

Taking Excellence Outdoors

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ABSTRACT

Scotland's new Curriculum for Excellence (CfE) appears to support learning outside the classroom but there remains no statutory requirement for Scottish pupils to learn outdoors during their school careers. Commentators have asserted the apparently strong resonance between CfE and outdoor learning but there has been little explanatory argument to support this. This paper argues that the variable provision of school-organised outdoor learning in Scotland is the result of, among other things, the perceived high cost and perceived lack of curricular relevance of such learning. We go on to show how the combination of CfE and a particular kind of outdoor learning pedagogy might tackle these problems. The pedagogy is cross-curricular and place-based; we illustrate it with a case study of a low cost programme that involves pupils planning and undertaking journeys from their school grounds as a means of learning about socio-cultural and geographical elements of their local landscape. In considering curricular relevance, we show that a historical emphasis on disciplinary subject content is one significant barrier to such outdoor learning. Curriculum for Excellence challenges this emphasis and could legitimise the kinds of outdoor learning we describe.

DEFINING OUTDOOR LEARNING THROUGH CRITIQUE

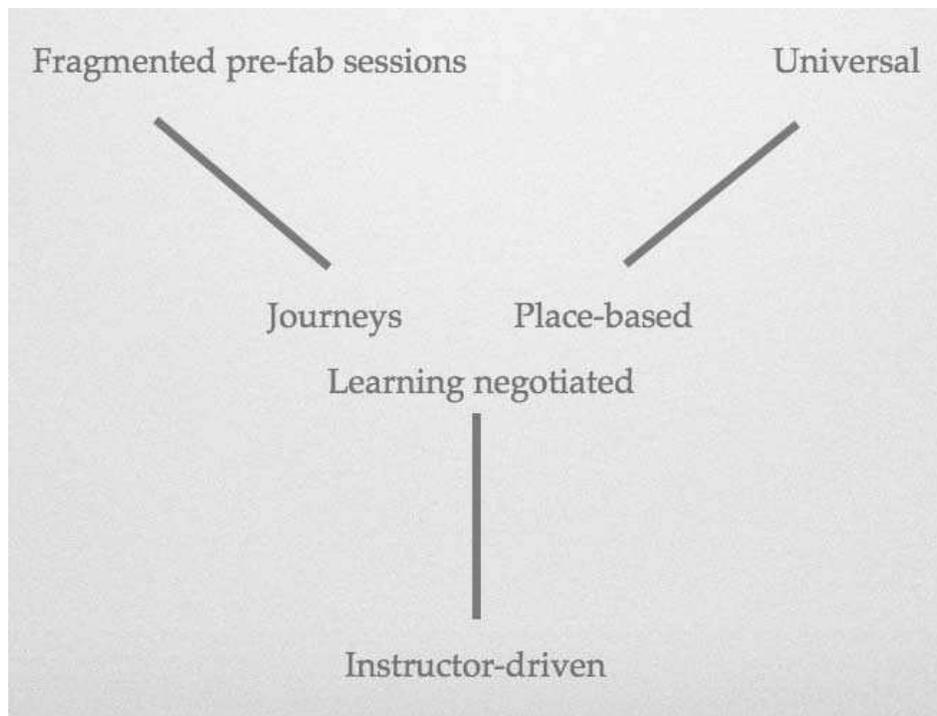
The terms 'outdoor education' and 'outdoor learning' are often used interchangeably. For the purposes of this paper, we will use the term 'outdoor learning' to cover all kinds of learning that might take place outside of the classroom or gymnasium. Historically, outdoor learning has been characterised by the development of a person's relationships with his/her self, others, and the natural environment (Mortlock 1984; Putnam & Hopkins 1993). Outdoor learning has also been analysed as education 'in' the outdoors (outdoor activities), 'through' the outdoors (personal and social development), and 'about' the outdoors (environmental education) (Higgins 1995).

Notwithstanding these analyses of outdoor learning, we believe that there is much scope and capacity for outdoor learning to address many areas of the school curriculum. Rather than espousing a more traditional view of 'outdoor education' as something that occurs predominantly at residential centres or on expeditions, we conceptualise 'outdoor learning' to be a broader and more enabling term. Our thesis is predicated upon the historical backdrop of the last 15 years, in which the outdoor education sector has sought to achieve

pedagogical legitimacy by focusing on providing empirical evidence to justify its existence¹.

The late 1990s and early 2000s yielded a number of papers that were critical of prevailing outdoor education practices in North America, Europe, Asia, and Australasia. Beames's (2006) reconnaissance of these critiques of outdoor education practice led him to propose a model of best practice outdoor learning, which comprises three dimensions (see Figure 1). In particular, he claims that effective outdoor learning needs to move away from fragmented 'canned' sessions towards journeys, involve the pupils negotiating what is learned with their teachers, and be place-conscious.

Figure 1: Three dimensions of outdoor learning (adapted from Beames 2006)



The first dimension (fragmented sessions – journeys) highlights the level to which educational programmes use self-organised journeys, rather than compartmentalised sessions, as a means of learning. Certainly, in residential outdoor centres, programmes are often marked by the participants having little responsibility and choice, as the activities are entirely prescribed, led by an 'expert', with meals provided by cooks. In these cases, there are few direct consequences for participants' actions. There does not appear to be an overwhelming base of evidence that these kinds of outdoor experiences have any meaningful transfer into pupils' lives back at their school or home community.

¹ Three notable publications include *Why Adventure?* (Barrett & Greenaway 1995), *A review of research on outdoor learning* (Rickinson et al. 2004), and *Outdoor education in Scotland: A summary of recent research* (Nicol, Higgins, Ross, & Mannion 2007).

Although Rickinson *et al.* (2004) found that residential experiences in particular can foster participants' personal and social development, the report highlights less convincing evidence for cognitive development. Rickinson *et al.* go on to state that more localised 'school grounds/ community projects have the capacity to link with most curriculum areas' (p. 6).

There is therefore increasing research support for educational programmes that take place within participants' home communities (Maeda 2005; Beames & Atencio 2008). There is a convincing case for moving away from compartmentalised courses full of adrenaline-filled activities, and instead advocating more sustainable, local, broad adventures that involve longer time scales, and where responsibilities are placed firmly on the shoulders of the participants (Rubens 1998; Rickinson *et al.* 2004).

The second dimension (universal – place-based) refers to the extent to which programmes are rooted in a sense of place. The outside end of the dimension is hallmarked by activities that can be done irrespective of their location. For example, a ropes course might be fun and adventurous, but the activity and its concomitant outcomes would be unaffected by taking place in a Canadian forest or in urban Glasgow. Effective outdoor learning programmes should be situated in the history, ecology, culture, and stories of the place they are in (Baker 2005; Beames 2006; Brookes 2002a, 2002b; Knapp 2005; Nicol & Higgins 1998; Stewart, 2004).

The third dimension examines the degree to which pupils decide what they want to learn and how they participate in the learning process. Teachers on the inner part of this dimension are those who are not overly authoritarian or prescriptive in their approach. Although uncertainty can be challenging for teachers and pupils alike, this more 'generative' approach, where knowledge is co-constructed by the learner and facilitator together, may be most able to cater to the needs and interests of individual students (see Loynes 2002). Krouwel (2005) notes that the 'learning that really matters on experiential programmes is that which comes from the experience, not prescription' (p. 31).

WHAT IS CfE AND WHAT DOES IT SAY ABOUT THE OUTDOORS?

Launched in 2004, the Scottish curriculum reform process Curriculum for Excellence (CfE) aspires to 'enable all children to develop their capacities as successful learners, confident individuals, responsible citizens and effective contributors to society' (Learning & Teaching Scotland (LTS), 2004: 3)². This is a focus on the characteristics of the educated person. It is explicitly set in contrast to the specification of the pre-CfE curriculum in Scotland, which has been described as 'too fragmented and overcrowded with content' (LTS, 2004, p. 10).

² The CfE is roughly structured around five learning stages covering children of ages 3-15 years, and across various school institutions: early years (pupil ages 3-5 years) and/or primary schools (ages 5-11 years) and secondary schools (ages 12-16 years in compulsory education, with three-quarters staying on until at least age 17, and many to 18 years). The core purposes of the curriculum include the development of four capacities enabling young people to become: *responsible citizens, effective contributors, successful learners and confident individuals*. In addition to *literacy, numeracy and health and wellbeing across learning*, there are also eight curricular areas for which suggested experiences and outcomes have been devised for ages 3-15 years. These areas are *expressive arts, health and wellbeing, languages, mathematics, religious and moral education, sciences, social studies, technologies*. At the time of writing revised arrangements for national qualifications for older children had not been confirmed. The Scottish curriculum is not legally prescribed for Scottish schools.

Moreover, CfE's whole-person emphasis has allowed it to contribute towards a wide range of existing educational agendas, including education for citizenship (LTS,2002), enterprise and creativity (LTS, 2008a), and healthy living (e.g. The Schools (Health Promotion and Nutrition) (Scotland) Act, 2007). The direction of this curricular reform is similar to those in other parts of the United Kingdom³.

The means of achieving these new purposes, according to CfE documents, will be a wide range of educational experiences, planned by teachers and schools who will be less constrained by curricular content. This range of experiences might include 'out-of-school activities' (LTS 2004: 13). The document that specifically develops CfE in relation to active learning for the early years (ages 3-5 years) includes a complete section on learning outdoors (LTS 2007: 15). For older students, however, CfE so far only notes that its emphasis 'enables' outdoor learning (LTS 2008b: 39).

We will argue that none of this by itself augurs change in primary and secondary school practice in relation to outdoor learning. Our contention is that CfE does not explicitly legitimise the use of what many teachers see as the significant resources needed for learning out-of-doors.

By detailing how outdoor learning can strengthen pedagogy, this paper aims to explain why outdoor learning and CfE are exceptionally well related. We will argue that by reducing the influence of disciplinary learning in school institutions CfE is reducing a key barrier to the kind of outdoor learning discussed in the previous section. Moreover, our conception of outdoor learning is particularly suited to the development of the whole-person foundations of CfE. In order to make this argument, we will: (a) argue that the official curriculum plays a role in influencing the current pattern of school-organised outdoor education; (b) show that existing claims about the relationship between CfE and outdoor learning do not explain why CfE should be any different from preceding curricula; and (c) provide just such an explanation for the kind of situated outdoor learning described above.

THE CURRENT PATTERN OF OUTDOOR ACTIVITY AND A CURRICULAR EXPLANATION

There have been substantial analyses of the pre-CfE curriculum in relation to outdoor learning (Higgins, Nicol & Ross 2006; Ross, Higgins & Nicol 2006). These covered the guidelines for 3-5 year olds (Scottish Consultative Council on the Curriculum (SCCC) 1999), the guidelines for 5-14 Environmental Studies⁴ (LTS 2000), and related National Qualifications and Scottish Vocational Qualifications (Scottish Qualifications Authority (SQA), 2004)⁵. These analyses showed that outdoor learning was encouraged. Nowhere, however, did this

³ According to the Qualifications and Curriculum Authority, for example, the proposed new curriculum for England "has a clear set of aims, more flexibility and more opportunities for all children to become successful learners, confident individuals and responsible citizens", http://www.qca.org.uk/qca_22267.aspx, accessed 5 June 2009

⁴ *Environmental Studies* was a major part of the Scottish curriculum for 5-14 year olds, covering science, social studies and technology.

⁵ The Scottish Qualifications Authority manages Scotland's qualifications framework and is the major public examination body.

encouragement amount to an obligation for teachers and schools to arrange outdoor learning experiences. The quality assurance framework (Her Majesty's Inspector of Education 2001) did not mention outdoor learning either. This was remarkable, given that in the late 1970s, the former Scottish regions of Lothian and Strathclyde were at the global forefront of formalised outdoor education provision (Cheesmond 1979).

Mannion, Doyle, Sankey, Mattu and Wilson (2007) recently investigated the current pattern of school-organised provision of outdoor learning. Their main findings were that provision of outdoor activity varied between schools and within schools, and that relatively little outdoor activity took place in the schools' local areas (as opposed to in the school grounds). Most of the very variable provision of beyond-school outdoor activity tended to involve pupils travelling to residential activity centres.

Mannion *et al.*'s (2007) recommendations were that outdoor provision should be more regular and more inclusive, and that (highlighting the gap that this paper addresses):

...we need to further investigate the outcomes of specific types, locations and foci on learning outcomes across the age range. This would allow us to better determine the appropriateness of the use of these outdoor learning types, in diverse locations, with different foci. With this information, the policy makers, curriculum designers and practitioners would be better able to engage in a debate on the emerging role of outdoor learning across the curriculum. (p. 4)

In their study of teachers' attitudes to organising outdoor learning about the natural heritage, Ross, Higgins and Nicol (2007) argued that the extent and variability of school-organised outdoor learning in Scotland was importantly influenced by the relationship between: the teacher-perceived resources needed to conduct outdoor learning; and teachers' perceptions about the relative official curricular legitimacy of competing uses of the same school resources (pp. 169-170). This argument places emphasis on the official curriculum as determining the outcome of such competition (and we have seen that the official curriculum is not prescriptive). It also emphasises that the perceived cost of learning outdoors was high. This is not to say that other factors such as teacher confidence and concerns around safety were irrelevant⁶, and indeed teacher pedagogical decision-making is not reducible to simple lists of determinants. Moreover, there are structural factors involved that lie beyond teacher and school decision-making⁷. However Ross *et al.*'s (2007) focus on resources and curricular legitimacy is a central concern for this paper because we are considering the implications of curriculum reform, and that reform (CfE) is also part of a long-

⁶ Rickinson *et al.* (2004) and O'Donnell, Morris, & Wilson (2006) for example, note that health and safety concerns can hinder teachers considering outdoor learning. There have therefore also been reforms directed specifically at risk and safety discourses (e.g. Scottish Executive 2004).

⁷ For example, there are researched impacts of: local authority decision-making (where there is no consistency on management or approach across Scotland); the lack of political imperatives to provide outdoor learning experiences; the lack of clarity of purpose amongst specialist outdoor learning providers (especially in residential centres) about the purposes of outdoor learning. See Nicol, Higgins & Ross (2006); Nicol, Higgins, Goodyear & Ross (2006).

standing process in Scotland of devolving power over resources to schools (Jeyes 2003).

For our purposes, then, we evaluate school outdoor learning in Scotland as follows: (a) current patterns of outdoor learning provision can be described as being variable; (b) this variability is in part influenced by varying teacher perspectives on the relationships between outdoor learning and the official curriculum; (c) the costs of outdoor learning are perceived to be exceptionally high; and (d) the combined effect of (b) and (c) has left outdoor learning exceptionally exposed to school-by-school and teacher-by-teacher decision-making, and thus the highly variable pattern identified above. We now turn to the question of whether the CfE curriculum reform might change this situation.

DOES CFE PROMOTE OUTDOOR LEARNING?

By 'de-cluttering' curriculum content, CfE provides new curricular space for the possibility of outdoor learning, but it does not directly legitimise it as a use of school resources over any other use of those resources. The balance that Ross *et al.* (2007) identified – curricular legitimacy in the face of competition for resources – appears largely unchanged by CfE. If schools are to divert resources to outdoor learning as a means of fulfilling the demands of the new curriculum, then any particular connection between CfE and outdoor learning needs to be claimed and explained. However, existing claims and explanations to this end have been insufficient.

The strongest links that have been made between CfE and outdoor learning were put forward in the LTS-produced document, *Taking Learning Outdoors* (2007b). The document claims that core experiences in the curriculum are enhanced and integrated by outdoor education. There is some support for this, for example in the case of field excursions in the science curriculum (Amos & Reiss 2006; Dillon *et al.* 2006). Another source of highlighted connections between CfE and outdoor learning can be found under the research programme *Outdoor Connections* (LTS 2008b). The *Outdoor Connections* website makes its claims based on a review of outdoor learning literature (Rickinson *et al.* 2004). For example, relative to the CfE's goal of developing 'confident individuals', the website declares that

Outdoor learning impacts positively on young peoples' attitudes, beliefs and self-perceptions: for example, independence, confidence, self-esteem, locus of control, self-efficacy, personal effectiveness and coping strategies. It yields benefits in the promotion of positive behaviour and improved physical self-image and fitness. (parag. 9)

Despite the claims of *Outdoor Connections* and *Taking Learning Outdoors* about CfE, the above statement does not explain why CfE's capacities are well-catered for by outdoor learning, only that they are. For example, it does not demonstrate whether or why the CfE capacities are any better catered for in the outdoors rather than in classrooms.

This is also true of the *Outdoor Connections* research literature. An example is that of Ross *et al.* (2006: 12-21), who examined a range of non-SQA qualifications, such as the John Muir Award, Duke of Edinburgh's Award, and

Natural Connections⁸. Focusing on the outdoor learning aspects of these awards, they showed that many of the sub-components of CfE are met by that learning. For instance, they suggested that the outdoor challenges of the John Muir Award ('discovering a wild place' and 'exploring a wild place') support CfE. They claimed that, among others, the CfE ideas of 'making informed decisions and choices' (Responsible Citizens) and 'solving problems' (Effective Contributors) were involved in these challenges. However, they also conceded that this analysis was 'simplistic' and 'broad brush' and relied on the authors' comparisons of the stated purposes of the awards (e.g. 'exploring a wild place') and the stated purposes of CfE (e.g. 'making informed decisions and choices'). The connection between CfE outcomes and outdoor learning was therefore not based on any explicit statement regarding the pedagogical connection between these distinctive sets of educational aims⁹. Ross *et al.*'s (2006) research essentially formalised the character of many of the claims made about CfE and outdoor learning: that the relationship is 'just obvious'.

The present paper attempts to be more precise about this. How does the kind of outdoor learning identified in our first section merge the academic curriculum with the aims described in the CfE? And why is the CfE reform an opportunity to develop that kind of outdoor learning?

SITUATED OUTDOOR LEARNING AND CFE

To show why CfE and our conception of outdoor learning are specially related, we make three arguments. First, we re-iterate our conception of outdoor learning and contrast it with the way outdoor education in general has been positioned as being of high cost and of low official curricular legitimacy. Secondly, we outline a case study programme which exemplifies our conception of outdoor learning and shows that an alternative pattern of curricular programming can be implemented to deliver CfE. Finally, we show that this conception draws particular support from CfE because CfE challenges the existing emphasis on disciplinary content as the central curriculum driver.

Situated learning and CfE

We used a range of critiques of outdoor learning to define a pedagogy that was cross-curricular and place-based: pupils should plan and undertake journeys from their school grounds as a means of learning about socio-cultural and geo-physical elements of their local landscape. From this perspective, our critique of the particular pattern of activity in Scotland takes two forms, both predicated on a definition of outdoor learning as situated learning. We question the perception of outdoor learning as being necessarily high cost, and we question the perceived tenuousness of the relationship between outdoor learning and official curricular legitimacy.

⁸ www.naturalconnections.info/Fife.html, www.dofe.org/, www.jmt.org/john-muir-award.asp , accessed 5 June 2009 (similar programmes exist in many parts of the world)

⁹ It could also be argued that in the absence of official curriculum prescription, schools make no demand on such awarding bodies to 'prove' pedagogical/curricular outcomes.

As we have discussed above, in many teachers' accounts and in evidence of patterns of activity, a central (but not the only) barrier to providing outdoor learning opportunities is the assumption that children's formal outdoor experiences should occur far away from school. Thus, in order for outdoor learning to happen, time must be taken out of the yearly timetable, buses must be booked and paid for, attention to curricula will be put on hold, the likelihood of a child being harmed increases, and the thought of completing the associated paperwork becomes prohibitive.

Beames' (2006) model (Figure 1) provides an alternative conception of outdoor learning by incorporating place-based and situated learning principles. Outdoor learning can take place in ways that are more logistically straightforward and cost-effective, while being personally meaningful and community-relevant (Lave & Wenger 1991).

It can also be strongly rooted in inter-disciplinary official curriculum content. The situated approach described pays particular importance to an area's human history, flora/fauna/landscape, and current local issues in relation to land use. The underlying assumption is that directly interacting with 'place' will foster an appreciation of, and an ethic of caring for, the land and its inhabitants (in every sense of the word). Outdoor learning can become a meaningful part of pupils' lives by being rooted within a familiar socio-cultural context. Situated perspectives recognise the importance of the 'physical, social, and cultural environment on individuals' meanings, actions, development, and learning' (Rovegno 2006: 271). From this perspective, the knowledge constructed through education is socially constructed and built in relation to prior knowledge (Rovegno & Dolly 2006: 242). Situated learning therefore provides broader and more holistic ways of paying particular attention to the changes in attitudes, knowledge, and skills resulting from interactions between pupils, the academic curriculum, and the various environments they encounter.

To exemplify this, we report a pedagogical framework that has been conceived and trialled by researchers and practitioners at the University of Edinburgh, and which is being used in several schools across Scotland (primary and secondary). The programme is called Outdoor Journeys.

An example: the Outdoor Journeys programme

Outdoor Journeys (2009) offers what we believe is a useful framework upon which to creatively and actively engage pupils' learning across curricula. As it involves exploring the empirical world, it is often inherently cross-curricular and situated, as much of what a child encounters in the 'real world' cannot be considered in isolation from the often fragmented and decontextualised subject areas presented in schools (see e.g. Ross 2007).

In Outdoor Journeys work so far¹⁰, two key tools have helped to structure participants' preparations for their outings: the Journey Plan and the Risk Assessment¹¹ - both negotiated by the pupils. The Journey Plan includes vital

¹⁰ The projects ran with two upper primary school classes and one early-middle primary school class, between April 2008 and May 2009, all together involving pupils of ages 7-11 years.

¹¹ both are downloadable from www.outdoorjourneys.org.uk, accessed 5 June 2009

information about the route and the participants, as well a checklist of items to consider bringing. Journey Plans are completed as a class, with the finished copy left with the school office. The Risk Assessment entails identifying hazards and deciding as a group how the risks associated with these hazards can be managed.

Throughout the journeys, pupils generated and answered questions about:

- Human influences on the land. For example, who lived and worked here 50 years ago? 200 years ago? 2000 years ago? How have they shaped the land? What is their story? Who owns the land? Who is using the land and for what purposes?
- Other inhabitants of the land. For example, what plants, flowers, trees, and moss are present? Why? What evidence of bugs, birds, can be found? Why have these living things chosen to live here, as opposed to somewhere else?

Outdoor Journeys can be considered in three phases that are negotiated, in terms of time and content, between the pupils and their classroom teacher. First, Questioning involves pupils exploring their school grounds and neighbourhoods and posing questions about the story of the land. Second, Researching enables groups of pupils to examine a topic of common interest (e.g. trees, architecture, maps, stone walls) through books, the internet, or interviewing people. Finally, Sharing involves pupils sharing what they learned with their classmates and other members of the community, using writing, performance, video, and art. These three phases can exist in a perpetual spiral, as pupils embark on subsequent journeys to different, nearby places.

The Sharing sessions at the four different Outdoor Journeys projects in Edinburgh and East Lothian strongly suggested that pupils gained much knowledge about the ecology, architecture, human geography, and history of the land that was within a 700 metre radius of their school. Despite most of the pupils living within walking distance of the school, they were clearly amazed by how ignorant they had been of their communities' stories. While pupils appeared to be reasonably well-versed about Scottish and even international issues, a rudimentary knowledge of their own neighbourhoods - their place - had previously eluded them.

Figure 2: The three phases of the Outdoor Journeys programme



Although there is a distinct and deliberate absence of adrenaline-filled activities, there is plenty of adventure, as the journeys themselves are unpredictable in nature. The concept of broad adventure (see Rubens 1998) that underpins

Outdoor Journeys focuses on allowing young people to take responsibility for their actions and their learning in a generative process that is negotiated with, and managed by, their teacher (see Loynes 2002). In keeping with CfE, these journeys require pupils to 'assess risk and take informed decisions...learn independently...link and apply different kinds of learning in new situations...' (LTS 2004: 12). This conception of outdoor learning is able to cater to virtually all of the items listed under CfE's four capacities. Yet, we have seen this type of conjectural link made before (see section 4). We now turn to the question of why links between situated outdoor learning and CfE are exceptional.

DISCUSSION: HOW COULD CFE PROMOTE OUTDOOR LEARNING?

The model offered by Outdoor Journeys addresses several key critiques and barriers found in policy and academic debates. Specifically, unlike some assumptions about outdoor learning experiences, Outdoor Journeys do not involve bus rides to distant locations. The journeys take place in (or near) the home community, and often begin from the school gates. By keeping journeys close to home, transport costs are minimised if not negated, thereby addressing one of the major barriers to school-organised outdoor learning cited by some Scottish teachers (Ross *et al.* 2007). At the upper primary/early secondary stage most outdoor journeying occurs by foot and no specialist or technical equipment is needed. Here again, barriers are overcome as expenses are kept to a minimum; teachers do not require extra training or qualifications such as the Mountain Leader award and, beyond waterproofs and rubber boots, no expensive equipment needs to be bought, stored, or maintained. We will return to other barriers of staffing and timetable disruption later.

The other problem identified above, was curricular legitimacy (in the face of perceived high costs, a high level of official curriculum legitimacy was needed for teachers and schools to justify the expenditure). Outdoor Journeys are also able to provide the platform upon which the high-legitimacy academic subject curriculum can be delivered. Indeed they particularly offer scope for 'more cross-subject activity' (LTS 2004: 4). According to Learning & Teaching Scotland, this happens best in a curriculum that is not 'too fragmented or over-crowded with content' (p. 10) and where teachers have the 'freedom to exercise judgment on appropriate learning for young people' (p. 5). Indeed,

an 'excellent' curriculum would go beyond the traditional boundaries and offer real-world learning experiences outdoors (LTS 2007: 5).

It is the link between these two points that demonstrates the exceptional relationship between outdoor learning and CfE. School-perceived concerns about the high cost and low legitimacy of outdoor learning in the current Scottish pattern of outdoor learning can be addressed by staying closer to the school and engaging with inter-disciplinary curricular content. Objections about the cost of timetable disruption (especially in secondary schools) and the cost of increased staff/student ratios when learning takes place outside the classroom will remain. These objections are rooted in the assumption that this cross-curricular conception of going outdoors to learn about local place is bolted-on to the present structure of schooling. However, we believe that CfE provides an opportunity for

much greater structural change. If schools have control over a slimmed-down content, as CfE demands, and outdoor learning is a low cost means of managing pupils' experiences of that content, then more wholesale changes in pedagogy are possible - changes which tackle problems of timetables and staff/student ratios. For example, Wrigley and Lofsnaes (2005) describe the operation of Norwegian youth schools (ages 3-16 years), where the year group cohort is a central organising structure (though they are smaller than in many Scottish schools):

A year group of 100 pupils typically has a team of five or six teachers, who between them teach the whole curriculum, take care of pupils' welfare and social development, liaise with parents, and provide academic and social guidance. The team meeting has the power to take decisions on timetable changes, so that it is easy to organise cross-curricular projects, residentials and so on. (pp. 26-27)

To imagine such structures in Scottish schools is to question the hegemony of subject disciplines taught by specialist teachers identifying primarily with that disciplinary content. So, the current emphasis in disciplinary specialism and content in the official curriculum is a barrier to this conception of outdoor learning (wrapped up closely with expense, time and effort, and alongside other issues such as concerns with safety). But CfE aims to undermine the exclusive centrality of subject specialism and de-contextualised disciplinary content (Carr, Meldrum & Allison 2006). Curriculum for Excellence aims to place the nature of the educated person at the centre of curricular purpose, and to reduce the amount of de-contextualised subject content, and to promote real world experience. It is hard to reconcile this with timetabled, indoor, subject-based, textbook classes. Situated learning in the world outdoors looks exceptionally legitimised by CfE and exceptionally able to deliver CfE's purposes.

CONCLUSIONS

A range of commentators have discussed the relationship between curriculum reform (CfE) and outdoor learning as mutually constituting opportunities, but there has been little discussion of precisely how this relationship occurs. In asking how CfE promotes outdoor learning we have outlined a conception of situated outdoor learning and illustrated it with the Outdoor Journeys programme. We have offered a critique of the current pattern of school-organised outdoor education, especially the perceptions that outdoor education is high cost and of low curricular relevance. Our conception of outdoor learning, based on gradually expanding outdoor journeys that are rooted in inter-disciplinary study of pupils' place, is deeply connected to CfE and is also made possible by it.

Thoreau (2007: 9) once commented on the 'sort of harmony discoverable between the capabilities of the landscape within a circle of ten miles' radius, or the limits of an afternoon walk'. To a similar end, by drawing on CfE guidelines and critical outdoor learning literature, we have shown how learning outside the classroom may be incorporated into pupils' everyday schooling so that it delivers the purposes of that schooling. Learning & Teaching Scotland (2007b: 10) states that 'Curriculum for Excellence recognises that learning is embedded in experience'. From our perspectives, effective outdoor learning resonates so clearly with CfE that pupils who are being denied an education outside the

classroom may be limited in their ability to develop the four capacities to their full potential.

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