

OUTDOOR EDUCATION IN SCOTLAND: A SUMMARY OF RECENT RESEARCH

Robbie Nicol, Peter Higgins, Hamish Rossⁱ and Greg Mannionⁱⁱ

INTRODUCTION

This report is the culmination of an extensive research programme on outdoor learning in Scotland initiated and supported primarily by Scottish Natural Heritage (SNH), and Learning and Teaching Scotland (LTS) through the Outdoor Connections development programme¹. The main purpose of the original research was to provide the background to allow key government agencies and their partners to stimulate appropriate outdoor learning developments.

The report summarises seven pieces of research, making pertinent links across specific findings. These research projects gathered the views of young people, teachers, specialist providers, and representatives of Local Authorities on outdoor learning. The national scale and integrated nature of this research represents a major contribution to understanding education outdoors, and is of international significance. The research programme is best seen as a sound beginning rather than a finished work.

The report begins with an overview of the current state of outdoor education in Scotland and then reviews each of the seven individual studies. The concluding section then considers the researchers' observations on the implications of the research.

For the purpose of this summary report, 'outdoor education' is a process in which educators, school pupils and others take part, and 'outdoor learning' is that learning which accrues as a result².

Educational policy context

Key Finding 1

There is governmental support for the role of outdoor education in the delivery of curricular and non-curricular educational themes such as personal, social, environmental and health education.

There is increased evidence and both public and political conviction that 'education outdoors' can provide important learning experiences that enable young people to learn in, through and about the natural heritage through first-hand experience.

Recent interest has been stimulated because of a number of public perceptions and specialist reports that suggest that children are increasingly separated from the natural environment, that they have little opportunity to learn to deal with risks in modern society, and that they exercise physically less than they should. There is a growing awareness that many aspects of young people's education could be addressed by enhanced outdoor experience. Consequently educational policy

ⁱ Nicol, Higgins and Ross: Outdoor and Environmental Education, University of Edinburgh.

Contact: pete.higgins@ed.ac.uk

ⁱⁱ Mannion: Institute of Education, University of Stirling, Stirling, Scotland. Contact: gbgm1@stir.ac.uk.

support for outdoor education is growing in Scotland and the UK. In 2005 the Minister for Education in Scotland initiated and funded a two-year development programme called 'Outdoor Connections'³. The focus of this programme is to 'make connections across current and emerging outdoor education priorities and policies, programmes and people; and to develop and distribute resources which will continue to improve the quality of outdoor learning'.

Key Finding 2

There are significant opportunities within curricular development (for example, Curriculum for Excellence) as well as a range of national and international initiatives to promote the potential of outdoor learning.

Following a recent national review of Scottish education the Scottish Executive has embarked on a major initiative - Curriculum for Excellence. In future much less emphasis will be placed on a subject-oriented curriculum and in preference the personal skills and attitudes of young people are to be the central themes. The intention is that schools will encourage young people to develop the 'capacity' to become 'successful learners', 'confident individuals', 'responsible citizens' and 'effective contributors'⁴. As outdoor education traditionally focuses on personal and social educational issues like these, government has encouraged the outdoor education community in Scotland to address these issues and contribute to the delivery of Curriculum for Excellence. The strong emphasis on sustainability education in the Outdoor Connections programme reflects the notion of 'responsible citizenship' explicit in Curriculum for Excellence.

In England too there is increasing support for education outside the classroom, and in the past two years there has been a UK Parliamentary enquiry⁵ and an active 'Real World Learning' / 'Education Outside the Classroom' campaign to re-invigorate this approach to education. The campaign has involved the sector working with politicians and civil servants to produce a 'manifesto' for 'Learning Outside the Classroom'. The outcomes were published at the end of November 2006⁶.

In August 2006 'Learning For Our Future: Scotland's First Action Plan for the UN Decade of Education for Sustainable Development'⁷ stated the obligations for school to university education with regard to environmental and sustainability education. Further, it emphasised the valuable role of education outdoors in doing so.

Sector Context

Key Finding 3

'A mixed economy' best describes the pattern of provision of outdoor learning involving the public, private, and charitable sectors. Understanding the nature of this patchwork of provision is important for any future funding or other developments.

Key Finding 4

Despite widespread provision there is no national framework, nor statutory requirements, regulatory mechanisms, formal teaching qualifications, quality assurance or educational policy to encourage the delivery of, or to establish and maintain the standards of outdoor learning experiences.

Outdoor education in Scotland is provided by the public, private and charitable sectors (within schools and pre-schools, residential outdoor and field-studies centres,

and also in hostels and camps), with the best recent estimate suggesting that provision is around 300,000 pupil days per year⁸. This mixed-economy of provision is not a planned national policy feature but is the result of individual organisations locating themselves within the market place. Despite renewed political support, provision appears vulnerable with, for example, specialist providers continuing to face financial difficulties. While there is no overall quality assurance monitoring, some schools report outdoor educational experiences under the ‘How Good is Our School’⁹ quality assurance framework, and Her Majesty’s Inspectors of Education (HMIE) do report on outdoor education where they encounter it.

SUMMARY OF RECENT RESEARCH

Curricular opportunities

Key Finding 5

The curriculum does not prescribe the context (e.g. outdoors) for learning even for specific subject areas, and the evidence suggests that the presumption and consequence is that teaching will take place indoors.

Key Finding 6

For both primary and secondary schools the Environmental Studies section of the current 5-14 Guidelines provide the greatest curricular opportunity for outdoor education to study the natural heritage, both in terms of content and thematic and project based opportunities. Geography and biology continue to provide opportunity into middle and upper secondary. Health related initiatives are also sources of opportunity for outdoor education in general.

In *Health Education* there is growing research evidence that outdoor activities in natural environments promote health and well-being. In *Physical Education* there is also a growing national concern about the sharp decline in levels of physical activity and the consequences for health and well-being. These concerns are being addressed through initiatives designed to increase physical activity such as Sportscotland’s *Active Schools*¹⁰ programme and the *Health Promoting Schools*¹¹ initiative. These issues to do with physical activity and health and well-being have yet to be fully developed from an outdoor education perspective, and might include simple things like encouraging people to walk to school as well as using local areas for outdoor learning.

Levels of Activity: Pre-schools, Primary and Secondary Schools¹²

Key Finding 7

Across all school sectors, there is great variation in the duration of provision and use of location types for different purposes. Primary children get a lot more outdoor learning than secondary age pupils. Critically, there are substantial numbers of young people in secondary schools who are not getting any outdoor learning (at least during the eight weeks of the summer term surveyed).

Key Finding 8

Nursery age children do not venture far from their pre-school centres and focus mostly on learning through play. Primary age children spend

most of their outdoor time doing fieldwork in naturalised settings whereas secondary pupils spend a greater proportion of outdoor time doing 'adventure type' activities also in wild areas but the focus is on personal and social development.

A total of 20 pre-schools, 16 primary schools and 15 secondary schools were surveyed over the 2006 summer term, to capture evidence about all of their formal outdoor learning events.

The average time spent on outdoor learning by randomly chosen primary schools was 19 minutes per pupil per week. The average duration spent on outdoor learning by randomly chosen secondary schools was 13 minutes per pupil per week.

School grounds provision¹³

Key Finding 9

School grounds are significant locations for schools' provision of outdoor learning, yet many schools report significant reduction in area and suitable surfaces for outdoor learning.

The survey of school grounds established that these were the most significant locations for pre-schools' provision and were a popular location for outdoor learning at primary level. In comparison, few secondary schools used their grounds to any significant extent. The most common area type found in Scottish schools was the hard surface playground, which was found in 97% of primary schools, 92% of secondary schools, 82% of special schools and 70% of nursery schools. Furthermore, 19% of secondary schools have lost school grounds in the last ten years and 29% of secondary school grounds in Scotland were considered to be too small. School grounds were described as a low priority in relation to school development plans in 27% of schools and were not referred to at all in development plans in a further 30% of schools. Unsurprisingly in light of this, nine of every ten respondents in the study expressed a desire for more area types in their school grounds, especially seats and sheltered areas. Clearly if outdoor education is to flourish in school grounds there is a greater need for planted areas and grass areas (other than sports playing fields).

Young peoples' perspectives¹⁴

Key Finding 10

Young People value experiences that:

- are fun or enjoyable, often involving doing something new and doing activities that engaged the senses;***
- leave them feeling uninhibited: being 'free', outdoors, setting their own agenda, not being rushed, being close to nature;***
- feel authentic and contingent, i.e. relating to the hands-on nature of practical activity, encounters with animals, being exposed to the effects of the weather and not always knowing what will happen next.***

Whilst Scottish young people valued a wide range of outdoor learning experiences and wanted more outdoor education provision from schools, they did not see schools as well-placed to facilitate the sorts of outdoor experiences they valued, mainly

because of concerns with health and safety. While the above features characterised valued outdoor experience for young people, they did not always get this sort of experience from schooling.

Key Finding 11

What young people value in outdoor experiences depends on the way three dimensions interact: the context/place, the activity itself and social aspect.

Most young people valued outdoor experiences that were less formal (e.g. mediated by family members, clubs and with friends) and some outdoor learning delivered through 'centres' and awards schemes. These less formal experiences were more commonly associated with providing more sustained, purposeful learning, tailored to their own interests and needs. Family contexts appeared to catalyse some of the richest forms of learning about, in and for the environment. The kinds of approaches to learning which young people found valuable and worthwhile included learning in, for and about natural contexts, self-directed approaches, teamwork, intergenerational learning, peer learning, the use of smaller groups, and approaches that allowed for greater choice about where they go while on trips and what they might do while outside.

Key Finding 12

Young people value being outdoors but find it difficult to express their emotions around their relationship with nature and the environment.

Key Finding 13

Young people think that mainstream youth culture does not consider all outdoor activity to be 'cool'. They feel that popularising outdoor activity through the media is a way of addressing this.

Key Finding 14

Many different learning outcomes are associated with experience in natural areas. How outdoor learning is mediated (via family, peers, schools, centres), and what the aims and focus of the experience are, make a big difference to what is learned. Simply 'being outdoors' is not sufficient for young people to express an ethic of care for nature or develop an understanding of natural processes. These things seem to be learned when they are an explicit aim of experiential activities and when they are mediated in appropriate ways.

Young people's learning about conservation, sustainability, environmental management and 'action for the environment' tended to be associated with programmes where this was an *explicit aspect of the teaching or the explicit focus of experience*. Similarly, family-led experiences were effective in encouraging environmental concern when there were significant adults who actively sought to impart this.

School teachers' perspectives¹⁵

Key Finding 15

Patterns of the quantity and type of provision offered through schooling are complex. Pre-school centres emphasise play, primary schools emphasise fieldwork and nature, while secondary schools emphasise

adventure activities (see also Key Finding 9). But there are also significant differences within sectors caused by a range of factors.

Despite the lack of curricular imperative, some teachers reported remarkable efforts to get their pupils outdoors, often citing curricular justification as a major reason for doing so. However the lack of structure and prescription may also act as a barrier to delivery in some cases. The picture was not consistent.

Evidence from school grounds research suggested that for projects involving school ground improvement, pupils are effective initiators of activity, particularly in primary schools and special schools; but in secondary and nursery schools pupil involvement tended to be much less. School fund-raising was prominent in funding improvement work in nursery, primary and special school grounds but was less widespread for secondary schools. This may partly reflect the larger size of sports projects, which are more common in secondary schools.

The focus of residential trips tends to be on outdoor activity skills and personal and social development, rather than environmental education outcomes.

Key Finding 16

Teachers in primary, secondary, specialist and nursery schools report common and specific barriers to delivering outdoor experiences (although to different degrees). These include (1 being the most frequently mentioned):

- 1. The financial cost to pupils and schools.***
- 2. The time involved in organising events.***
- 3. The adult/pupil ratios required.***
- 4. Issues to do with safety, risk and liability.***
- 5. The weather.***
- 6. The dependence on transport to access sites (as well as issues linked to cost and ratios).***
- 7. The disruption to classes.***

A series of barriers were mentioned by teachers in the context of organising outdoor activity. They were complexly interrelated, and their relative importance varied from teacher to teacher and from sector to sector. But throughout, the dominant issues were those of effort and cost.

Key Finding 17

Teachers differ in how they see the benefits of outdoor study. This is important because a needs analysis for those already committed to going outdoors will be different from those who are not. This key motivational characteristic is important if any future targeted development of the schools' sector is envisaged.

In deciding whether or not to organise outdoor study, all teachers weighed up effort and cost. However, teachers differed in how they understand the benefits of outdoor study. If teachers 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. Increasing outdoor study may also depend on some form of staff training or the development of an appreciation or legitimisation of the wider benefits of outdoor study. On the other hand, even where personal and institutional attitudes and dispositions are consistent with outdoor study, it would benefit from increased resources.

Outdoor education from Local Authorities' perspectives¹⁶

Key Finding 18

The provision of outdoor learning is highly devolved between Local Authorities, within and between Departments in each Authority, and between individuals of varying degrees of seniority employed by Authorities. Many are unable to provide Authority-wide information on the extent of provision they are responsible for. This patchwork of provision is not clearly understood when the Local Authority sector is considered as a whole, nor is it managed in any systematic way.

Some of the 32 Scottish Local Authorities were unable to provide Authority-wide information on out-of-school excursions, and there was no consistency in the job title (or seniority) of those with responsibility for outdoor education. In some, outdoor education was cross-departmental (e.g. education, community services, children's services); it was delivered by different people (e.g. teachers, rangers, instructors, youth workers) and took place in different settings (e.g. schools, field visits, school grounds, residential centres). However, all Local Authorities had an individual responsible for the implementation of Curriculum for Excellence, and this was the only consistent grouping equipped to comment on the future potential of outdoor learning in a policy context.

These findings are highly significant as they reflect the current policy void in relation to outdoor learning. This is particularly problematic as there are a range of 'players' (e.g. teachers, schools, specialist providers and Local Authority managers). Attempting to determine the amount of outdoor learning activity taking place in Scottish Local Authorities has not previously been attempted on this scale. However, despite two separate endeavours within this programme of research, the full extent of provision remains unknown. This is because of the difficulties in accessing this information. These result from the differences between and within Local Authorities regarding the individuals responsible for outdoor education provision, and also differences in reporting arrangements between schools and their Local Authority.

Key Finding 19

Local Authorities report a decline of financial support for outdoor learning in the last 20 years.

Findings for 2004-05 suggested that spending (including all funding partners) on outdoor education ranged from about 0.5% to 0.05%, with the average percentage being equivalent to approximately 0.2% of Local Education Authority education budgets (excluding school teacher salary, supply cover and parental contributions). Local Authorities acknowledged that provision of and financial support for outdoor learning experiences had changed and often declined in the last twenty years. Parents and guardians now also contribute significantly to the cost of outdoor education, particularly for excursions and residential courses.

Key Finding 20

Within Local Authorities there is overwhelming agreement that Curriculum for Excellence is an excellent opportunity for developing outdoor learning.

Curriculum for Excellence officers welcomed curricular reform and saw an important role for outdoor learning. However, there was no sign of this becoming a

commitment through written policy. Indeed very little policy specifically relating to outdoor education currently exists nationally or in Local Authorities. Health and Safety policy dominated, and if any policy on 'curriculum or content' existed it was lost to external observers in the current departmental structures of Local Authorities.

Key finding 21

There is a policy void within local authorities with regard to the rationale for and role of outdoor learning, and many are unable to provide authority-wide information on the extent of their provision.

Practical outdoor learning was seen as being able to contribute to developing 'the four capacities' of Curriculum for Excellence. However as Curriculum for Excellence sought to move away from a prescriptive curriculum, the inclusion of such opportunities in policy was unlikely. Whilst all Local Authorities could provide detailed guidelines and regulation on safety in outdoor education, with one exception no evidence was found of any guidance on the philosophy or curricular potential of outdoor education, which the analysis of teachers' perspectives (above) suggested might be particularly valuable.

Outdoor education from outdoor providers' perspectives¹⁷

Determining views on outdoor education from a providers' perspective was a fairly complex task because of the 'blurring of the edges' around the sectors (public, private and charitable). For example, a provider may be thought of as a commercial provider because all its funding comes from its clients. Yet all its clients may be school groups whose funding comes from the public sector (and from parents/guardians). In making sense of this complexity it is helpful to think of where the providers' funding comes from and which sector the participants represent. It is however notable that providers had little difficulty locating themselves within one sector or another.

Key Finding 22

Providers recognise that outdoor learning contributes to and enhances the 3-18 curriculum in Scotland, although there is a difference between those who feel compelled to provide 'curricular' opportunities and those who will do so if asked by a client. Specialist providers of outdoor learning do not view the curriculum as the main rationale for their work but instead see it as a form of curricular enhancement.

Key Finding 23

Some curricular subjects appear to have more relevance to the outdoors than others. The extent of this is not empirically clear, and further research on a subject-by-subject basis would help to clarify the situation.

The relationship between outdoor education providers and the curriculum was complex. It was not clear what aspects of learning were considered specific to outdoor education. For example, all of the survey data that refer to personal and social education could easily refer to classroom learning (e.g. team work, communication skills, self confidence, self awareness). This was not the case for other areas of study where there was an established rationale for going outdoors (e.g. for geography or biology field-work).

There was no evidence in curriculum guidelines or from providers that outdoor education was centrally located within the curriculum; rather it was currently a form of 'curricular enhancement'. It seemed that outdoor learning could be located both within and outside the curriculum, with the same arguments being deployed to associate it as to distance it, laying the outdoor sector open to claims that providers take a utilitarian approach to the use of such justifications. Notably, especially in light of the focus of the Outdoor Connections programme, the majority of specialist providers failed to acknowledge the imminent arrival of Curriculum for Excellence.

Providers were very good at keeping records of attendance, and of those who responded to this research the data showed that the charitable sector (12 providers supplied about 87,000 days per year) was larger than the Local Authority sector (26 providers supplied about 74,000 days). The private sector ranked third in terms of quantity of provision, where 10 providers supplied about 12,000 days per year, though these data take no account of the size of the individual providers. Notwithstanding seasonal variations that meant centres were not always operating at capacity all of the time, the evidence suggesting that specialist providers experienced more demand for their services than they could supply, leaving many pupils whose outdoor learning needs were not being met.

Key Finding 24

Fear of exposing young people to risk is not such a barrier for specialist providers of outdoor learning as it is for schools and Local Authorities. This suggests that the issue is not just with whether or not there are significant risks, but that perception of risk matters too, and this does not rest solely with, for example, the way the media reports on outdoor incidents.

That specialist providers did not see risk as a central barrier to provision is not surprising, given that specialist providers are experts in risk management. The main barrier reported by providers was a lack of resources (most frequently cost), and this corresponded with findings from other parts of the research programme. Some private sector providers felt disadvantaged because of subsidy attached to public sector provision. On the other hand, it was notable that publicly-funded providers seem to experience even more financial difficulty than others, and it was not clear why this is the case.

Key finding 25

For specialist providers, evaluation of learning is not conducted systematically, not triangulated with other evidence and not evaluated or assessed externally.

The great majority of outdoor specialists argued that learning experiences in the outdoors were 'special' but could not provide robust evidence of the learning outcomes of their programmes (although many conducted some form of in-house anecdotal monitoring). This is perhaps understandable as there has never been a national requirement to assess learning outcomes related to outdoor education. The fact that such monitoring and evaluation in support of its key claims has neither come from within the sector nor been imposed by external agents (e.g. funders or educational policy-makers) places the sector in a position which is un-necessarily weak if the claims are as robust as providers suggest.

Key Finding 26

Like Local Authorities, specialist providers lack written policy to communicate the outdoor learning they provide.

Whilst the existence of a written policy does not necessarily equate with quality, the more clearly a provider can specify its aims (teaching objectives) the easier it is to externally assess learning. Whilst potentially providers may have good internal procedures for ensuring quality, they lacked a means of communicating this; again placing the sector in a vulnerable position.

No clear pattern emerged to suggest the sector as a whole was experiencing significant problems regarding legislative issues, for example through the Activities Centres (Young Persons Safety) Act, European Union Working Time Directive, Child Protection Act, minibus driving and trailer towing (specific issues existed for younger staff).

The lack of a coherent internal structure raises questions about the sector's ability to define and manage its own affairs. At present the future development of outdoor education seems to depend on strategic leadership from senior managers, civil servants and politicians at all levels of governance. This lack of structural organisation raises questions as to whether internal or external energy and resources should be directed towards individual organisations, the development of sectors (e.g. private, public, charitable) or the development of the infrastructure as a whole.

CONCLUSIONS

Collectively these research studies represent the most comprehensive and integrated national scale research programme on outdoor education ever undertaken in the UK or indeed overseas. Having reviewed all of these studies the authors of this summary statement offer some key observations on the implications for the future provision of outdoor learning in Scotland. These are presented below under separate headings.

General issues

The research programme illustrates strong and positive support for taking learning outdoors from across the spectrum of those who participated in the studies. The findings reinforce the importance of commitment and action at all levels in addressing the opportunities offered by the current educational policy context, and building on the achievements of Outdoors Connections.

It is clear from the review that outdoor education is no longer seen as being just about adventure or field studies, or as the remit solely of geography or biology teachers. The possible locations of outdoor learning for schools include schools' grounds, urban spaces, rural or city farms, parks, gardens, woodlands, coasts, outdoor centres, wilderness areas and more. In this context, outdoor education is as much about a teaching approach for all teachers as about discrete specialist provision. This review has shown how teachers and specialist providers from a range of disciplines use outdoor learning as a way of enhancing and integrating a wide range of topics and activities across the whole curriculum, thereby potentially connecting learners with their environment, their community, their society and indeed themselves. Although many young people have little opportunity to engage with the natural heritage they are clear about their interest in education outdoors.

Consistently across the research programme, the barriers described are both physical (e.g. lack of staff with curricular expertise) and perceptual. So the difficulties lie not just in the barriers themselves but also in the ways that Local Authorities, teachers and specialist providers think of their role in relation to the curriculum. This perceptual issue is also true of safety concerns. These and other misconceptions need to be dealt with by teachers and outdoor providers through specific pre-service and in-service training.

Young people

Young people are very articulate about how they value a range of outdoor learning experiences, and educators could usefully draw upon young people's views in their session planning and curriculum design. However, young people appear confused about the concept of sustainability and their relationship with the natural heritage. Because these issues integrate both science and values, the resolution is not as straightforward as teaching people how to behave.

Observations for further consideration include the importance of:

- More natural heritage education taking place outdoors;
- Outdoor learning about the natural heritage featuring in curricular planning;
- Providing thematic learning opportunities for young people to engage in a cross curricular subject approach;
- Understanding the interdisciplinary and complexity necessary when teaching science and values together;
- Encouraging more ownership of learning by young people;
- Involving young people in the planning of outdoor learning so that their perspectives are included and any confusion identified and dealt with at an early stage in the learning episode.

Teachers

Opportunities for outdoor study depend very much on the immediate locality of each school, and the particular aspect of learning planned and provided. It would appear that schools who are not actively involved in outdoor learning require assistance to cross the threshold. Because of the specificity of each school this would be difficult to achieve by gathering teachers at an area unrepresentative of their own locality. This would be better achieved *in situ* in schools and local areas. One of the most effective means of achieving this is through the process of action research, where experienced outdoor practitioners combine with teachers in a collaborative process. Each provides their own expertise to arrive at site-specific solutions linking curricular objectives with outdoor study. Clearly there is the potential here to bring together those who know a lot about the curriculum (e.g. teachers) and those who know more about the methods (e.g. outdoor providers) to assist each other.

Observations for further consideration include the value of:

- Developing a support structure and resources to help teachers overcome the barriers that prevent them going outdoors;
- This support structure working with teachers in developing curricular activities that clearly show the benefits of outdoor study;
- This support mechanism providing support that is geographically appropriate where teachers are making use of local areas such as woods, rivers, parks (i.e. *in situ* and school specific);

- This support structure being flexible enough to include assistance of a more general nature where issues apply to all schools (i.e. not necessarily *in situ* nor school specific).

Local Authorities

Within Local Authorities, outdoor education policy tends to focus on health and safety issues instead of learning experiences. This means that, despite the manifestly excellent safety record of outdoor learning, it is viewed as a 'safety issue' rather than a learning opportunity. The tendency to view the former as more important than the latter needs to change if the greater potential for outdoor learning of the natural heritage is to be realised. This could perhaps be achieved through a series of workshops targeting Local Authority managers and their legal advisors.

Outdoor learning provision between Local Authorities is inconsistent, and within them communication structures (between strategy, policy and delivery) are often complex. Neither feature is conducive to developing outdoor learning, nor is the institutional risk-aversion noted above and the complex paperwork required allowing time out of the classroom. Simple approaches avoiding complicated logistics whilst providing multiple dividends will encourage teachers to use the outdoors.

If policy makers, teachers and providers can show that outdoor education can provide holistic experiences that draw together the aspects of the 'academic' curriculum with 'the four capacities' of Curriculum for Excellence this is likely to encourage other teachers to use outdoor learning with their pupils.

Observations for further consideration include the value of:

- A support structure to help Local Authorities explore the links between Curriculum for Excellence officers and those responsible within their departments for outdoor learning;
- This support structure being responsible for providing a theoretical overview of the multiple curricular dividends available through outdoor learning;
- Exploring the use of school cluster groups as a way of using thematic outdoor learning to promote the curricular continuity between secondary schools and their feeder primaries espoused in Curriculum for Excellence;
- Assisting schools with the planning and support of local delivery including:
 - a) undertaking risk assessments,
 - b) providing web-based support,
 - c) providing support for residential provision,
 - d) delivering good practice workshops aimed at showing how others have overcome the barriers identified above,
 - e) supporting outdoor and environmental specialists to visit primary schools,
 - f) supporting secondary school specialists to take their work outdoors,
 - g) promoting action research as a way of managing change in schools, particularly where it is desirable to involve external partners to assist change.

Specialist outdoor providers

Specialist outdoor providers need to be made aware of the potential of Curriculum for Excellence. At the Outdoor Connections National Conference in 2006, specialist providers were not well represented. It is possible that visiting the providers *in-situ* would be a more effective means of communication.

Observations for further consideration include the value of:

- A support structure that links different providers, particularly between residential centres, outdoor specialists and schools;
- A support structure that links young people's outdoor learning experiences at school (where the school provides the teaching) with their outdoor experiences at residential centres (where specialists provide the teaching);
- Supporting specialist providers to explore the thematic learning opportunities that will arise from integrating their existing work with Curriculum for Excellence;
- A dialogue with schools to explore the use of thematic outdoor learning to encourage study of the natural heritage;
- Supporting specialist providers to share their specialist experience to help schools overcome the barriers they experience with health and safety issues;
- Assisting schools with the planning and support of local delivery;
- Considering the funding provision across the 'mixed economy' sector if the level of specialist provision is to be maintained or increased.

Teacher pre-service and in-service training

Part of the problem for existing teachers appears to have been the lack of opportunities for them to learn about outdoor opportunities as part of their own training. As there is no requirement to deliver teacher training outdoors (or even to refer to education outdoors) any such training is entirely at the whim of the Teacher Education Institution. There is also no requirement or nationally co-ordinated in-service training in education outdoors.

Observations for further consideration include the current opportunity for:

- Initial Teacher Education (ITE) institutions to review this situation as they continue to consider how they will prepare their own curriculum for the implementation of Curriculum for Excellence;
- Specific opportunities for pre- and in-service outdoor learning to be part of this picture;
- Establishing a national requirement, which would be a means of making such training consistent and equitable, and be the surest way of ensuring equity and consistency of young peoples outdoor learning experiences.

Structural issues

Quality assurance of outdoor learning

At present it is impossible to gauge the quality of outdoor learning experiences, as there is no requirement for individual outdoor providers to address this issue, or for schools to include outdoor learning in their work.

An observation for further consideration is:

- There is a potential role for HMIE to ask schools to address curricular issues through education outdoors, and also to begin inspections of outdoor providers, who are primarily working with young people extracted from classes during school time.

Co-ordinating policy and practice

Outdoor education in Scotland continues to experience considerable difficulties in terms of the enabling conditions for it to flourish, and yet its inherent characteristics (e.g. direct experience of the 'natural world') have the potential to make a significant contribution to Curriculum for Excellence.

Furthermore, there is currently an increasing number of educational initiatives from organisations such as local authorities (e.g. Fife Council), charitable trusts and Non-Governmental Organisations (e.g. Field Studies Council, Royal Society for the Protection of Birds, John Muir Trust), government agencies (e.g. SNH, Forestry Commission) and interest organisations (e.g. Scottish Advisory Panel for Outdoor Education, Association of Heads of Outdoor Education Centres, Institute for Outdoor Learning). Whilst this demonstrates the interest and commitment to be found in the sector, this fragmented approach can be interpreted as confused and poorly directed, making it difficult for policy makers to orchestrate support even if they wish to do so.

Scottish Natural Heritage, Learning and Teaching Scotland and the Outdoor Connections programme have worked in synergy to support the research upon which this report is based, and clearly these studies will inform policy and practice in the sector. This commitment is unprecedented and has been extremely valuable to many of those involved in provision.

Observations for further consideration include the importance of:

- The bodies involved in educational provision in Scotland developing co-ordinated policy and practical support to allow these learning experiences, which are so widely valued, to thrive. Teachers in schools, outdoor providers, Local Authority policy makers, Teacher Education Institutions and HMIE can all play their part but encouragement, direction and co-ordination at national level is a necessary prerequisite;
- Building on the success of Outdoor Connections by moving from the existing focus on policy and research to the promotion and support for delivery of outdoor learning across all sectors.

Further Research

Whilst throughout this summary report the original studies have been referred to as a 'programme' they were not designed or embarked upon with the intention of delivering a comprehensive overview of provision. There are many aspects left unexamined and the studies completed so far are of course modest in scale.

In Scotland, one research priority must be an examination of the extent to which learning experiences of the natural heritage outdoors relate to learning outcomes consistent with Curriculum for Excellence. The present studies show clear *belief* in this relationship, but as few studies have been carried out empirical evidence is modest. However, there is no need for policy development to be delayed until such studies have been completed.

Addressing the culture of 'health and safety' (identified by young people) may be important for schools and policy makers. Some schools and pre-schools clearly do manage to provide a lot of outdoor learning and a better understanding of what factors encourage this and what lessons can be applied in other contexts would significantly aid policy development and practice.

From the studies it does not appear that existing curricular documents are the main driver, and there is a pressing need for more research into the relationship between outdoor learning and the curriculum if young people's engagement with the natural heritage (and by extension, environmental sustainability) is to be taken seriously. As part of this research, understanding better how the affective dimension of learners' relationship with nature is affected would be of use. Also, since learners of different ages are clearly engaging in different types of activity and in different locations, there is a need to further understand which sorts of outdoor experiences give rise to which learning outcomes. For example, it would be of use to understand how and when explicit outcomes relating to nature result in different outcomes for young people.

Nonetheless the seven studies reviewed do add significantly to a growing body of research in Scotland and elsewhere concerning the philosophy, pedagogy and practice of learning in the outdoors and also the nature of provision. With the growing interest in and commitment to education outdoors as the corollary to education indoors, a better and deeper understanding seems achievable.

An observation for further consideration is:

- This current research programme has highlighted areas where further research would significantly contribute to promoting and supporting outdoor learning, especially through:
 - Examining the relationship between learning outdoors and learning outcomes consistent with Curriculum for Excellence;
 - Adopting an action research approach involving a wide range of stakeholders in identifying effective approaches to local delivery.

References to the seven research projects summarised in the present report

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<http://www.acurriculumforexcellencescotland.gov.uk/index.asp>

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Active Schools Programme

<http://www.sportscotland.org.uk/ChannelNavigation/Our+activities/TopicNavigation/Active+Schools/>

[accessed January 2007]

Department for Education and Skills (UK Government): <http://www.dfes.gov.uk>

[accessed January 2007]

Health promoting Schools: <http://www.healthpromotingschools.co.uk/>

[accessed January 2007]

Learning and Teaching Scotland: <http://www.ltscotland.org.uk>

[accessed January 2007]

Learning For Our Future: Scotland's First Action Plan for the UN Decade of Education for Sustainable Development

(<http://www.scotland.gov.uk/Publications/2006/07/25143907/6>)

[accessed January 2007]

Learning Outside the Classroom Manifesto:

<http://www.teachernet.gov.uk/learningoutsidetheclassroom>

[accessed January 2007]

Outdoor Connections: <http://www.ltscotland.org.uk/takinglearningoutdoors/index.asp>

[accessed January 2007]

Endnotes

¹ The study of *School Grounds in Scotland* was supported by Sportscotland and the Scottish Poverty Information Unit.

² Learning and Teaching Scotland (2007), p. 5

³ <http://www.ltscotland.org.uk/takinglearningoutdoors/index.asp>

⁴ <http://www.acurriculumforexcellencescotland.gov.uk/index.asp>

⁵ House of Commons (2005 a, 2005 b)

⁶ <http://www.dfes.gov.uk> and <http://www.teachernet.gov.uk/learningoutsidetheclassroom>

⁷ <http://www.scotland.gov.uk/Publications/2006/07/25143907/6>

⁸ Higgins (2002)

⁹ <http://www.hmie.gov.uk/documents/publication/hgios.html>

¹⁰ <http://www.sportscotland.org.uk/ChannelNavigation/Our+activities/TopicNavigation/Active+Schools/>

¹¹ <http://www.healthpromotingschools.co.uk/>

¹² The evidence in this section comes from Mannion *et al.* (2007). A total of 20 pre-schools, 16 primary schools and 15 secondary schools were surveyed. Over half of these schools and pre-schools were selected at random. 823 records were collected which detailed durations and locations and numbers participating in a much larger number of outdoor classes and events. For pre-schools, we surveyed on-site and off site events for two week long periods while for schools, we surveyed for all events (residential and non-residential) over an eight week period (May and June 2006). The remaining sample was a non-random cluster of schools and pre-schools that were renowned for being more active outdoors. Non-random data were used for comparison purposes and to demonstrate range of in duration of provision.

¹³ The material in this section is drawn from McKendrick (2005).

¹⁴ The evidence in this section comes from Mannion *et al.* (2007). 76 young people aged 3-18 were interviewed in 18 focus groups. 8 focus groups were with young people in 'out-of-school/pre-school' contexts (e.g. clubs, outdoor groups). 26 respondents were of pre-school age, 26 of primary age and 24 of secondary age. 44 of the respondents were male and 32 female.

¹⁵ The evidence in this section comes from Higgins *et al.* (2006). A total of 98 teachers responded to 211 questionnaires sent out (46%) and 20 were interviewed.

¹⁶ A total of 25 Curriculum for Excellence officers of the 32 in post in Scottish Local Authorities (78%)

¹⁷ A total of 240 questionnaires were sent out and 63 providers responded (26%).