present study has gathered empirical evidence indicating that secondary schools are indeed keen to develop outdoor learning. This 'shift' may be due to the introduction of the Broad General Educational Phase, a central feature of CfE that stretches from age three to S3. As, when examined at the S1-S3 stage, it offers teachers increased flexibility both within and between subject boundaries and affords greater scope to apply their professional skills, knowledge and creativity to deliver varied, rich and rewarding educational experiences (Scottish Government, 2012b: 1). In terms of logistics and timetabling Education Scotland advise that 'learners should be at the centre of curriculum planning rather than "fitted into" curriculum structures' (p. 1). Therefore the context and opportunity for learning outside of the classroom within secondary education in Scotland, especially within the S1-S3 stage, is favourable.

Additionally, these findings clearly indicate that secondary teachers need support to develop their outdoor learning practice. The form of this support is discussed in more detail, and in reference to teachers' needs, in point 3. In terms of questionnaire returns, we recorded a 41% response rate from secondary schools, which is higher than the primary school response rate of 32%. Furthermore, secondary schools have indicated an obvious desire to continue working with us during this research project, as a 25% follow-up rate was recorded, as compared to 19% from primary schools.

2. Increased use of school grounds

The questionnaires gathered data relating to teachers' use of contexts for learning across the Early, First and Second levels in primary school and Third and Fourth levels and Senior phase in secondary. The contexts for learning reflect the categories used within the 2006 study: school grounds; local areas

within walking distance of school; local areas out with walking distance of school; and residential involving at least one overnight stay (e.g. outdoor education or field study centres). Further, teachers were asked to quantify their usage by stating whether they used each context more than, less than or the same as they did five years ago. The five-year time frame was introduced as it reflects the time lapsed between the 2006 study and the current study (the questionnaires were administered in 2011). There are a number of extant factors which cannot be controlled for, such as teachers' perceptions of usage compared to actual time spent in those contexts; continuity of teacher over the five year time-frame; the influence of weather, and cost and access to those contexts: these will all impact upon frequency of outdoor experiences. Whilst those variables are acknowledged we have assumed they will be generally similar across all schools in the study.

Responding primary school teachers reported an increase in the use of their school grounds, across all of the primary curriculum levels (early years through to P7), over the past five years. Specifically, 91 teachers provided a total of 212 responses to this question. The reason for this is because some teachers (mostly Head Teachers or those with an overall responsibility for outdoor learning) provided responses for each curriculum level, whereas others provided a single response relative to one level. Therefore, the sum of the responses presented in Table 1 is greater than the total number of respondents.

Table 2 Frequency of use of school grounds across school levels from early years to P7.

Curriculum level				
	Early (pre-school to P1)	First (to end of P4)	Second (to end of P7)	
Number of responding teachers indicating an increase in use of school grounds	58 responses or 59% of total responses covering this level	60 responses or 66% of total responses covering this level	53 responses or 58% of total responses covering this level	

We were particularly interested to see how the questionnaire results demonstrate that the use of local community areas (both within and outwith walking distance of the school), have remained comparatively stable across primary schools during this same time. Similarly, primary schools' use of residential trips involving at least one overnight stay (e.g. outdoor education or field study centre) has also remained consistent since 2006.

The increased use of school grounds within the primary sector may be attributable to a growing awareness of this context as being suitable and desirable for curricular learning; in other words, outdoor learning does not have to take place in distant places, it can be developed within the school grounds and the local community (Beames *et al.*, 2011). These authors (2011: 6) note that,

School grounds are often rich in cultural and ecological stories. The land upon which the school sits has tremendous relevance in the lives of the students, as this place where the majority of formal learning takes place, and for many children, their principal site of unstructured, informal outdoor play and learning.

Focusing on 'the local' is emphasised in recent policy guidance, which states that 'the school grounds are often the first step in taking pupils outdoors' (Learning and Teaching Scotland, 2010: 10). The document highlights the synergistic benefits afforded by this approach, which can 'engage the local community as partners who can often provide good sources of expertise, finance and other resources for development projects' (p. 10). So, while there may be increasing financial restrictions that reduce funding available for children to spend a week at a residential outdoor centre, there seems to be an increasingly higher value being placed on learning experiences that are responsive to local phenomena (see Mannion *et al.*, 2013; Sandell and Öhman, 2011; Wattchow and Brown, 2011; Beames *et al.*, 2011). Local place appears to be increasingly seen as a community asset that is worthy of deep and interdisciplinary academic examination.

Secondary schools' use of contexts for outdoor learning (e.g. school grounds, day trips, residential experiences) have largely remained stable over the past five years; very little variation was reported. This suggests that while secondary schools may wish to deliver more of the formal curriculum outdoors, they have yet to act, which, in turn, could be interpreted as another reason to develop research and professional development in this sector (see point 5 for further discussion).

3. Changes in teachers' attitudes between 2006 and 2011

In 2006, primary and secondary teachers reported time, disruption and cost as the most significant barriers when planning for learning out-of-doors (Ross *et al.*, 2007; Higgins *et al.*, 2006). Other issues such as adult/pupil ratios, transport, safety, qualifications and expertise, and weather were also highlighted. Ross *et al.* (2007) note that all of these issues combine in complex ways in different teachers' contexts, however, the key factors related to effort and cost. For example, teachers' understanding of the benefits of outdoor study varied, therefore if those whose attitudes and situations are less conducive to outdoor study are to be encouraged to take learning outdoors, there may be little point in, for example, providing extra resources, when the root cause includes understanding (or lack of understanding) of the benefits. In such cases, increasing outdoor study may also depend on some form of professional development or legitimisation of learning outdoors.

All data gathered from the primary and secondary level questionnaires, referring to enabling and inhibiting factors in terms of developing outdoor learning, were grouped thematically. The themes emerged from the data and in most cases were self-explanatory, however, some categories such as 'context', 'enhances pupil learning' and 'enjoyment', could be interpreted as ambiguous. To clarify, 'context' in this case refers to the area within and around the school and includes all references to school grounds, local places and community areas.

'Enhancing pupil learning' groups together all responses that referred to enabling factors that stem from a desire and motivation to develop, encourage and enhance pupils' learning. Finally, 'enjoyment' covers all responses that positioned pupils' enjoyment and happiness as core to their rationale for embedding outdoor learning experiences within their professional practice.

Evidence from the current primary school level questionnaires (n=207)¹ demonstrates that the top three enabling influences on teaching outdoors are 'good school grounds' (n=25), 'enthusiasm of staff' (n=24) and 'good environment locally' (n=22). Conversely, the top three inhibiting influences (n=216) were 'weather' (n=45), 'cost' (n=43) and 'staffing ratios' (n=27). A reasonable interpretation of these findings is that although the barriers to teachers taking their pupils outside remain ever-present, there are aspects of schools' cultures that can, in contrast, be regarded as positive and supportive influences on local learning outside the classroom.

At the secondary school level (n=55), the top three enabling influences were: first, 'context' (n=15), which includes links to local communities and the use of local facilities -- all of which combined to provide a relevant and authentic context for learning; second, 'enhances pupil learning' (n=11), which includes making learning more engaging, encouraging a deeper understanding from pupils, and benefitting pupils more generally; and third, 'enjoyment' (n=6), which simply refers to teachers' perception of how much fun their students were having during the outdoor learning sessions. At this secondary school level, the top three inhibiting factors (n=72) were 'cost' (n=20), 'health and safety' (n=14) and 'timetabling' (n=10).

Interestingly, 'health and safety' appeared as a greater inhibiting factor for secondary (n=14, which equates to 20% of the total secondary teachers' responses) than for primary teachers (n=21, which equates to 10% of the total primary teachers' responses). Perhaps, this difference reflects the customary use of school grounds in primary schools, coupled with the impact of recent investment in professional development and teacher support bolstering confidence at the primary school level. Whilst a correlation is difficult to establish, recent provision has grown extensively. In 2010 Education Scotland instigated a national Continuing Professional Development (CPD) programme for teachers involving staff at the University of Edinburgh which relates specifically to CfE, and was delivered in nationwide in-service programmes for teachers (~1000). There are now elective courses in teacher training programmes at several Scottish universities, and staff who teach these courses deliver related presentations and workshops for professional and academic audiences throughout Scotland and the UK.

In contrast, *local* outdoor learning in secondary schools may still be regarded as being in its infancy despite an historical involvement in day-trips and residential adventurous and environmental outdoor experiences that precedes that of the primary sector (Higgins, 2002; Cheesmond, 1979).

¹ The total number of responses is greater than the sample size as each respondent could provide numerous examples of enabling and inhibiting factors.

Higgins (2002: 149) reveals that during the 1960s and '70s outdoor education (often formalised as physical outdoor activities and based on a residential experiences) was extensively developed in Scotland (in particular the Lothian region - the area around Edinburgh) and gained international significance (see Cheesmond, 1979, for more details). Since that era, however, such secondary school outdoor learning has, according to Higgins (2002: 149) been in decline (until relatively recently) due to a shift away 'from public provision through the education service' and a 'growth in charitable private sector provision' especially in the case of residential provision. Higgins (2002: 149) summarises provision in Scotland from the late 1970s onwards and reveals that in the period of 1978-79, while primary school provision was very limited, all secondary schools had some programme of outdoor education and almost all of these schools employed staff responsible for this (see Cheesmond, 1979 for more details). Higgins then considers Smith's (1999) unpublished study (cited in Higgins, 2002) and notes that in the twenty years following Cheesmond's investigation, the situation has declined to a point where very few secondary schools have a programme of outdoor education or the capacity to staff it. Primary school involvement was somewhat more extensive, but this is not reflected in staff appointment and designated responsibilities.

The present study builds on Cheesmond (1979) and Smith's (1999) work and extends Higgins' (2002) historical summary, as we can state that in the period from 2006 to 2011, primary school provision has continued to grow and designated responsibility has developed within that sector at school and local authority level. Currently, secondary school provision continues to be variable, however, there is obvious scope and reported enthusiasm for development within the sector. Additionally, there is increasing support for continued development at primary and secondary level (Education Scotland, 2013).

Further, and in relation to the development of provision for outdoor learning, it is quite possible that the secondary sector does not have sufficient outdoor teaching role models who can serve as guides and mentors for those who might want to teach outdoors, or who may not feel confident or skilled enough to do so (these mentors may not have 'come into the system', or given the historical context, may have been lost). O'Donnell *et al.*'s (2006: 16) research supports this as they state that secondary subject heads who had received more professional development (initial teacher or subsequent) with respect to Education Outside of the Classroom were significantly more likely to have offered a greater number of school-site activities, off-site day visits and UK residential experiences than teachers with lower levels of professional development.

Returning to the issue of health and safety, our findings suggest that current concerns are not as prominent as found by Ross *et al.* (2007). This shift may reflect that what our evidence suggests is an increasing recognition among teachers and school administrators of outdoor learning as a legitimate approach to delivering the formal curriculum. This is in turn reflected in increased government policy documents (Learning and Teaching Scotland 2007, 2010), blogs (e.g. I'm a teacher, get me outside now¹), courses available at Initial

¹ See <http://creativestarlarning.co.uk>

Teacher Education institutions, and media coverage (e.g. Times Education Supplement). When combined, these influences may encourage educators at primary and secondary level to feel that they are no longer a lone, isolated voice, but part of a growing movement that has an increasingly wide base of support and guidance. Lending support to O'Donnell *et al.* (2006), others have also suggested similar supportive and networked approaches within and between schools (Mannion *et al.*, 2013: 798) and beyond formal educational contexts to external environmental organisations (Dillon, 2010: 9). For example Mannion *et al.* (2013: 798) report that collaborative approaches to planning for outdoor teaching which brought together teachers who were more experienced in an outdoor context and those who were less so, provided the more novice colleague with greater reassurance and any arising 'issues became surmountable'. Further, they suggest that teachers could develop their expertise through a process of collegiate collaboration and reflection; we would extend this and suggest that as teachers' expertise develops so too does their self –assurance in relation to their abilities, and this, in turn, could allay some of the concern that persists around health and safety.

Both primary and secondary teachers mentioned school grounds and the local environment around school as enabling factors. This reflects the growing use of school grounds at the primary level (see point 2) and contributes to the increasing national and international attention being paid to learning experiences that are place-responsive in both urban and rural environments (see Mannion *et al.*, 2013; Sandell and Öhman, 2010; Wattchow & Brown 2011; Beames *et al.* 2011; Harrison, 2010; Grunewald & Smith, 2010; Smith & Sobel, 2010; Takano, Higgins & McLaughlin, 2009; Stewart, 2004; Grunewald, 2003; Cameron, 2003). Recently, urban contexts were described as 'the defining ecological phenomenon of the 21st century' (Newman & Jennings 2008: 2), as almost half of the world's population now lives in cities (UN-HABITAT, 2008). This provides a compelling need to understand the educational value and potential of these contexts. Indeed, the theme of the 13th European Institute for Outdoor Adventure Education and Experiential Learning Seminar 2013 was 'Urban nature: inclusive learning through youth work and school work', which further reflects the significance of this emerging research agenda.

4. Positive influence of CFEOL policy guidance

The questionnaire gauged if teachers were aware of the recent policy guidance (CFEOL) and, if so, the degree to which it had influenced their delivery of the curriculum. At the primary school level, 81% of responding teachers were aware of the guidance. Most comments regarding its influence were positive and those teachers suggested that the document had provided encouraging, practical ideas that had helped them to see the relevance and value of teaching outdoors. Four teachers were not so positive: in general, they felt that 'the guidance had made limited impact as they were working in that way already'.

At the secondary school level, 74% of responding teachers were aware of the guidance document. Although most comments regarding its influence were positive, many teachers noted that the CFEOL's impact had been negligible, as their planning for outdoor learning provision was in its early stages. One

respondent, however, stated that the document had not caused any impact, as there 'was already a strong outdoor learning focus in the school'.

We can claim, then, that these findings show how the guidance document has been useful in assisting teachers to develop a greater understanding of the value and relevance of outdoor learning. Data from the secondary schools indicates that, while there is certain awareness and interest in teaching and learning outdoors, actual practice is less common. The positive integration of outdoor learning approaches into the mainstream remains more marked at the secondary level, which may be due to timetabling structures and the lack of flexibility between and within subject areas. However, CFE's Broad General Education may alleviate such inhibiting influences within the S1-S3 stage.

In summary, it appears that there is beginning to be a shift in terms of secondary teachers' understanding and acceptance of outdoor learning as a legitimate pedagogy. Notwithstanding these issues of acceptance and legitimacy, there remain issues around the practical implementation of teaching and learning outdoors in Scotland.

5. Request for more training and support

Finally, the questionnaire asked whether further support and/or professional development would enable teachers to develop strategies and approaches for delivering the curriculum outdoors. They were asked to define what type of pre-service and/or in-service training would be useful, or if no support was requested they were offered the opportunity to suggest a suitable alternative. Positive requests for support were received from responding teachers at primary (75%) and secondary (62%) level, and they suggested practical lesson ideas, ways to encourage and empower staff, ways to share resources, and skills-based programmes such as minibus training for drivers, as useful types of support.

Interestingly, the primary sector focused on ways to leverage funding, such as help with grant applications and ideas for monetary support. None of the secondary responses, however, focused on costs *per se*, and instead raised the need to encourage and empower staff and bring in (low-cost) CPD providers. As noted earlier, this may reflect the relatively early stages of outdoor learning development in secondary schools, where the focus for some teachers' seems to remain on understanding what outdoor learning is and can be, rather than on the practicalities of implementation. These findings can be considered of interest for another reason as well: as we have seen, in the 1970s, outdoor learning provision in the Lothian region was heavily resourced, widespread, and highly respected (Cheesmond, 1979). There is some irony in Education Scotland's re-introduction of a wheel that it invented decades earlier.

In terms of alternative ways to support schools that would enable the development of outdoor learning beyond training courses, the secondary sector suggestions focused principally on securing funding to enable the development of staff attitude and confidence, practical support from parents and volunteers to help with staff/pupil ratios, and the need to foster support from outside agencies (e.g. the ranger service, community organisations).

CONCLUSIONS AND IMPLICATIONS

This study provides a contemporary audit of the provision of, and support for, outdoor learning in a sample of primary and secondary schools in Scotland, and builds on research conducted in 2006 by Higgins *et al.* Currently, the policy justification and support for such provision is much stronger than it was in 2006. Indeed, the data collected for the present study pre-dates the inclusion of outdoor learning in the significant recent commitment to 'Learning for Sustainability' (Scottish Government 2012a) and the revised GTCS Professional Standards (GTCS, 2013), and these policy developments can be expected to further influence teacher attitudes and provision. Such national level support addresses points raised by Ross *et al.* (2007: 169), as it offers teachers a stronger and clearer professional justification for developing their outdoor learning practice.

This study has identified five key findings, which have informed two principal recommendations for both pre-service and in-service

First, primary schools appear to be developing locally-based outdoor learning, as there is a shift towards using school grounds and areas within walking distance from school. This may reflect an increasing awareness of the value of community and place-based education and the low-cost, authentic and meaningful context for learning that local phenomena can provide (Beames *et al.*, 2011; Wattchow and Brown, 2011). As such, future training should build on this and take account of the implications of recent initiatives such as 'Learning for Sustainability', which recommends that 'every learner should have the opportunity for contact with nature in their school grounds on a daily basis and throughout the seasons through the provision of thoughtfully developed green space for outdoor learning and play' (Scottish Government, 2012a: 30). Such commitment from national educational policy will further legitimise school grounds as a vital context for learning, and importantly, provide teachers with officially sanctioned support for developing this

Second, secondary schools appear keen to develop outdoor learning provision. Future training and guidance should be developed specifically for this sector; this would take account of the timetabling structure and subject delineation of secondary education. We are currently conducting research into the development of a secondary-specific outdoor learning programme that addresses the practicalities issues inherent in delivering aspects of the secondary curriculum out-of-doors, while capitalising on the opportunities afforded by CfE's Broad General Education within the S1-S3 stage. Findings from the present study continue to inform future work in this area.

Currently there is increasing interest, support and commitment to the development of outdoor learning from individual teachers, their schools and local authorities, and at national educational policy level. It is important that future developments, specifically professional development (both pre- and in-service) proceed in-line with teachers' needs and in relation to curricular aims and objectives. While advocacy at all levels is important, it is equally important to ensure that policy developments, central support and inspection regimes (through Education Scotland) and training courses positively influence everyday teaching practice – whether indoors or out.

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REFERENCES

- Amos, R. and Reiss, M. (2006) What contribution can residential field courses make to the education of 11-14 year-olds? *School Science Review*, 88(322), 37-44.
- Beames, S. and Ross, H. (2010) Journeys outside the classroom. *Journal of Adventure Education & Outdoor Learning*, 10(2), 95-109.
- Beames, S., Atencio, M. and Ross, H. (2009) Taking excellence outdoors. *Scottish Educational Review*, 41(2), 32-45.
- Beames, S., Higgins, P., and Nicol, R. (2011) *Learning Outside the Classroom*. London: Routledge.
- Bronfenbrenner, U. (1979) *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Cameron, J. (2003) Educating for place responsiveness: an Australian perspective on ethical practice. *Ethics, Place and Environment*, 6(2) 99-115.
- Cheesmond, J. (1979) *A research report of the outdoor education programme in Lothian Region Secondary Schools 1978/1979* Edinburgh: Lothian Region and Dunfermline College of Education.
- Christie, E. (2004) *Raising achievement in Scottish secondary schools? A study of outdoor experiential learning*. (Unpublished doctoral thesis), University of Edinburgh, Edinburgh.
- Davis, B. and Sumara, D. (2006) *Complexity and education: Inquiries into learning, teaching, and research*. Abingdon, UK: Routledge.
- Department for Education and Skills. (2006) *Learning outside the classroom manifesto*. Nottingham: DfES.
- Dillon, J. (2010) Beyond barriers to learning outside the classroom in natural environments. Online at http://www.naturalengland.org.uk/Images/LOtC-barriers-analysis_tcm6-31083.pdf (accessed 18/11/2013)
- Dillon, J., Rickinson, M., Teamey, K., Morris, M., Young Choi, M., Sanders, D. and Benefield, P. (2006) The value of outdoor learning: evidence from research in the UK and elsewhere. *School Science Review*, 87(320), 107-111.
- Education Scotland. (2012) *Scottish Schools online*. Online at <http://www.ltscotland.org.uk/scottishschoolsonline/> (accessed 28/09/2013)
- Education Scotland (2013) *Experience and outcome guides for outdoor learning*. Online at <http://www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/about/experiencesandoutcomes.asp> (accessed 20/11/2013)
- Education Scotland. (2013) Outdoor Learning. Online at <http://www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/index.asp> (accessed 25/03/2013).
- General Teaching Council Scotland (2013) *The General Teaching Council Scotland Professional Standards*. Online at <http://www.gtcs.org.uk/standards/> (accessed 18/11/2013)
- Grunewald, D. (2003) The best of both worlds: A critical pedagogy of place. *Educational Researcher* 32(4), 3-11.
- Grunewald, D. and Smith, G. (2010) *PBE in the global age: local diversity*. London: Routledge.
- Harrison, S. (2010) 'Why are we here?': Taking 'place' into account in UK environmental education. *Journal of Adventure Education and Outdoor Learning*, (10)1, 3-18.
- Higgins, P. (2002) Outdoor education in Scotland. *Journal of Adventure Education*

- and Outdoor Learning*, 2(2), 149-168.
- Higgins, P., Nicol, R. and Ross, H. (2006) *Teachers' approaches and attitudes to engaging with the natural heritage through the curriculum*. Perth: Scottish Natural Heritage.
- Higgins, P. and Nicol, R. (2013). *Outdoor Education*. In T. Bryce & W. Humes, D. Gillies and A. Kennedy (Eds.), *Scottish education* (4th ed) (pp. 620-627). Edinburgh: Edinburgh University Press.
- Higgins, P. and Lavery, A. (2013). *Sustainable Development Education*. In T. Bryce & W. Humes, D. Gillies and A. Kennedy (Eds.), *Scottish education* (4th ed) (pp. 337-342). Edinburgh: Edinburgh University Press.
- House of Commons Education and Skills Committee. (2005) *Education outside of the classroom*. Online at http://www.educationscotland.gov.uk/Images/Education%20outside%20Classroom_tcm4-391163.pdf (accessed 23/03/2013).
- Learning and Teaching Scotland (2006) *Building the Curriculum*. Online at <http://www.educationscotland.gov.uk/thecurriculum/howdoyoubuildyourcurriculum/curriculumplanning/whatisbuildingyourcurriculum/index.asp> (accessed 20/11/2013)
- Learning and Teaching Scotland. (2007) *Taking learning outdoors*. Online at http://www.educationscotland.gov.uk/Images/TknLrnOutA4_tcm4-402066.pdf (accessed 25/03/2013).
- Learning and Teaching Scotland. (2010) *Curriculum for excellence through outdoor learning*. Online at http://www.educationscotland.gov.uk/Images/cfeOutdoorLearningfinal_tcm4-596061.pdf (accessed 25/03/2013).
- Mannion, G., Doyle, L., Sankey, K., Mattu, L., and Wilson, M. (2007) *Young people's interaction with natural heritage through outdoor learning*. Perth: Scottish Natural Heritage.
- Mannion, G. Fenwick, A. and Lynch, J. (2013). Place-responsive pedagogy: learning from teachers' experiences of excursions in nature. *Environmental Education Research*, 19(6), 792-809.
- Newman, P. and Jennings, I. (2008) *Cities as sustainable ecosystems: principles and practices*. Washington, D.C.: Island Press.
- Nicol, R., Higgins, P., Ross, H. and Mannion, G. (2007) *Outdoor education in Scotland: a summary of recent research*. Perth: SNH.
- O'Donnell, L., Morris, M. and Wilson, R. (2006) *Education outside the classroom: An assessment of activity and practice in schools and local authorities* (Research Report No 803), Nottingham: Department for Education & Skills.
- Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M. Y., Sanders, D. and Benefield, P. (2004) *A review of research on outdoor learning*. Shrewsbury: National Foundation for Educational Research and King's College London.
- Ross, H., Higgins, P. and Nicol, R. (2007) Outdoor study of nature: Teachers' motivations and contexts. *Scottish Educational Review*, 39(2), 160-172.
- Sandell, J. and Öhman, K. (2010) Educational potentials of encounters with nature: Reflections from a Swedish outdoor perspective. *Environmental Education Research*, 16(1), 113-32.
- Scottish Government. (2010) *Urban/Rural classification Study*. Online at <http://www.scotland.gov.uk/Publications/2010/08/2010UR> (accessed 27/09/11).
- Scottish Government. (2011) *Scottish Government School meals supplementary data*. Online at <http://www.scotland.gov.uk/Topics/Statistics/Browse/School-Education/MealsSD> (accessed 28/09/2011).
- Scottish Government. (2012a) *Learning for sustainability report*. Online at <http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/OnePlanetSchools/LearningforSustainabilityreport> (accessed 25/03/2013).

- Scottish Government. (2012b) Broad General Education in the Secondary School. Online at http://www.educationscotland.gov.uk/Images/BGEQandA25052012_tcm4-722372.pdf (accessed 26/03/2013).
- Smith, G. and Sobel, D. (2010) *Place-and community-based education in schools*. Abingdon, UK: Routledge.
- Stewart, A. (2004). Decolonising encounters with the Murray River: Building place responsive outdoor education. *Australian Journal of Outdoor Education*. 8, 46-55.
- Takano, T., Higgins, P. and McLaughlin, P. (2009) Connecting with place: Implications of integrating cultural values into the school curriculum in Alaska. *Environmental Education Research*, 15(3), 343-70.
- UN-HABITAT. (2008) *State of the world's cities 2008/2009: harmonious cities*. London: Earthscan.
- Wattchow, B. and Brown, M. (2011) *A pedagogy of place: Outdoor education for a changing world*. Melbourne: Monash University.