taking learning outdoors
partnerships for excellence
# Contents

Introduction by the Chair of the Outdoor Connections Advisory Group  --  --  --  --  --  --  --  --  --  --  -- 1

Vision of sustainable outdoor learning  --  --  --  --  --  --  --  --  --  --  --  --  --  --  -- 3

Our definition of outdoor learning  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  -- 5

Rationale for outdoor learning  --  --  --  --  --  --  --  --  --  --  --  --  --  --  -- 7

A Curriculum for Excellence outdoors  --  --  --  --  --  --  --  --  --  --  --  -- 9

What has Outdoor Connections achieved?  --  --  --  --  --  --  --  --  -- 13

Where do we go from here?  --  --  --  --  --  --  --  --  -- 15

Outdoor Connections Advisory Group membership  --  --  -- 17

References  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  -- 19
Introduction by the Chair of Outdoor Connections Advisory Group

As a group, we are convinced that outdoor learning offers unique opportunities to extend the potential of our children and young people. We learn in context and through experience and place. Therefore, we need to offer different and challenging experiences to stimulate their learning and development. Learning beyond the classroom, in all its forms, can make a huge contribution to this.

This is undoubtedly an exciting time in Scottish education. There is a real drive for all children and young people to achieve across a broad educational experience. As we look to their future, and the challenges children and young people face, they need the values to choose to live more sustainable lives and these can be successfully developed by learning outdoors.

Outdoor learning is not, and should not be, an end in itself, but should be embedded in A Curriculum for Excellence 3–18. It must offer core experiences to children and young people, regularly and routinely, through their transition from pre-school education to adulthood.

This publication is the first of its kind in Scotland and will serve many audiences: teachers, school managers, local authorities and outdoor specialists. It is informed by the biggest research programme ever undertaken on outdoor education in Scotland. In all reviews of this kind, it is the implementation of the findings, the promotion of good practice and consideration of the conclusions that are key to achieving maximum impact.

We have made much of this information available on the Outdoor Connections website at www.LTScotland.org.uk/takinglearningoutdoors/index.asp. It is important that the findings of this review are considered not just in terms of how they might help to prove the value of outdoor learning, but also in terms of how they might help to improve quality, access and capacity.

If we want children and young people aged 3–18 to have the capacities set out in A Curriculum for Excellence, we need to think about how and where they best become confident, responsible, effective and, above all, successful learners. We know the power of outdoor education – learning in school grounds, fieldwork, adventure activity, educational excursions and residential experiences – and we value the contribution it makes. What we now need to do is to revitalise outdoor learning by taking a number of important steps:

• Reinforce and promote outdoor learning pedagogy in the delivery of A Curriculum for Excellence.
• Make sure that educators see the possibilities and are informed of good practice in terms of supporting improved attainment, and providing appropriate planned opportunities for wider achievement.
• Assist other outdoor specialists to understand the demands of the curriculum and make sure that they tailor experiences to meet these demands.
• To stress the considerable benefits of outdoor learning as opposed to the disproportionate emphasis on risk.
• To recognise the extent to which any such risk can be effectively managed.

This is the time to develop the partnerships necessary at national, local authority, community planning and school level to overcome the barriers and sustain outdoor learning opportunities for all children and young people.

I believe that this report and the support developed through the Outdoor Connections programme can help us to grasp these opportunities.

David Cameron
Director of Children’s Services, Stirling Council
Chair of the Outdoor Connections Advisory Group
Vision of sustainable outdoor learning

In 2005 the Minister for Education and Young People initiated an outdoor education development programme, sponsored by the Scottish Executive and led by Learning and Teaching Scotland (LTS). The development programme, Outdoor Connections, is designed to make outdoor connections across a range of current and emerging education policies, programmes and people; to improve the quality of learning experiences; and to secure a sustainable status for outdoor education as part of overall education and lifelong learning provision.

The programme is supported by an Advisory Group with representatives from a range of interests: local authority, voluntary and commercial providers, teachers, headteachers’ associations, education directorate, higher education institutions, HM Inspectorate of Education (HMIE), the Scottish Advisory Panel for Outdoor Education (SAPOE), Scottish Natural Heritage (SNH) and the Institute for Outdoor Learning (IOL). The programme has been further informed by a wider range of partners through a national conference and research seminar.

This report has been informed by a research programme on outdoor education in Scotland. It is important that the findings, conclusions and good practice identified by this research are considered not just in terms of how they might help to prove the value of outdoor learning, but also in terms of how they can improve quality, access and capacity. This research and further detailed information is available on www.LTScotland.org.uk/takinglearningoutdoors/index.asp.

The combined work of the Outdoor Connections programme led to the vision that to achieve sustainable outdoor learning in Scotland:

We must work in partnership to overcome the barriers and provide all children and young people across all school subject areas and beyond, and at all stages 3–18, with opportunities to learn outdoors regularly.
“I don’t think you can just sit in a classroom and be taught how to save the planet or whatever – you have to actually get out there and learn what needs done and how to do it and everything.”

Secondary girl

“My daughter has more energy and is more inquisitive about her surroundings.”

Parent

“I think it is more that you see them [teachers] more as people rather than just someone who is standing in front of you telling you how to add up or whatever, like if you have to stay with them and live with them for a week or whatever, you sort of get to […] know them more as people.”

Secondary girl

“You learn differently outside.”

Primary boy
Our definition of outdoor learning

In the context of this programme the outdoor classroom is a setting, outdoor education is a process in which educators, students and others take part, and outdoor learning is the learning which accrues as a result.

Outdoor education is seen as a teaching approach which can enhance and integrate a broad range of core experiences across the whole curriculum – a wide variety of activities which connect learners with their environment, their community, their society and themselves. It engages and motivates learners through first-hand experiences which demonstrate the relevance of knowledge, understanding and skills, and can help to underpin better attainment and achievement across the curriculum.

The classroom of the future should not be limited to a classroom at all – an ‘excellent’ curriculum would go beyond the traditional boundaries and offer real-world learning experiences outdoors. The outdoor classroom can be found in a variety of locations: school grounds, outdoor residential centres, urban spaces, zoos, farms, parks, gardens, woodlands, rivers, coasts, moorland, mountain, in the sand, up a tree, in a puddle and more.

This understanding of outdoor education aims to be inclusive and can help a wide range of agencies to value and contextualise what they, and others, contribute to the progressive education and development of children and young people in Scotland from pre-school education to adulthood.

This vision builds on a long and established internationally respected tradition of high quality outdoor education in Scotland which has been a model for those developing practice in the UK and overseas. (1)
Rationale for outdoor learning

It is clear, from a national and international evidence base and the recent Scottish research conducted by the programme, that outdoor learning can contribute significantly to the education and personal development of children and young people and enable them to embrace the challenges of their futures.

Whilst there are a great many areas in which outdoor learning can make a contribution, the most notable are:

Sustainable living and working

In response to the UN Decade for Education for Sustainable Development, the Scottish Executive and partners’ Action Plan *Choosing our Future: Scotland’s Sustainable Development Strategy* (2005) identified learning as a major strand of our approach to sustainable development. As a key component of citizenship and enterprise, sustainable development cannot be achieved unless people have the necessary knowledge, awareness, understanding and skills to play a part. Facing up to the challenges of sustainable development means changing the way we live and work and has implications for how we develop as individuals and, ultimately, globally. It requires us to learn new approaches and attitudes for improved use of our planet’s limited resources and get much better at thinking about, and acting on, the long-term consequences of our actions as well as local, national and global consequences.

‘Key Action Point: The Executive is keen to raise the profile and uptake of outdoor education as a whole school approach which can effectively knit together many of the strands of sustainable development in a rich learning environment.’

Direct outdoor experiences help people develop the knowledge and understanding necessary to help them to make these changes. The values necessary to equip the current and future generations to meet these challenges can be developed by re-engaging children and young people with their planet through learning outdoors – frequently throughout their school life and in a variety of contexts and settings.

Health and wellbeing

In *Let’s Make Scotland More Active – A Strategy for Physical Activity* (Scottish Executive, 2003), the First Minister emphasised that physical inactivity is clearly a very common and certain risk to health and wellbeing in Scotland. This results not only in death and disease but also limits the extent to which many people in Scotland can take part fully at school, in work, in their communities and in family life.

Learning outdoors inevitably involves physical activity, if not through the learning itself then in travel to the activity. Outdoor learning opens doors to opportunities to lead physically active lives well beyond school in a landscape that is admired internationally for its outdoor recreation potential. These physical outdoor activities are also generally non-competitive and are consequently attractive to many people as lifelong pursuits. Income from these forms of recreation also contributes significantly to the economy of Scotland.

The Scottish Executive’s National Programme for Improving Mental Health and Well-Being: Action Plan 2003–2006 states that major transitions, such as the start of formal schooling and entering secondary school, bring increased
exposure to risks that may predispose children and young people to poor mental health. Young adulthood is a time when significant mental health problems and mental illness affect as many as one in ten of our young people. The World Health Organisation estimates that depression and depression-related illnesses will become the greatest source of ill-health by 2020.

There is substantial evidence that links the natural environment with good physical health and psychological wellbeing. It indicates that nature can make positive contributions to our health, help us recover from pre-existing stresses or problems, have an ‘immunising’ effect by protecting us from future stresses, and help us concentrate and think more clearly (4). In light of this, children and young people’s wellbeing could be enhanced through learning outdoors and this could act as a stimulus for a lifetime of good health through the outdoors.

**Learning**

In *Improving Scottish Education* (HMIE, 2006), HMIE explains that our education system needs to build on its strengths to meet the challenges of an increasingly complex and uncertain future. Whilst not a panacea, outdoor learning can improve children’s learning experiences in a number of areas that were identified for improvement by HMIE, for example: in primary school ‘learning experiences often lack relevance, engagement and excitement’; in secondary school we need to be ‘improving learning by engaging, challenging and motivating all young people better, and encouraging in them a greater sense of responsibility and independence’ and ‘increasing pupils’ awareness of their potential contribution to their community and environment’; and in special school settings ‘pupils’ learning experiences should be more effective, more motivating and cover a broader range of areas’.

Approaches to learning and teaching need to emphasise participation in experiences as well as achievement of outcomes. Taken together, indoor and outdoor experiences delivering outcomes across the evolving curriculum will meet national aspirations for every young person: the knowledge and understanding, skills, capabilities and attributes they will develop to embrace the challenges of their future.

“Build a calendar – tradition doesn’t just happen; build passion through achievement … a passion not only for pupils to learn but also for teachers to teach outdoors.”

   Headteacher
A Curriculum for Excellence outdoors

A common language is needed by a wide range of varied interests to support the development of children and young people outdoors; A Curriculum for Excellence gives us this. The development of A Curriculum for Excellence informs the agenda for the delivery of Integrated Children’s Services, specifically education. It is essential that outdoor learning and this report are viewed within that context. What follows is an illustration of the language of A Curriculum for Excellence through the research evidence on outdoor learning.

Values
Direct experience of the complex interdependence of life on Earth enables reinforcement of the link between cognitive and affective learning, providing a bridge to advanced understanding. This gives learners a real context to explore, understand, develop and apply the values of wisdom, compassion, integrity and justice.

Capacities
The UK and international evidence base and Scottish research shows that outdoor learning can add significantly to children and young people’s learning experience and their achievements and this can be closely linked to the four capacities:

Developing successful learners
- Outdoor learning can have a positive impact on long-term memory.
- There is substantial evidence that in outdoor learning, learners develop their knowledge and skills in ways that add value to their everyday experiences in the classroom.
- There can be reinforcement between the affective and the cognitive, with each influencing the other and providing a bridge to higher order learning.
- Substantial evidence that outdoor learning has the potential to raise attainment and improve attitudes towards the environment.
- Evidence that outdoor learning fosters the development of specific academic skills, as well as improved engagement, achievement and stronger motivation to learn.

Developing confident individuals
- There is substantial evidence that outdoor learning can impact positively on children and young people’s attitudes, beliefs, and self-perceptions, for example: independence, confidence, self-esteem, locus of control, self-efficacy, personal effectiveness, coping strategies.
- There are examples of outdoor learning programmes yielding benefits in the promotion of positive behaviour and improved physical self-image and fitness.

Developing responsible citizens
- Renewed pride in community with greater sense of place, of belonging and responsibility.
- There is significant evidence of the effect of outdoor learning on social development and greater community involvement.
- In outdoor learning, pupils develop more positive relationships with each other, with their teachers and with the wider community.
- Clear evidence that outdoor learning increases knowledge and understanding of the natural world and environmental systems and processes, and that this knowledge and associated affective development are related to responsible attitudes to the environment.
Developing effective contributors

- Strong evidence across a wide range of outcomes identifies positive effects in the short term and continued gains in the long term. (3)
- There is substantial evidence that outdoor learning can impact positively on children and young people’s interpersonal and social skills such as: social effectiveness, communication skills, group cohesion and teamwork. (3)

Process/methodology outdoors

A Curriculum for Excellence recognises that learning is embedded in experience. By taking learning outdoors we remove some of the barriers that the traditional classroom can put up between children and young people and first-hand, real-life experiences. Outdoor learning is hands-on and direct, and the knowledge that pupils gain from it is real, first-hand and often unforgettable.

Contextualised, applied learning outdoors often stimulates and intrinsically motivates learners who attend to engage with learning longer with less disruptive behaviour.

Outdoor learning can be the space for learning beyond subject boundaries, so that learners can make connections between different areas of learning. Through interdisciplinary activities of this kind, children and young people can develop their knowledge, understanding, enterprise and organisational skills, creativity, teamwork and the ability to apply their learning in new and challenging contexts.

The wealth of opportunities for personal achievement associated with outdoor learning enriches the life experience of learners. Taking part in these activities plays an important part in widening a child or young person’s horizons, developing confidence, progress and achievement. These achievements must be recognised for the significance they have to learners, their families and communities.

“The very good contribution of outdoor education, both within the curriculum and during evenings and weekends, in enhancing the confidence and self-esteem of young people.”

HMIE

“My child has become more independent with a lot more confidence.”

Parent
Outdoor learning design principles

<table>
<thead>
<tr>
<th>Challenge and enjoyment:</th>
<th>active learning, engaging and motivating.</th>
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<tbody>
<tr>
<td>Coherence:</td>
<td>draws on different strands of learning, often into a single extended experience.</td>
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<tr>
<td>Relevance:</td>
<td>contextualises learning to the world and life beyond the school.</td>
</tr>
<tr>
<td>Choice:</td>
<td>opens horizons to the variety of learning for life beyond the class setting.</td>
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<tr>
<td>Breadth:</td>
<td>a wide variety of contexts and environments for learning and experiences exist over the doorstep.</td>
</tr>
<tr>
<td>Progression:</td>
<td>for all young people from 3 to 18 years demands a wide range of outdoor learning experiences. Progression in settings from school grounds to (potentially) international travel, progression in pedagogy from didactic to self-led, progression in activity from simple observation to technical forms of travel, progression in values and content.</td>
</tr>
<tr>
<td>Depth:</td>
<td>direct experience of the complex interdependence of life on Earth enables reinforcement of the link between cognitive and affective learning, providing a bridge to advanced understanding.</td>
</tr>
<tr>
<td>Expression and creativity:</td>
<td>through working in smaller groups and responding imaginatively to stimulating settings, contexts and activity.</td>
</tr>
<tr>
<td>Holistic:</td>
<td>intellectual, physical, emotional, aesthetic and spiritual development can occur together.</td>
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Subject areas outdoors

‘The curriculum areas simply provide a device for ensuring that learning takes place across a broad range of contexts, and offer a way of grouping experiences and outcomes under recognisable headings. These experiences and outcomes may be secured within school and beyond in outdoor education settings. They support the progressive development of ideas, skills and ways of thinking.’


The UK and international evidence base and Scottish research shows that outdoor learning can add significantly to children and young people’s learning experience. From our research in Scotland we found examples of all of the subject areas being taught through outdoor education settings, often in an interdisciplinary approach. Examples of these are on www.LTScotland.org.uk/takinglearningoutdoors/index.asp

Scottish education is encouraging the development of Teachers for Excellence. The extension of teaching to the outdoors is a further opportunity to promote the learning and development of teachers in this way.

‘The outdoors is becoming as well used by the staff now as any other classroom. For most of my staff it’s brought creativity back into teaching.’

Headteacher
What has Outdoor Connections achieved?

Outdoor Connections was designed to make connections across a range of current and emerging education policies, programmes and people; to improve the quality of learning experiences; and to secure a sustainable status for outdoor education as part of overall education and lifelong learning provision.

The Outdoor Connections development programme and partners have together:

- raised the profile of outdoor learning
- achieved recognition for outdoor learning through *A Curriculum for Excellence*
- established closer links than before between schools and outdoor specialists
- completed substantial research on Scottish outdoor learning opportunities – the most comprehensive national study anywhere in the world
- identified good outdoor learning practice
- developed national partnership working across departments and agencies to support outdoor learning
- engaged many national and local stakeholders in the outdoor learning discussion
- provided a national point of reference for outdoor learning in Scotland
- provided leadership towards a national vision of outdoor learning.

Outdoor Connections has provided a national focus to move outdoor learning forward. However, the research shows that work still needs to be done at a variety of levels to ensure equal opportunity for all Scottish children and young people.

**Inveraray Primary School, Argyll and Bute**, became involved in the Grounds for Learning (GfL) Learning Outside, Inside curriculum project, through a desire to revamp the school’s curriculum, which relied too heavily on textbook learning. Funding to improve the school’s grounds was secured from Scottish Natural Heritage, with ongoing advice and support from GfL.

Children produced ideas for improving their grounds and drew up their own plans. Primary 1 and 2 pupils designed and created an attractive, herbal boat garden. Primary 3 pupils built birdhouses and studied birds, whilst Primary 4 and 5 made a butterfly zone to hatch caterpillars and grew their own fruit and vegetables, which were used for school lunches and the tuck shop. Other developments within the grounds include a wild pond with viewing platform, outdoor seating that the children helped build, a vegetable garden with raised beds, sculptures and mosaics as part of the art project and a willow den and tunnel.

Visits into the wider community enabled pupils to undertake interesting research activity and motivated them to learn. Pupils’ involvement with the wider community enhanced their learning and very successfully promoted their achievements. The integration of outdoor learning into the curriculum has allowed the approach to be sustained and for the children to see the learning in a context.
At **Balnacraig Special School, Perth and Kinross**, outdoor learning is the very essence of the curriculum and is the foundation for the building of relationships. All pupils participate in twice-weekly allocations typically lasting half a day, in two distinct groups – S1/S2 pupils then S3/S4 pupils. Their experience in outdoor learning is then followed up as the basis for their other curricular studies. An experiential input at S1/S2 has a lead into PSD. The S3/S4 pupils undertake Standard Grade courses plus short courses. The short courses offered are SQA Performance Units at Int 1 or Int 2. Outdoor Education Performance Units covered include Hill Walking, Rock Climbing, Skiing and Orienteering.

The strength is that tangible connections are made between classroom work and the real world. This leads to a sense of relevance with corresponding improvements in relationships, motivation, attitudes, qualities and capabilities in terms of personal development and improved attitudes to work.
Where do we go from here?

The research with teachers, headteachers, local authorities and outdoor specialists has identified a number of barriers which result in the opportunities for outdoor learning being very variable across the country.

The main barriers identified were:

- school culture – timetabling, disruption, exam attainment focus, planning time
- legitimacy of outdoor learning – lack of curricular imperative and limited learning evaluation and improvement planning
- risk/litigation perception
- health and safety bureaucracy
- staff competence and confidence
- access to suitable outdoor venues
- resources – cost, transport, ratios and weather.

Whilst these barriers are common across the country, it was apparent from the baseline data collected that some local authorities, schools and pre-school establishments can overcome the barriers. Some of the barriers are situational, for example access, and are best overcome at school community level. Other barriers, for example efficient resourcing, are best addressed by partnership approaches at local authority or regional levels. Some barriers need to be overcome at national level. For example, the value of outdoor learning needs to be promoted and successful approaches should be developed. A few require a combination of action at all levels: teacher confidence and competence; reducing any unnecessary administration for excursions; and changing cultures in schools. It is clear that few local authorities, schools or pre-school establishments have the capability to overcome these barriers without wider partnership support.

If children and young people 3–18 are to develop the capacities set out in A Curriculum for Excellence, every school and teacher should reflect on how and where they can best become confident, responsible, effective and, above all, successful learners. Outdoor learning can play a significant part in this process and it is time to revitalise provision by taking a number of important steps.

- Reinforce and promote outdoor learning pedagogy in the delivery of A Curriculum for Excellence.
- Make sure that educators see the possibilities and are informed of good practice.
- Assist other outdoor specialists to understand the demands of the curriculum and make sure that they tailor experiences to meet these demands.
- To stress the considerable benefits of outdoor learning as opposed to the disproportionate emphasis on risk.
- To recognise the extent to which any such risk can be effectively managed.

Until now Learning and Teaching Scotland has taken the lead on behalf of the Scottish Executive Education Department with support from key partners through the Outdoor Connections development programme 2005–07. It is now time for a range of other agencies to work with us and develop the partnerships necessary at national, local authority, community planning and school community level to overcome the barriers and sustain outdoor learning opportunities for all children and young people.

We must work in partnership to overcome the barriers and provide all children and young people across all school subject areas and beyond, and at all stages 3–18, with opportunities to learn outdoors regularly.
“Until you see like how animals are losing their habitats and you see the actual problems you can't really feel strongly about it. I mean, you’ll learn about it and you’ll know it’s important but you really won’t feel that strongly about it unless you actually experience it.”

Secondary boy

“The process of changing the school grounds has involved everyone – the parents, the teachers and the pupils. I’m proud of what we’ve done and I hope other schools follow our example.”

Parent

“Pupils at this stage also developed new types of team working and problem solving skills during residential outdoor education experiences.”

HMIE

“My daughter is more aware of the environment, sleeps better on a Wednesday night and comes home from school enthusiastic about what she has done, without being prompted.”

Parent

“Residential experiences, field trips and outdoor education were used effectively to develop pupils’ fitness and citizenship skills, and to enhance their broader cultural and environmental awareness.”

HMIE
Falla Hill Primary School, West Lothian and staff from Forestry Commission Scotland started a Forest School in 2004. This started with a commitment to take the composite P6/7 class out into the woods every Wednesday for the full school year. This development has continued and now involves all pupils in Primary 6 and 7.

The children walk from Falla Hill Primary School to their Forest School in a patch of local woodland. For the children this has given them the opportunity to explore their local area. They have increased their powers of observation, have tasted blackberries and enjoy the peace and quiet of the forest. Pupil diaries help the children to reflect on their own learning. Teachers are delighted at the breadth of curriculum covered. The children have enjoyed this experience enormously and have gained a great deal of knowledge about the environment without realising just how much they have learned. Positive changes in the children’s health, attitude and behaviour have been noted by teachers and parents alike, just by allowing children to explore, express and grow in the natural, informal and safe woodland setting.
References

More information, research reports and downloadable copies of this document are available at www.LTScotland.org.uk/takinglearningoutdoors


"We need to encourage this generation, perhaps more than any previous one, to acquire the environmental awareness and citizenship that is instilled through exploration of the natural environment in childhood.

Chief Executive, Learning and Teaching Scotland

"I would argue that all areas of development and all the features of learning can be addressed through outside play in the garden. I think it is just the most marvelous place for children to learn. They are learning about the environment, in control of their own learning, making decisions, problem solving, investigating, having to interact with others and learning to work together, to share.

Nursery school Headteacher

"When the children went out to begin with it was really interesting to observe how they managed space and we found that the boys used the whole space, they were able to release all this energy and we noticed how long they could concentrate and how positively they were behaving.

Nursery school Headteacher

"We must challenge people to think; why learn indoors?

Deputy Education and Young People Minister