

Outdoor Learning

Practical guidance, ideas and support for
teachers and practitioners in Scotland

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Section 1:

Introduction

It is possible, through international comparisons, to recognise Scotland as an emerging leader in the field of outdoor learning. Scotland has a long history of engaging children and young people with the outdoors and the value placed on outdoor learning within Curriculum for Excellence is encouragement to continue, and build upon, that history. Indeed, Scotland is one of only a handful of countries which now explicitly includes the use of the outdoor environment as a necessary approach and context for delivering its education curriculum. Just as Scotland is being recognised as an innovative forerunner in curriculum reform at a time of exponential change, so it is beginning to be recognised as a leader in the use of outdoor learning.

By capitalising on the potential of the full spectrum of outdoor learning experiences, from simple learning activities close to schools and settings through to residential experiences and beyond, practitioners can contribute positively to the learning journey of Scotland's children and young people.

The purpose of this resource is to provide practical, accessible and straightforward advice for teachers, childhood practitioners, youth workers and others working with children and young people on how to engage children and young people with learning outdoors. It is part of achieving a wider objective of supporting the implementation of the guidance document Curriculum for Excellence through Outdoor Learning.

This resource introduces practitioners who are not familiar with outdoor learning to exploring ways of taking children outside. It provides a route into continuing professional development and suggestions for embedding outdoor learning as a whole-school approach. It serves to illustrate the potential of outdoor learning as an effective approach to learning and teaching within the context of Curriculum for Excellence.

It should be noted that this resource is not a definitive guide to outdoor learning in Scotland and that there are many ways of taking learning outdoors that will not be covered in detail.

Further support and guidance are available on the Education Scotland website and through Glow. There are also many partner organisations and individuals throughout Scotland who produce materials and provide first-hand support to enable practitioners to facilitate quality learning outdoors for children and young people.

Please visit www.educationscotland.gov.uk/outdoorlearning for more information.

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Outdoor learning within the curriculum

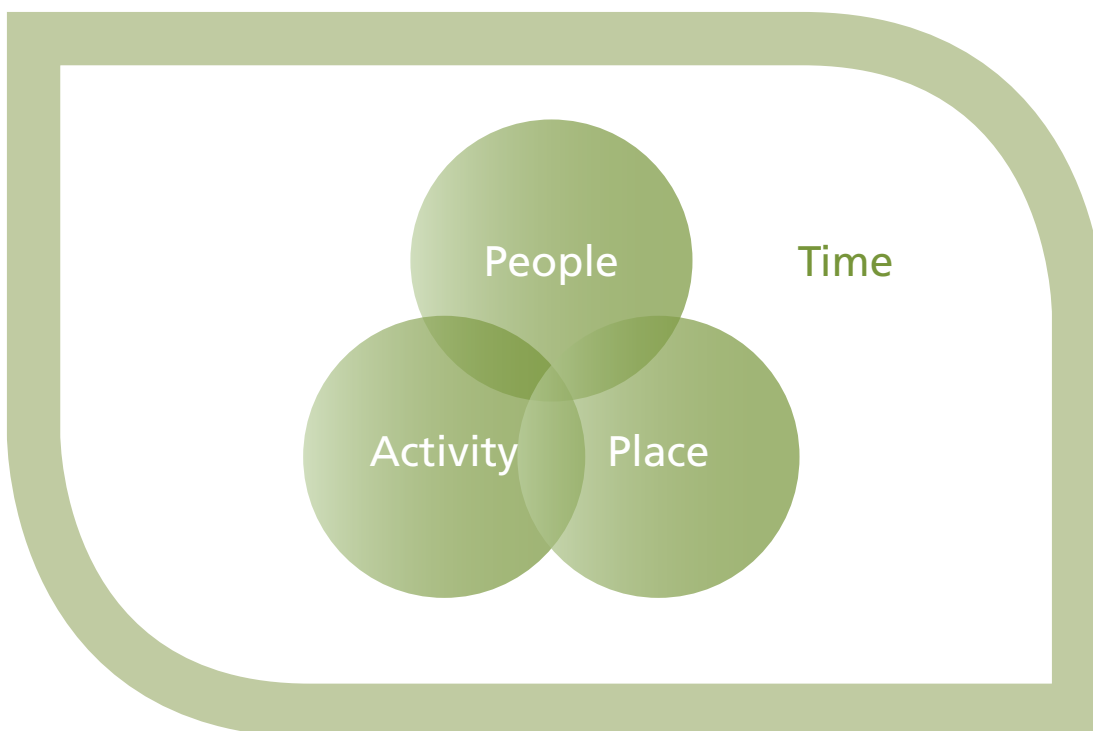
**'We are not saying 'good bye' to our classrooms;
we are opening them up.'**

Simon Beames, Outdoor Education Lecturer, Edinburgh University

Learning outdoors is about engaging children and young people in many different ways. Practitioners frequently act as facilitators, using multi-sensory and experiential approaches. This encourages children and young people to become involved in emotional, physical, aesthetic, spiritual and cognitive experiences as part of their learning.

The place or context in which learning takes place is an integral part of the learning process, as illustrated in Figure 1. The relationships between the people involved, the activities undertaken and the place where the learning happens require thought and consideration to maximise the learning opportunities and to meet the needs and aspirations of children and young people.

Figure 1: The learning process.¹



¹ Adapted from Higgins, P (1995), Outdoor education provision at Moray House Institute of Education, *Scottish Journal of Physical Education*, 23(3), 4–11. See also Beames, S, Higgins, P, and Nicol, R (2011), *Learning Outside the Classroom: Theory and guidelines for practice*, New York: Routledge.

The place in which people learn also helps them to make connections between their experiences and the world around them in a meaningful context. Outdoor places provide a diversity of resources and spaces that is hard to replicate in an indoor environment.

Time is a consideration as the seasons, life cycles and the passing of years create an ever-changing environment. A 5-year-old child is likely to have a very different experience when going for a walk in their local area from that of a 15-year-old. When planning a progression of outdoor experiences, practitioners can use these natural cycles and changes advantageously, adding value to the curriculum at every level.

Within these contexts are opportunities to develop skills for learning, life and work. The numeracy, literacy and health and wellbeing experiences and outcomes that are the responsibility of all adults can be developed by taking learning outdoors during and outwith school hours.

Outdoor learning encompasses the entire range of learning experiences undertaken outside. Whether it is reading a book outside or participating in an overseas expedition, the curriculum design principles apply. Curriculum planners and managers should recognise the place of the full spectrum of outdoor learning experiences and should not interpret the promotion of the use of school grounds and local areas as an alternative to outdoor residential experiences but as part of a spectrum of learning opportunities. Each type of outdoor learning experience should complement the other and should form a progressive and coherent range of experiences for children and young people. Practitioners need to know how the experience benefits their learners. The quality of learning and teaching is of paramount importance regardless of the place in which it occurs.

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The benefits of outdoor learning

There is now a substantial base of national and international evidence about the benefits of taking learning outdoors.² The impact of outdoor learning on children and young people's health and wellbeing, wider achievements, attainment and personal development is often recognised by practitioners.

There are some general benefits from taking learning outside within and across curriculum areas:

- connections are made experientially with the real world outside the classroom, helping to develop skills, knowledge and understanding in a meaningful context
- outdoor environments and surroundings act as a rich stimulus for creative thinking and learning. This affords opportunities for challenge, enquiry, critical thinking and reflection
- children and young people find that not everything outside matches the models or the textbooks. This does not mean that what they have found is 'wrong'. Instead, it develops awareness of the complexities of the real world and can help to develop critical thinking skills
- children and young people are able to understand the relevance of a subject taught in school to everyday life
- children and young people can sometimes behave differently outdoors. Quiet pupils may speak more, others become calmer and more focused when outside, especially in a natural space
- the multi-sensory experience outdoors helps children and young people to retain knowledge more effectively. There are opportunities for pupils to learn with their whole bodies on a large scale
- learning in a less structured environment can provide a different learning experience from that of the classroom
- being outdoors can be a more relaxing learning experience for many learners

What the research says

Scotland's own universities have made a significant contribution to the international research base around the subject of learning outdoors. There have been several studies of outdoor learning within Scottish education and these are a useful starting point for those practitioners with an interest in understanding the issues more fully.³

2 Education Scotland (2007), Taking Learning Outdoors: Partnerships for Excellence, Glasgow: Education Scotland, p7.

3 The University of Edinburgh's Outdoor Education research pages offer a useful overview of much of the Scottish literature and research. <http://www.education.ed.ac.uk/outdoored/resources.html>

Below is a collection of snippets from the international research that illustrate the potential impact of taking learning outdoors and spending time outside. The challenge for practitioners is to identify positive action based on available research to ensure all children have regular, frequent, enjoyable and challenging opportunities to learn outdoors throughout their school career and beyond.

Practitioners may find using the snippets helpful when:

- considering the benefits of outdoor learning
- planning programmes of support for specific groups or individual children
- communicating with the wider school community to promote taking learning outdoors
- undertaking continuing professional development activities linking to outdoor learning

These snippets are a small selection from the research available. The impact of being outside is in many cases culturally and socially specific. For this reason it is important that practitioners who want to further develop their evidence-based practice read more widely. By accessing the links given in Appendix 1, a comprehensive overview can be gained through further reading, reflection and professional discussion. This in turn can translate into changing or enhancing a practitioner's understanding, confidence and motivation to take children outside to learn effectively.

Residential programmes have a positive impact on children⁴

At-risk children who attended a week-long residential outdoor education programme increased their test scores compared with children who did not have this experience. There was a 27% increase in measured mastery of science concepts, enhanced co-operation and conflict resolution skills, gains in self-esteem, gains in positive environmental behaviour, and gains in problem solving, motivation to learn and classroom behaviour.

Field trips help young students to better articulate environmental problems⁵

Complex environmental problems are challenging for pupils to understand. In addition to using pictures and diagrams, and examining a problem sequentially, using kinaesthetic and auditory learning approaches on field trips made a notable positive difference.

Improving school grounds helps children's health and wellbeing⁶

Children who experience school grounds with diverse natural settings are more physically active, more aware of nutrition, more civil to one another and more creative.

4 The American Institutes for Research study (2005), *Effects of Outdoor Education Programs for Children in California*, Palo Alto, CA: American Institutes for Research.

5 Pruneau, D, Freiman, V, Barbier, P-Y and Langis, J (2010), *Helping young students to better pose an environmental problem*, *Applied Environmental Education and Communication*, 8(2), 105–113.

6 Bell, A C and Dymont, J E (2006), *Grounds for Action: Promoting Physical Activity through School Ground Greening in Canada*, Toronto, Canada: Evergreen.

Short-sightedness in children affected by time spent outside

Australian Government research⁷ suggests that myopia, or short-sightedness, in children appears to be positively affected by the amount of time spent outside. The vision of 6- and 7-year-olds of Chinese ethnicity in Singapore and Australia was compared. Ten per cent of the Australian children were short-sighted compared with 30% of the Singaporean children. All the children spent a similar amount of time reading, watching TV and playing computer games. However, the Australian children spent on average two hours a day outdoors, which was 90 minutes more than the Singaporean children.

Nature is a buffer of life stress

Nearby levels of nature moderate the impact of stressful life events on the psychological wellbeing of children. The life stress impact is lower among children with high levels of nearby nature than among those with little nearby nature.⁸

Being outside affects children's behaviour

A Swedish study⁹ was carried out at two day nurseries, one an outdoor 'I Ur och Skur' kindergarten and the other a traditional nursery in new, spacious premises. The research team studied children's behaviour as a whole: how they played, how often they were outside, their play routines, and the development of motor function and powers of concentration during the course of a year.

'When it comes to concentration capacity, the children within I Ur och Skur pre-schools are more than twice as focused as children within a normal pre-school. Their motor skills are better, they are less frustrated, restless and sick.'

Science scores improve through environmental stewardship

A large study¹⁰ from Louisiana compared students who received horticulture lessons and grew plants for a restoration project to a control group. Over the two-year project, the sciences scores in tests were higher in this programme than in the control group.

Tree density linked to asthma in young children¹¹

Lovasi et al (2008) examined the prevalence of asthma in 4-year-old and 5-year-old children, the density of trees growing in streets, pollution sources and census data. They concluded that street trees may help prevent early childhood asthma in urban areas but further research is needed.

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- 7 Rose, K A, Morgan, I G, Smith, W, Burlutsky, G, Mitchell, P and Saw, S (2008), Myopia, lifestyle and schooling in students of Chinese ethnicity in Singapore and Sydney, *Arch Ophthalmol*, 126(4), 527–530. <http://archophth.highwire.org/cgi/content/abstract/126/4/527> Accessed 13.3.11.
- 8 Wells, N M and Evans, G W (2003), Nearby Nature: A Buffer of Life Stress Among Rural Children, *Environment and Behavior*, 35(3), 311–330.
- 9 Grahn, P, Martensson, F, Lindblad, B, Nilsson, P and Ekman, A (1997), *Ute på Dagis, Stad and Land*, 145, Håssleholm, Sweden: Nora Skåne Offset.
- 10 Karsh, K, Bush, E, Hinson, J and Blanchard, P (2009), Integrating Horticulture Biology and Environmental Coastal Issues into the Middle School Science Curriculum, *HortTechnology*, 19, 813–817.

Children who experience and bond with nature develop pro-environmental behaviour¹²

Pro-environmental behaviour in children and adults was examined through a literature review. One key recommendation was that educators should make time for children to experience nature, individually and as a group, enabling them to develop bonds with nature.

Physical co-ordination is affected by landscape¹³

Two groups of pre-school children attending the same nursery were studied during a nine-month period. One group had daily access to natural landscape for at least two hours, the other group only occasional access. Significant differences were found in balance skills, co-ordination and agility. The researchers concluded, 'Nature affords possibilities and challenges for the children to explore their own abilities. The children feel more comfortable being in the natural environment and their knowledge about nature increases.'

Environmental programmes help basic skills¹⁴

Children who are in environment-based instructional programmes score as well or better than control group children standardised measures in reading, maths, language and spelling. The environment-based programmes also foster co-operative learning and civic responsibility, using the natural characteristics of the school grounds and local community as the foundational framework for the curricula.

Natural settings help children focus and enhance cognitive abilities¹⁵

Proximity to, views of and daily exposure to natural settings increase children's ability to focus and enhance cognitive abilities.

The impact of outdoor learning cannot be assumed – it depends on the activities undertaken and how they are facilitated¹⁶

The delivery of outdoor learning and the aims and focus of the experience 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.' (Key finding 14)

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- 11 Lovasi, G S, Quinn, J W, Neckerman, K M, Perzanowski, M S and Rundle, A (2008), Children living in areas with more street trees have lower prevalence of asthma, *Journal of Epidemiology and Community Health*, 62(7), 647–649.
- 12 Chawla, L and Cushing, F D (2007), Education for strategic environmental behavior, *Environmental Education Research*, 13(4), 437–452.
- 13 Fjørtoft, I and Sageie, J (2001), The Natural Environment as a Playground for Children: The Impact of Outdoor Play Activities in Pre-Primary School Children, *Early Childhood Education Journal*, 29(2), 111–117.
- 14 Lieberman, G A and Hoody L L (2005), California Student Assessment Project Phase Two: The Effects of Environment-Based Education on Student Achievement, Poway, CA: State Education and Environment Roundtable.
- 15 Wells, N M (2000), At Home with Nature: Effects of 'Greenness' on Children's Cognitive Functioning, *Environment and Behavior*, 32(6), 775–795.

Benefits of Forest Schools

A longitudinal evaluation¹⁷ of three Forest School programmes noted that for many children it takes many weeks or months for changes to occur. Thus long-term and regular contact with a woodland environment is needed. However, positive outcomes included greater self-confidence and self-belief and a better ability to work co-operatively with others. The children developed more sophisticated uses of spoken and written language. The children developed physical stamina and gross and fine motor skills. There was an increased respect for the environment and interest in natural surroundings. The practitioners gained a new perspective and understanding of the children. The children took their experience home and asked their parents to take them outdoors at the weekends or in the school holidays, helping to change parental attitudes and interest in Forest Schools.

‘The games children play outside tend to be less gender stereotyped than the ones played inside since the material children use to play with in the forest is not as associated with a specific gender.’¹⁸

Eva Änggård, Department of Didactic Science and Early Childhood Education, Stockholm University

Greater community involvement in schools that green their grounds¹⁹

One of the major benefits of green school grounds is increased involvement by adults and members of the nearby community, from helping with gardens to enriching the lifescape of the school grounds.

The impact of time outside on ADD and ADHD

Results from a study²⁰ of children with attention deficit disorder (ADD) indicate that children function better than usual after activities in green settings. The ‘greener’ a play area is, the less severe the ADD symptoms are.

Children with attention deficit hyperactivity Disorder (ADHD) demonstrated improved concentration when completing a task after a 20-minute walk in a city park. The difference was comparable to what is achieved with standard ADHD medication. ‘Doses of nature’ might serve as a safe, inexpensive, widely accessible new tool in the toolkit for managing ADHD symptoms.²¹

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- 16 Nicol, R, Higgins, P, Ross, H and Mannion, G (2007), *Outdoor Education in Scotland: A Summary of Recent Research*, Inverness: Scottish Natural Heritage.
- 17 Murray, R and O'Brien, E (2005), *Such Enthusiasm – A Joy to See: An Evaluation of Forest School in England*, Farnham: Forest Research. [www.forestresearch.gov.uk/pdf/ForestSchoolEnglandReport.pdf/\\$FILE/ForestSchoolEnglandReport.pdf](http://www.forestresearch.gov.uk/pdf/ForestSchoolEnglandReport.pdf/$FILE/ForestSchoolEnglandReport.pdf) Accessed 13.3.11.
- 18 Quote taken from www.friluftsframjandet.se/guest/360 Accessed 13.3.11.
- 19 Bell, A C and Dymont J E (2006), *Grounds for Action: Promoting Physical Activity through School Ground Greening in Canada*, Toronto, Canada: Evergreen.
- 20 Faber Taylor, A Kuo, F E and Sullivan, W C (2001), *Coping with ADD: The Surprising Connection to Green Play Settings*, *Environment and Behavior*, January 2001, 33(1).

Adult mentors have a positive lifelong impact on children and young people²²

Many people who choose to take action to benefit the environment have had an adult mentor as children. The adult mentors demonstrated care for the land as a limited resource essential for family identity and wellbeing, disapproval of destructive practice, a fascination with the details of other living things and elements of earth and sky, and simple pleasure in being in nature.

Children who free play in wild natural environments are more likely to have pro-environmental behaviours and attitudes as adults

When children become truly engaged with the natural world at a young age, the experience is likely to stay with them in a powerful way, shaping their subsequent environmental path.²³ People who have had frequent childhood experiences in natural spaces are more likely to visit such places as adults.²⁴

‘Domesticated’ nature activities such as picking flowers or planting seeds, while having a significant positive effect, did not have as great an influence as that of ‘wild’ nature on environmental attitudes and had only a marginal effect on environmental behaviours.

Research²⁵ about the health impact of the John Muir Award found that ‘1 in 10 participants had never visited a wild place before their award involvement’ and that ‘those living in the poorest circumstances were over 6 times more likely to have had no previous experience of wild places’.

Being ‘nature smart’ is a recognised intelligence

Howard Gardner designated ‘naturalist’ or ‘nature smart’ as the eighth intelligence. This includes abilities such as noticing subtle differences and details about objects, having the capacity to use multiple senses, being able to identify and distinguish one species from another, and being aware of how to distinguish the diversity of organisms in their ecological niche.²⁶

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- 21 Faber Taylor, A Kuo, F E (2009), Children with Attention Deficits Concentrate Better After Walk in the Park, *Journal of Attention Disorders*, Mar 2009, 12, 402–409.
- 22 Chawla, L (2006), Learning to Love the Natural World Enough to Protect It in *Barn*, 2, 57–58. *Barn* is a quarterly published by the Norwegian Centre for Child Research at the Norwegian University of Science and Technology, Trondheim, Norway.
- 23 Wells, N M and Lekies, K S (2006), Nature and the life course: Pathways from childhood nature experiences to adult environmentalism, *Children, Youth and Environments*, 16(1), 1–24.
- 24 Ward Thompson, C, Aspinall, P and Montarzino, A (2008), ‘The childhood factor – Adult visits to green places and the significance of childhood experience’, *Environment and Behaviour*, 40(1), 111–143.
- 25 Mitchell, D and Shaw, R (2009), Health Impacts of the John Muir Award, Glasgow: Glasgow University’s Public Health and Health Policy Unit. www.gcph.co.uk/assets/0000/0445/JMA_Health_Impacts_Final_report.pdf Accessed 14.3.11.
- 26 Gardner, H (2006), *Multiple Intelligences: New Horizons in Theory and Practice*, 2nd edition, New York, USA: Basic Books, 18–20.

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Section 2:

Making connections across the curriculum

Practitioners possess skills and approaches to learning, teaching and assessment that are valid and useful in an outdoor context. The abilities of educators enable them to be effective outside as well as indoors. All subjects, all ages and all levels can be taught outdoors.

Many current themes in education can be taken outside with a little thought and creativity. For example, enterprise in education or citizenship activities can be effective and meaningful when undertaken outside. Access to Scotland's natural, built and cultural heritage brings a unique dimension to learning which helps young people learn and understand the contributions they can make to society. International education and global citizenship themes taken outdoors add perspective to children and young people's appreciation of Scotland's relationship with the wider world.

Whilst learning outside is relevant across the curriculum, the following sections cover specific approaches and themes where outdoor learning has a unique and enhanced role in meeting the learning needs of children and young people. These sections are:

- A whole-school approach.
- Early years outdoors.
- The health and wellbeing of children and young people.
- Sustainable development education and outdoor learning.
- Fostering creativity through learning outdoors.
- Skills for learning, skills for life and skills for work.
- Informal outdoor learning opportunities for children and young people during and beyond the school day.
- Bridging the Gap outdoors for young people.
- ICT and digital technologies.
- Interdisciplinary learning.

A whole-school approach

Everyone within each learning community, whatever their contact with children and young people, should be proactive in promoting the benefits of being outdoors in the classroom, the playground and the wider school community. The adults involved can encourage and capitalise on the potential of the outdoor context to provide new challenges and ways of learning. Practitioners need to ensure that the outdoor experiences provided engage children and young people, and that they take account of their views.

Learners can benefit from a wide variety of outdoor experiences within and beyond the formal curriculum. Look for opportunities that make the most of the wider knowledge and skills of practitioners. Examples include:

- catering staff using vegetables grown in the school garden in their menus
- a social inclusion worker leading Forest School activities as part of an S4 Biology course
- a science technician taking a lead role on the school grounds development committee
- a depute headteacher leading a low-level hill-walking club after school in the summer term
- a janitor developing a hot composting system to support the school in recycling garden waste
- transition activities that take place outdoors and involve partner organisations, including community learning
- an after-school club holding weekly outdoor free-play sessions all year round and during the holidays in the wildlife garden belonging to a secondary school
- parent councils assisting with the funding of outdoor clothing for the school to enable outdoor learning to take place in all weathers

'We found out that our catering manager is a passionate gardener and she has worked with our pupils creating a vegetable growing area for the different classes to grow and eat their own vegetables.'

St Dominic's RC Primary, Airdrie, North Lanarkshire

Early years outdoors

There are an increasing number of early years settings throughout Scotland demonstrating leading practice outdoors. In line with the medium-term priorities stated in the *Early Years Framework*,²⁷ there are established outdoor and nature kindergartens where children are outside all year round in almost all weathers. Many other centres are incorporating aspects of this philosophy and approach in their routines.

Quality practice in outdoor learning through play is often characterised by:

- knowledgeable and enthusiastic practitioners who collaboratively plan, facilitate and enable children to develop their skills, knowledge and understanding through child-initiated, play-based experiences – this is developed from observing and consulting children using a variety of approaches
- the development of outdoor spaces within settings as stimulating play environments that include many open-ended resources, natural materials and opportunities to engage in risky, challenging and adventurous play
- the indoor and outdoor spaces given equal consideration and being simultaneously accessible to children
- opportunities for children to experience natural places which give a feeling of wildness through regular and frequent off-site visits to woodlands, beaches or other areas of greenspace – this also includes time to visit and get to know the local community, its people and its services

Practitioners who are willing, keen and interested in working with children outside can make a positive difference to the quality of outdoor provision. Even a small outdoor space has the potential to be developed on a low budget using cheap or unwanted items. The organisations listed in Appendix 1 can help committed practitioners to do this using a participatory approach that fully involves young children. Making outdoor spaces as safe as necessary and not as safe as possible is an important step when allowing children more freedom to self-assess risk in their play.

Giving the indoor and outdoor play environments equal consideration is helpful. Little steps make a big difference. For example:

- allowing parents to drop off or collect their child from the outdoor space rather than indoors
- having snack outside
- holding circle times or reading stories outside
- planning for outside as well as inside, for example rather than having an outdoor box on a planning sheet, ensure that half the activities offered take place outside

Regular visits to local woodlands, beaches or other greenspaces help young children learn and make connections across all curriculum areas. There is a whole world beyond the indoor space waiting to be explored. Look at the issues around off-site visits and ways of solving these to enable the activity to happen on a frequent basis.

A useful starting point for improving outdoor play provision is the Education Scotland Supporting the Early Level DVD²⁸, which has a section about learning environments and the need to maximise the potential of the outdoors. www.educationscotland.gov.uk/earlyyears/curriculum/supportingearlylevel/implementation/environmentsforlearning.asp

The Early Years area of the Education Scotland website has comprehensive support for childhood practitioners working in the early years, both indoors and outdoors. www.educationscotland.gov.uk/earlyyears/

Possible lines of development for outdoor play

When considering possible lines of development for outdoor learning and play, these should be based primarily on the children's interests interwoven with seasonal and ongoing events and celebrations. Developing meaningful connections between the curriculum areas is paramount. Every experience and outcome can be developed outside in a bigger, better or different way than when being developed inside.

Whilst structured activities are beneficial for some children, most learning takes place through careful consideration of resources, the environment and the interactions of practitioners and children who are embarking on a learning journey together. Interdisciplinary learning through child-initiated play is the norm.

Practitioners may find it helpful to develop possible lines of development (PLODS) through mapping or brainstorming outdoor activities based upon popular child-led themes, schemas observed and activities linked to real-world events such as the weather, seasons and cultural and community celebrations.

The example below indicates how this may happen, clearly linking the different curriculum areas.

27 Scottish Government (2008), The Early Years Framework, p26. www.scotland.gov.uk/Resource/Doc/257007/0076309.pdf

28 Curriculum for Excellence: Supporting the Early Level, Education Scotland, 2010.

Shapes in the environment

A group of children are fascinated with rolling tyres outside. Their lead adult shows them a book about vehicles and the children notice that the trikes other children are using have tyres as well. One child comments, 'Those are circles,' and draws a circle on the ground to show the other children in the group. The lead adult smiles and wonders how many children would fit in the newly drawn circle. The children make estimates, which are chalked on the ground beside the circle. They all crowd into the circle and call on other children to help. The children enjoy counting everyone in the circle to work out the answer.

The next day, the lead practitioner puts out a variety of play objects and asks the children which toys they think can roll or stack. The children sort out the objects and proceed to build a tower with the objects that stack.

Later on in the week the children are going for a walk in the local neighbourhood and notice all the circles and other shapes they can see. As the children pass a church a cross can be seen so the practitioner challenges the children to look for crosses in the environment.

Engaging parents and carers with outdoor play

Fostering close, purposeful relationships between home and the early years establishment provides many benefits for young children. These relationships can help to make sense of the totality of their experiences.

There are many ways of engaging parents and carers to ensure all understand the benefits of outdoor play and are interested, supported and committed to providing outdoor experiences for their child. This could include their involvement in:

- outdoor activities on- and off-site
- developing the outdoor space, from initial consultations and fundraising to implementing changes and celebrating successes
- creating and sharing story sacks that include outdoor activities at home
- looking after a soft toy, such as 'Outdoor Orla' and helping their child to record outdoor experiences with the toy at weekends
- sharing events and family activities that happen outdoors such as camping, holidays abroad and barbeques

- early years settings offering outdoor social activities as part of the induction and welcoming process
- setting up outdoor clothing loan systems or developing a stock of secondhand clothing for children to use at the establishment

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The health and wellbeing of children and young people

The advice in this section is based upon a wide range of recent and relevant research highlighted in Section 1 about health and wellbeing that suggests that direct, frequent experience of being outside, particularly in contact with nature, produces positive physical, mental and emotional benefits that affect children's overall development.

Getting it Right for Every Child is a national programme that aims to improve outcomes for all children and young people. As part of a holistic approach to *Getting it Right for Every Child*, practitioners should take into account the benefits for children and their families of spending time outside, ideally in natural settings. This can be part of a wider package or approach to providing support and meeting the needs of individual children.

Practitioners can use outdoor learning as an approach to support children and young people in each wellbeing indicator so that they grow and develop through being nurtured, active, respected, responsible, included, safe, healthy and achieving.

Nurtured

Having a nurturing place to live, in a family setting with additional help if needed or, where this is not possible, in a suitable care setting.

- Adults should listen to and observe children playing outside. The evidence gathered can be used to further develop opportunities for free play based on children's interests.
- Adults can demonstrate respect for living things and the environment.
- Observing how children respond to nature away from the perceived stress of school can give a measure of how nurtured they are.
- Some children need to run off aggression or anger. Use the school grounds or outdoor space to allow children with this need to do this in line with an agreed approach.
- Working on specific behaviours outside benefits some children. Children can then transfer skills inside, creating a more nurturing environment in general.
- Using open-ended equipment that relies on collaboration between an adult and a child or between children provides opportunities for bonding. This works well with big play equipment outdoors.
- Use nurture group²⁸ principles and apply them in an outdoor setting.
- Extend children's opportunities to get to know the community within their local area.
- Be planned, prepared and positive about spending time outside with children. Model appropriate behaviours, including a willingness to try new activities, and rise to challenges.

28 The Nurture Group Network has more information: www.nurturegroups.org

Active

Having opportunities to take part in activities such as play, recreation and sport which contribute to healthy growth and development, both at home and in the community.

- Ensure children have opportunities to spend regular time in a natural setting. This may be parkland, beaches, woods or other areas of greenspace.
- Enable children to have the freedom to enjoy unstructured play, providing physical challenge at a self-chosen level of risk.
- Provide big open-ended resources, such as guttering, planks of wood, bread crates, etc that children can play with, making trails, obstacle courses, etc.
- Ensure children have suitable outdoor clothing and footwear to enable all-year outdoor play and learning to happen.
- Encourage children of different ages to play together.

Respected

Having the opportunity, along with carers, to be heard and involved in decisions that affect them.

- Involve the children in outdoor projects that interest them and develop a sense of ownership and belonging, for example:
 - growing plants of their choice in containers or gardens
 - improving the play facilities in a playground
 - participation in schemes such as the John Muir Award, Award Scheme Development and Accreditation Network ASDAN or Duke of Edinburgh's Award, which set clear goals for achievement for individuals or groups.
- Listen to children and involve them in decisions at their level of understanding in a familiar context. Some children are more talkative outdoors and in play situations.
- Use a variety of consultation techniques so that even very young children or those with limited verbal skills can have their feelings and responses noted.

Responsible

Having opportunities and encouragement to play active and responsible roles in their schools and communities and, where necessary, having appropriate guidance and supervision and being involved in decisions that affect them.

- Create a collaborative learning environment, indoors and out, that enables children to have and to take responsibility for themselves, resources and the environment.
- Create opportunities for children to make decisions that have clear consequences. Group challenges or team-building activities can help. Adventurous activities with clear systems and instruction may appeal.
- Develop routines around going outside that encourage responsibility, for example:
 - involving children in the planning of work outside, including risk–benefit assessments
 - ensuring children carry their own snack, water, portable seat and toys
 - learning how to manage in different situations such as walking near a busy road, crossing safely, dealing with different (and uneven) surfaces, appropriate communication with others in the community.

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Included

Having help to overcome social, educational, physical and economic inequalities, and being accepted as part of the community in which they live and learn.

- All children can succeed outside especially when a supportive practitioner seeks creative ways of engaging children. Look for interests a child displays indoors and extend the possibilities outside. For example, a child who likes cars could take a toy car on a string outside for a walk or simply to participate in a group activity.
- Children often accept each other readily outside whereas they may be competitive inside. Rather than excluding a child from class, try to include them outside first, within a small team.

The outdoor space or school grounds send a strong message about the school's ethos and whether it welcomes and accepts all children. Ensure the school entrance is bright, welcoming and attractive:

- Keep the grounds well maintained, organised and litter-free.
- Have seating and shelter available. Children need to have all-weather clothing and footwear for being outside. Children need to feel comfortable outside.
- Provide extended opportunities to be outdoors and have lots of multi-sensory experiences.
- Provide a rich range of open-ended play materials.
- Create areas for growing food.
- Ensure there are challenges and risk-taking opportunities.
- Give opportunities for children to be physically energetic and active.
- Plan healthy snacks and food, including produce grown by children.

Safe

Protected from abuse, neglect or harm at home, at school and in the community.

- Enable children to take calculated risks that allow them to feel a sense of achievement, success and exhilaration. Let children develop their own approaches and attitudes towards risk.
- Actively involve learners in the risk–benefit assessment process. For example, in the school grounds, pupils can learn to identify potential hazards and contribute to the development of playground rules to encourage positive behaviour.
- Use free play outside to create trusted bonds between the child and significant professionals who will be involved with the child to keep them safe. Get them outside with education staff to observe the benefits for the child and to engage in a non-threatening way. This fits very much with nurture group thinking and makes bonds easier.
- Use off-site visits as a strategy to get children opening up and feeling safe to express their feelings.
- Seek advice from outdoor education professionals, who can advise on introducing more adventurous activities into the playground and provide access to adventure activities in the local area.
- Provide den-building materials and support children to make shelters. When children engage with their physical environment, turning places into spaces that have meaning for them, they gain a sense of belonging. Den building can lead to children making their own safe space and self-chosen time out.
- Provide nooks, crannies and places where children feel they can hide or be alone when needed, for example willow structures, bushes or landscape features that provide privacy.
- Ensure that health and safety guidelines are followed and interpreted sensibly when taking children outside.
- Ensure that opportunities to learn road safety, appropriate behaviour near water and other practical risk–management skills are taught.
- Be aware that child protection procedures must be in place outside too.

Healthy

Having the highest attainable standards of physical and mental health, access to suitable healthcare, and support in learning to make healthy and safe choices.

- Ensure children have access to outdoor intervals and lunchtimes to play.
- Work with the wider school community to green the grounds and increase the number of natural features.

- When identifying the main barriers to learning faced by a child and putting in place a personalised timetable as an alternative to exclusion, practitioners should identify what can be offered within or through the local community.
- Provide time to walk and talk and spend time just being outdoors, especially in greenspace or nature.
- Find ways to provide regular experiences in natural settings.
- Provide plenty of opportunities for physical activity outside.

Achieving

Being supported and guided in their learning and in the development of their skills, confidence and self-esteem at home, at school and in the community

- Plan activities and lessons that appeal to the naturalist intelligence within a young person and allow them to achieve in a range of real-world contexts.
- Provide opportunities for formal recognition of achievement such as ASDAN, John Muir Award, Duke of Edinburgh's Award, Youth Achievement Awards, etc.
- Find a means to enable a child or group to develop an expertise outside that can be used as a positive focus or distraction if needed. Some children will accept praise outside but not inside. Being praised for having good practical skills can be quite different and more manageable than trying to generally be 'good'.
- Provide opportunities to access natural areas and attend residential courses or expeditions where young people experience intrinsic rewards through meeting physical or social challenges.
- Involve learners in the development and care of a school garden.

'One teacher has been rebuilding a bike outside with his ASN class. When a child's behaviour begins to escalate, he has a great 'We need a helper' tactic to distract the child, who is asked to help fix the bike. This turns the situation into a positive matter where the child now feels valued.'

Headteacher, Aberdeen City Council

Sustainable development education and outdoor learning

*Sustainable development is about meeting the needs of the present without compromising the ability of future generations to meet their own needs.*²⁹

'The Scottish Government and partners will promote the use of outdoor learning experiences to engage young people in sustainable development education in a meaningful and transformative way using the Curriculum for Excellence through Outdoor Learning guidance and online resources to encourage teachers to make the most of outdoor learning opportunities.'³⁰

Outdoor learning has an important role to play in helping children understand about our planet and the complex life systems it supports through observation, interaction with and interpretation of natural events and changes all year round.

It helps children and young people make connections to the world in which we live. Outdoor learning can motivate people of all ages to think about and take action at local, national and global levels to live harmoniously and deal effectively with the impact we have on our environments. An appreciation of the natural world and society largely depends on direct personal, aesthetic and spiritual experiences outdoors and in the real world.

This happens through providing outdoor experiences that help children engage with, understand and manage the emotions created by those outdoor experiences. These experiences might be carefully designed programmes, or informal and spontaneous activities. They can be enhanced through multi-sensory approaches such as the use of expressive arts to interpret and communicate findings as part of an interdisciplinary project.

'We are living on this planet as if we had another one to go to.' Terri Swearingen

Research suggests that engagement with the natural world from a very young age may be a prerequisite for the development of critical reasoning skills and proactive positive behaviours and attitudes towards sustainable development.³¹ This begins with free-play experiences³² in woodlands, beaches and other areas of greenspace where children can directly experience and interact with nature.³³

29 UN definition taken from www.un-documents.net/ocf-02.htm# Accessed 14.3.11.

30 Scottish Government (2010), Learning for Change: Scotland's Action Plan for the Second Half of the UN Decade of Education for Sustainable Development, Action 10, p16. www.scotland.gov.uk/Publications/2010/05/20152453/0 Accessed 14.3.11.

Sustainability is more than a scientific concept. The Scottish Government's Learning for our Future document lists its fundamental principles as:

- interdependence
- diversity
- carrying capacity
- rights and responsibilities
- equity and justice
- uncertainty and precaution

Schools and centres can incorporate these sustainable principles into outdoor experiences when the opportunities arise and use partner organisations and professionals to widen learners' understanding of these issues. Simple actions and decisions can make a positive difference. For example:

- give learners plenty of opportunities to learn about Scottish wildlife and plants. This links to the science experiences and outcomes on biodiversity and connects children and young people to Scotland's natural heritage
- make connections between nature and children's lives, in the past, present and future. For example, look at uses of plants and food gathered safely from the wild, undertake felting projects and plant trees
- use recycled materials as much as possible. For example, adopt the principles of permaculture when developing gardens, reusing items for free play and formal learning activities
- enable learners to engage with the key concepts that underpin responsible citizenship, such as democratic and community engagement and responsibility in the context of sustainable development

31 Beames, S, Higgins, P, and Nicol, R (To be published August 2011), Learning Outside the Classroom: Theory and Guidelines for Practice, New York: Routledge, Chapter 3.

32 See definition on p37 and at footnote 45.

33 Sobel, D (2008), Childhood and Nature: Design Principles for Educators, Portland, USA: Stenhouse Publishers.

Examples of interdisciplinary projects with aspects of sustainability woven into the experiences

There are many possibilities for integrating sustainable thinking and action into outdoor experiences. The approach is best undertaken through a series of ongoing linked activities rather than fragmented sessions to allow learners time for ideas and experiences to interact and make connections between nature, people, communities and society. These activities can also include a focus on the positive actions everyone can take, individually and collectively. This can be a context for understanding and learning more about how our society works and promoting a sense of shared ownership and involvement.

Early level – Making homes

During a together time, a child announces that she is moving house. This creates a lot of interest as the other children ask questions. The lead adult asks if the children would like to create a new house outside. A group of children want to do this and start drawing their ideas of what it should look like. Together they think about the materials needed and collect them together.

Before long there are several little dens built from milk crates, umbrellas and old sheets. The adult encourages the children to think about what they need inside their homes. The children have their own ideas and before long are immersed in role-play using shells, bark and other natural materials to represent different household objects.

The next day the children are visiting their local woodland. The adult shows them photos of their new homes in the outdoor space and wonders what they would look like here. Some children decide they want to be squirrels and other woodland animals. One child tries building a drey in a tree but the sticks keep falling out. Eventually he moves the sticks over to a pair of children who have decided that the 'Gruffalo' lives in a nest on the ground. Their key worker wonders why the nest on the ground is easier to build. 'It just is,' answers the child.

First level – What animals live in or use our grounds?

Undertake a simple investigation, looking for evidence of animals. The animals can be classified simply and the variety noticed and recorded.

If children are interested in wildlife, then suitable homes can be researched and built, such as bird boxes, log piles, hedgehog houses or other places for animals to live. Ideally, locally sourced natural materials and reused household items will be the materials used to create the homes. The children can map where the homes are located. Through asking questions, children can find out more about local wildlife.

The animal homes can be monitored on a monthly basis to see which creatures move into the grounds. The children may wish to experiment with the siting of the wildlife homes to find the most effective place. Invite the local Biodiversity Action Plan officer to meet the pupils to discuss their findings and suggest any further action the pupils could take, such as planting specific plants as food sources and shelter.

Second level – The vegetable plot

This works well linked to, or following on from, a project about World War II and creating a 'Dig for Victory' garden.

Discuss the planting of an area of a vegetable plot. Think about what the plants need to grow and discuss the use of fertilisers. Invite a local farmer or vegetable gardener to explain their use of fertilisers, including organic products. Pupils plan how they could investigate which fertiliser is best for their garden. Pupils can take soil samples, test compost from their own compost heap, inspect commercial fertilisers, etc. Prepare the soil in separate plots or containers to allow groups to carry out their investigations. Display their results and produce to the class.

Use mini compost columns set up in different parts of the school grounds to investigate the best conditions for composting. Use the observations to select the site for a full-size compost bin and set up a composting system with the support of the school's kitchen staff.

Using ingredients from the school garden or grown locally, plan and cook a healthy meal. Ensure that the recipe is balanced and includes ingredients from a range of food groups. Find out the minimum number of food miles it is possible to use to make the meal. Compare this with food eaten during World War II.

Third and fourth levels – An outdoor performance

Find an outdoor place such as a community woodland or local beach that is keen to attract more visitors. Challenge groups to rebrand and promote it in a new way through a performance.

Design the performance as a guided walk with groups taking inspiration from their specific area, using music, visual art, the spoken word and other forms to create site-specific experiences. A focus could be made on spirituality and religion, with the English and art departments working to display key concepts, ideas and values within the performance. The business department can assist pupils in marketing the performance to parents and the local community.

Learners can explore the area looking for 'found objects' such as attractive pebbles, sticks, or flotsam and jetsam. Create works of art which can be displayed along the route of the performance to add additional interest.

'The Executive is keen to raise the profile and uptake of outdoor education as a whole school approach which can effectively knit together many strands of sustainable development in a rich learning environment.'³⁴

34 Scottish Executive (August 2006), Learning for Our Future: Scotland's First Action Plan for the UN Decade for Sustainable Development, Key Action Point.

Fostering creativity through learning outdoors

Creativity is about generating ideas or producing things and transforming them into something of value, in any field or discipline. Creativity is complex and lots of factors are involved in its development. Being inventive, ingenious, innovative and entrepreneurial is part of being creative. There is also a need for learners to be able to persist when faced with a challenge, for example to see a task through to completion or to be able to work through a difficult social situation that requires negotiation and compromise. Courage, motivation and resilience are part of the creative process.

Everyone has the potential to be creative. It is a skill that can be and needs to be developed but is often a capacity that young children seem to possess naturally and should be nurtured. A learning environment that supports and encourages creative thinking and play makes a difference. Collaborative groups and partnerships within classes and schools, and extending into the community have a positive impact on learners.

Taking learning and play outdoors can help foster creativity, for the following reasons.

Increased knowledge base

Children who spend more time in a natural environment have a better knowledge of nature.³⁵ Time to observe patterns, sequences and events in the world can develop an understanding of relationships, interdependency and cause and effect.

35 www.scotland.gov.uk/Publications/2006/07/25143907/0 Accessed 14.3.11.

Developing problem-solving strategies

Outdoor spaces and places can present opportunities to develop problem-solving strategies. Learners are exposed to far more varied and multifaceted issues and challenges in an outdoor environment. These can be used skilfully to engage young people in the application of a wide array of skills and knowledge in response to challenges. Creative thinking is about creating ideas that have value; by using skills to implement ideas and solutions young people identify with the value of being creative.

Natural places and materials

Give children and young people opportunities to visit places that have a sense of wildness. By using natural materials for different purposes children are able to make connections and be inventive. Natural materials are more 'open ended', requiring greater skill and creativity in use.

Challenge, risk and decision making

Creativity is closely linked to risk taking and learning to manage risk. Ventures and adventures both require creative thinking and associated mental and physical risk taking. A progression of outdoor activities through the different levels can be part of a whole-school approach. Succeeding in a series of physical outdoor activities can have a carry-over effect into academic performance, providing the challenges are appropriate to the age and abilities of the learners. Experiences of risk and reward also empower learners to take risks with their learning, exploring new possibilities and seeking out solutions. Risk is an essential precursor to creativity.

Acquisition of new, specialist and transferable skills

Skills related to subject areas and work can be acquired through outdoor experiences that cannot be learned or practised inside. Skills learned in context become more relevant and applicable across a range of situations. For example, in one rural island school, pupils were involved in a beach clean-up. Using the flotsam and jetsam they picked up, the children made rope crosses for Easter to give as gifts to the older members of the community. Many of the pupils were from fishing backgrounds so the skill of tying knots to make the crosses was a life skill for them.

Communication

The ability to communicate is a necessary part of creativity. Being outdoors can encourage a quiet child to chatter. Much outdoor work relies on group collaboration.

Time to relax and let the focus go

The state of the brain is hugely important for creativity. It is hard to be creative when there is a continued focus only on a task. The powerful subconscious, where much creativity resides, is suppressed. Often the best ideas come when there is not a focus on the problem, but engagement in some other less pressured activity. Having spaces and time for quieter relaxation and observation of people and nature is important to nurture creativity. Being outdoors can provide opportunities for both challenge and reflection.

Developing imagination

Imagination is central to developing creative thinking whether it involves seeking a single solution or a number of alternatives. Developing a capacity to imagine the consequences of a particular action helps with innovation. The outside world provides experiences and events that feed the imagination and provide many settings for creative thought.

In 1971, the theory of loose parts was proposed by architect Simon Nicholson.³⁶ He believed that loose parts in a play environment empower creativity. Loose parts are materials with no specific set of directions that can be used alone or combined with other materials. They can be natural or synthetic. In an outdoor environment, they could be stones, stumps, sand, gravel, twigs, wood, pallets, logs, stones, flowers, rope, tyres, shells, etc.

In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it.³⁷ Having loose parts available allows children and young people to use these materials as they choose. Nicholson suggested that children playing with loose parts are using more creativity and imagination and developing more skill and competence than they would playing with most fixed resources.

When children play or learn in a space or with an object, they experience it in a unique way. They view it in terms of its 'affordances', rather than its common use. The 'affordances' of an object or space are all the things it has the potential to do or be. For example, a stick may be a fishing rod, walking stick or many other things. It has a high affordance. A toy car is mostly used as a car. Thus it has a lower affordance.

Natural materials such as stones, sticks and shells are of particular value because they are not uniform. When carefully used within and across different subject areas, natural materials encourage problem solving, high-order thinking and communication. For example, if a Primary 2 class are asked to find out how many Unifix cubes are needed to make one metre, the answer is fixed. If stones are used, the challenge becomes open-ended because each stone is a slightly different size. This gives rise to more discussion and further challenge, such as requesting that all groups use the same number of stones to complete the task.

In natural environments such as woodlands and beaches, the opportunities for using natural materials as loose parts as part of a learning and teaching approach are further enhanced as the scale and quantity of materials available greatly increases. Material should be gathered responsibly.

As practitioners, when working outside, we need to ask:

- can the materials or environment we offer be used in many ways?
- can they be used in combination with other materials to support imagination and develop creativity?
- are the materials freely accessible?
- am I allowing pupils to make connections in the learning environment?³⁸

36 Nicholson, S (1971), 'How Not to Cheat Children: The Theory of Loose Parts', *Landscape Architecture*, 62, 30–35.

37 Nicholson, S. (1971) 'The Theory of Loose Parts: an Important principle for design methodology' Open University, p5 <http://jil.lboro.ac.uk/ojs/index.php/SDEC/article/viewFile/1204/1171> Accessed 16/6/11.

The potential and development of the outdoor space as a place to enrich creative learning and teaching

Creative thinking skills are fostered when learners are given authentic tasks that are relevant and have a real purpose. Developing an outdoor space is an ideal context for this to happen in. Involving children and young people in the process provides opportunities for them to take real responsibility, think creatively and take action.

These suggestions are particularly relevant for secondary schools, where the design of the school site may not take account of the creative needs, interests and aspirations of its learners.

In terms of fostering creativity, schools and centres in all sectors may wish to consider the following ideas:

- increase the biodiversity of school grounds to attract wildlife and plant life. They can be a rich learning source about the natural world
- give young people the opportunity to take ownership of their school grounds by generating ideas for their development and then being involved in an interdisciplinary project to implement their vision. More advice is given in the Transforming your Outdoor Space section
- consider the potential of the grounds for learning through exploration and discovery across the curriculum areas. Provide different surfaces, textures and multi-sensory experiences. Create unusual features in interesting places using outdoor art and craft designed and made by learners
- develop more adventurous activities in playgrounds. This helps develop self-confidence and measured risk taking. Allow for progressive challenge and risk taking in the outdoor space
- provide places where children and young people daydream outdoors, invent imaginary games, role-play and read. Nooks, crannies and quiet corners give learners places to be alone. Careful planting of trees and shrubs is one way to do this
- provide loose parts and imaginative play materials during intervals and lunchtimes which pupils can use to create something of their own making. Focus on natural materials and the use of scrap materials

'To climb a tree is for a child to discover a new world.'

Froebel, Education of Man, 1826

Skills for learning, skills for life and skills for work

Outdoor learning can provide a range of opportunities for children and young people to develop skills for learning, life and work. Stepping out of the classroom gives access to a range of real-world learning experiences that allow learners to understand the relevance of their existing skills and enable them to understand areas for development.

The outdoor environment opens up opportunities for practitioners and learners to work in new ways. For example, the greater space available outside, the availability of new and natural materials, the freedom to make mess and noise all mean that some of the barriers that might have constrained the structure of learning activities inside are removed. By capitalising on these opportunities practitioners can provide challenges and learning experiences that are particularly relevant when considering skills development and progression.

As an example, practical challenges outside that require learners to solve problems can provide opportunities to develop thinking skills by providing a context that requires learners to analyse the issues, understand the problem, create potential solutions and evaluate those which may be successful before applying them to solve a particular challenge.

Points to think about:

- what area(s) of the curriculum, skills or particular outcomes are learners currently covering?
- identify a problem outdoors that needs to be solved
- explain why this problem needs to be solved
- create success criteria that will indicate what needs to be done to solve the problem successfully
- outline two or three observable behaviours, taking into account the skills that can be developed, which will identify how learners will work together. What will you see and hear?

By providing opportunities to work and communicate in groups, young people also learn that they have different abilities and attributes from others, enabling them to understand that their skills are valuable and relevant. By working practically with others, learners are also able to evaluate their own skills and reflect on next steps.

'All learners should be involved in planning and reflecting on their own learning, through formative assessment, self and peer evaluation and personal learning planning.'³⁹

Learning outside and engaging young people with their learning in new ways can provide opportunities to gather evidence of learning and the whole range of skills for learning, life and work. For this reason, when working with children and young people outside practitioners should gather evidence and record developments in the same way as they would for all other learning.

'For example, evidence of literacy and thinking skills might be gathered and evaluated as part of developing and presenting solutions to problems or investigations in maths or business; evidence of skills in numeracy and working with others might be gathered and evaluated as part of a group task to monitor local weather patterns in social subjects; evidence of literacy and leadership skills might be gathered and evaluated as part of an outdoor expedition or volunteering task; evidence of health and wellbeing and planning skills might be gathered and evaluated as part of a volunteering task.'⁴⁰

For further guidance on developing skills for learning, life and work, please refer to Building the Curriculum 4: www.educationscotland.gov.uk/Images/BtC4_Skills_tcm4-569141.pdf

39 Scottish Government (2008), Building the Curriculum 3: A framework for learning and teaching, Edinburgh: Scottish Government.

40 Scottish Government (2009), Building the Curriculum 4: Skills for learning, skills for life and skills for work, Edinburgh: Scottish Government.

Informal outdoor learning opportunities for children and young people during and beyond the school day

Children's access to nature and outdoor play has fallen dramatically. Today in our society, children spend less than half the amount of time playing outdoors that their parents did at the same age, and much of that time is restricted to built playgrounds and structured activities or sports.⁴¹ Research on the John Muir Award found that '1 in 10 participants had never visited a wild place before their award involvement' and that 'those living in the poorest circumstances were over 6 times more likely to have had no previous experience of wild places'.⁴² Working with partner organisations, especially those involved in youth work, to provide access to such places may be a priority for schools in urban and deprived areas.

Making time and space for play

Play is key to physical, mental and social wellbeing for children and young people of all ages. A review of research⁴³ suggests that:

- playtime could offer children a unique opportunity to advance their interacting skills and social cognitive resources through informal self-directed play
- playtime may have decreased by as much as 50% since the 1970s
- children's free time at school may decrease as they get older
- reducing break times could impact on children's anxiety levels
- in the mid-1980s, approximately 21% of children travelled to school without an adult; by 2005, this number had dropped to 6%
- children explore their environment and play more when they travel to school without an adult

Researchers have found that during unsupervised playtimes, children expend around two-thirds of the energy of a formal PE class. Despite this relatively high level of activity in playtimes, researchers have concluded that there is scope to double it.⁴⁴

41 Louv, R (2005), *Last Child in the Woods*, New York: Algonquin Books.

42 Mitchell, D and Shaw, R (2009), *Health Impacts of the John Muir Award*, Glasgow University's Public Health and Health Policy Unit.

43 Gleave, J (2009), *Children's Time to Play: A Literature Review*, London: NCB for Play England. www.playday.org.uk/pdf/Childrens-time-to-play-a-literature-review.pdf

44 Mackett, R and Paskins, J (2004), 'Increasing children's volume of physical activity through walk and Play'. Contribution to the Department of Culture, Media and Sport and Department of Health Consultation on Choosing Health, Choosing Activity: A Consultation on How to Increase Physical Activity, Spring 2004. London: UCL.

'Children are disappearing from the outdoors at a rate that would make them top of any conservationist's list of endangered species if they were any other member of the animal kingdom.' Tim Gill

For all of the reasons outlined above it is important that those working in formal education understand the importance of informal opportunities for learning outdoors and of outdoor play.

The Go Play programme⁴⁵ defines free play as:

'Freely chosen, personally directed, intrinsically motivated behaviour that actively engages the child. It is performed for no external goal or reward, and is a fundamental and integral part of healthy development – not only for individual children, but also for the society in which we live.'

Play can cover anything from children exploring outdoor spaces to making up new games or finding ways to express themselves. It can be carried out alone or with others, indoors or outdoors.

For children, play generally means some form of physical, creative or imaginative activity where there is no 'right way' or 'wrong way' to do things and where they take the lead in what happens and how games develop. Possibly most importantly, the play environment is not an adult-led one and children themselves lead what happens.'

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Developing outdoor free play during intervals and lunchtimes

Schools have an important role to play here and may wish to consider:

- the importance of free play and highlighting this in school policies and programmes to support pupils' wellbeing and to meet their needs
- ensuring that intervals and lunchtimes are not cut back or removed altogether from the school day
- working with parents and support staff to ensure that learners have daily opportunities to play outside all year round and in all weathers
- introducing risk-benefit assessments to support more adventurous play
- providing training and support for playground supervisors, pupil play leaders or community play volunteers providing support to enable free play
- the development of school grounds to reduce bullying and violence at playtimes⁴⁶

46 Verstraete, S J, Cardon, G M, De Clercq, D and De Bourdeaudhuij, I (2006) Increasing children's physical activity levels during recess periods in elementary schools: The effects of providing game equipment, <http://www.ingentaconnect.com/content/oup/eurpub;jsessionid=2jl6fq51dp4fk.alice> European Journal of Public Health, August 2006, 415–419(5).

- in consultation with pupils and other stakeholders, increasing the quantity of natural surfaces, trees, shrubs and other plants which allow children to re-establish a daily connection with nature
- the use of themed boxes to support different types of play outdoors. For example, Cardross Primary School Pupil Council created a box of play resources and activities linked to their woodland area. The whole process was researched and designed by the pupils and the box is conveniently available for all at the entrance to the wood. Other themes can be related to weather, minibeasts, rainy days outdoors, multicultural and seasonal events and celebrations, etc
- the accessible provision of loose parts and natural materials that allow children to play creatively (refer to the section on Creativity)

Bridging the Gap outdoors for young people

Bridging the Gap is about ensuring the best outcomes for young people by working in partnership with other organisations and departments. Young people are not just lifelong learners but also lifewide learners. A significant proportion of a young person's learning takes place beyond the setting of a school. Practitioners have a responsibility to recognise this learning as part of the 'totality of experiences' a young person has as they progress through their learning journey.

In addition to recognising the learning that is already happening, think about what opportunities are available to work in closer partnerships with youth workers or community learning colleagues. There are many advantages to doing this, for example:

- young people's learning becomes relevant across contexts and enables their knowledge, understanding and skills to be recognised by the wider school community
- the experiences and learning which take place in school can be extended or consolidated when young people are working in their communities or in other settings
- access can be gained to a wide range of expertise and resources that would not be available otherwise. In many cases partners can work with practitioners to look at developing opportunities for working together which fit into school routines
- by engaging with others an insight can be gained into the lives, experiences, skills and attributes of the young people with whom practitioners work

Bridging the Gap – Improving Outcomes for Scotland's Young People through School and Youth Work Partnerships (Education Scotland Report, 2009) gives a wealth of practical ideas through case studies of existing work in schools, as well as the policy background and useful contact organisations to get started.

www.educationscotland.gov.uk/Images/Bridging_The_Gap_tcm4-552837.pdf



ICT and digital technologies

ICT and the use of digital technology can be an important aspect of any outdoor learning experience. Whether this is planning, photocopying letters, taking photos while you are away or sharing your experience with others, technology is an enabler and if used in the right way can add considerable value to the outdoor classroom.

This section outlines some of the ways in which technology may be used to enhance outdoor learning.

Before going outside

The internet has revolutionised the organisation and planning of outdoor learning experiences. Many schools and centres have established outdoor learning opportunities and it may be time to review these in light of Curriculum for Excellence through Outdoor Learning. The Education Scotland (<http://www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/placestolearnoutdoors/wheretogomap/index.asp>) 'Where to go in Scotland: Interactive Map' provides a searchable database of places that schools and centres can visit throughout Scotland and the VisitWoods website (<http://www.woodlandtrust.org.uk/en/visit-woods/Pages/get-involved.aspx>) can help locate local woodlands.

Satellite imagery in Google Earth (www.google.co.uk/intl/en_uk/earth/index.html), Google Maps (<http://maps.google.com>) and Bing Maps (www.bing.com/maps/default.aspx?q=&mkt=en-GB&FORM=BYFD) provides a great opportunity to scope out an area before a visit. These tools can also help children understand where the area is in relation to where they live and to places they have visited before. Using satellite imagery and virtual globes before a visit can also help link to other aspects of the curriculum. Obvious links include using the Google Earth ruler and compass tools to reinforce the core skills of distance, direction and orientation. Imagery can also be used to support imaginative and factual writing about an area, as well as to put learners at ease if they are apprehensive about their forthcoming experience.

As tools like Google Earth become more advanced, more digital data is being overlaid on top of digital maps. The potential for using digital mapping for sharing information is likely to develop rapidly along with its potential as an educational tool.

When outside

Most people take many digital pictures these days and any image from an outdoor learning experience is likely to be a memorable one. The trick is to encourage pupils to take quality digital images that capture the beauty, mood and personalities of the experience or journey. Again, there is a lot of advice and 'top tips' online about helping children to take good digital photographs. Remember that photographs can help to evidence children's learning too.

Challenge-based learning with photography is an ideal way to get learners to look more carefully at the environment around them. As well as trying to capture the magic moments, consider making a list of digital challenges for people to record. Examples might include: 'Take a picture of a cloud that looks like an animal, something that is out of place, a smile, something synthetic but beautiful and something in conflict.'

If organised in the right way and time permitting, it is also possible to work with a whole group to take a lot of pictures and then digitally reconstruct places in three dimensions when back home. Web services like Microsoft's Photosynth (<http://photosynth.net>) are useful tools for this purpose.

Disposable cameras have a place in outdoor learning. They are cheap and easy to use in the sand, snow or dirt. The waterproof versions allow you to capture those wet moments that might be missed otherwise.

Images are not the only thing that should be taken away from an outdoor learning experience. Electronic voice recorders can also be used to capture memories and sounds from the place visited. Voice recorders do not have to be expensive. Talking Tins (www.talkingproducts.co.uk/talking_tins.htm) or Easi Speak Microphones (www.rm.com/shops/rmshop/product.aspx?cref=PD1380880) provide cheap, robust commercial solutions. Most mobile phones also have a voice recorder and as long as you have a signal, a variety of apps, including Evernote (www.evernote.com) and AudioBoo (<http://audioboo.fm>), allow the geo-location of sounds or voices from the field to an online digital map. This can be used when back home or for observers to follow the group's progress. Other mobile phone apps can turn school playing fields into a huge game of Scrabble (www.seeknsPELL.com) or local streets into a virtual game of Pac-Man (www.streetpacman.org).

GPS and tracksticks (www.trackstick.com) can also be used to map where the group has been and to share the journey with others. A handheld GPS can also be used to find one of over one million geocaches hidden outdoors as part of the world's largest global treasure hunt (www.geocaching.com).

Using technology such as some of the examples mentioned above can give learners' outdoor experiences additional purpose and assist with reflective processes back inside.

Sharing outdoor experiences

Think about the 'www' of the internet as the World Wide Web display. Digital tools allow learners to share their outdoor learning experiences with an authentic audience.

Groups can write up their experiences online and share them using a variety of publication methods such as Glow Blogs. Alternatively, groups of learners can work collaboratively to document their thoughts and feelings using tools to create and edit collaborative documents, such as Glow Wikis (www.ltscotland.org.uk/usingglowandict/glow/index.asp).

Photographs can be uploaded to photo-sharing websites such as Flickr (www.flickr.com) and collected audio or video content can be edited, expanded upon and developed in audio or video podcasts. Audacity (<http://audacity.sourceforge.net>) and Windows Live Movie Maker for the PC (<http://explore.live.com/windows-live-movie-maker?os=other>), Garage Band (www.apple.com/ilife/garageband) and iMovie for the Mac (www.apple.com/ilife/imovie) provide free tools to help edit and publish digital content. Many young people will already be familiar with the use of these resources but they might need help to storyboard and structure their digital creations.

Other online tools such as Glogster (<http://edu.glogster.com>) and Animoto (<http://animoto.com/education>) provide quick and creative ways to share experiences, while Google Earth (www.google.co.uk/intl/en_uk/earth/index.html), Google Maps (<http://maps.google.com>) and Bing Maps (www.bing.com/maps/default.aspx?q=&mkt=en-GB&FORM=BYFD) now provide a stimulus for reflection.

Importantly, by sharing their outdoor experiences, practitioners and learners inspire confidence in others, as well as providing advice, inspiration and ideas for further learning outside.

Interdisciplinary learning

Outdoor environments provide firm contexts for interdisciplinary learning. Through interdisciplinary projects and themes learners discover that the whole is more than the sum of the parts. In turn this ensures that learners appreciate the value and place of different disciplines in understanding, managing and making the most of the complex world in which they live.

Being in a different environment can create a 'need to know' factor that can be exploited in a number of different ways. Exploring a theme, meeting a challenge or problem solving can all be used as reasons for practitioners from different disciplines to contribute their own expertise and guidance.

Equally, an outdoor situation can be used to highlight and confirm links and explicitly encourage learners to transfer skills and knowledge between discipline areas.

Formats for outdoor interdisciplinary learning can include:

- short-term one-off projects linked to an event, such as a community arts festival
- medium-term shared units of work and residential trips
- long-term projects such as managing allotments, school grounds developments or achieving awards

This curriculum approach can allow children and young people to learn based on their interests and help them make connections between different areas of learning. Being outside the walls of a classroom can be a physical demonstration of the removal of disciplinary walls. This can be further confirmed by ensuring that a range of different professionals or partners participate in the outdoor projects.

Examples of interdisciplinary work

Early level

Enjoy local foods outdoors at a teddy bears' picnic. Children bring their teddies and healthy snacks are eaten together outdoors. Harvest some vegetables or fruit beforehand to have in some soup or with dips. Talk about the flavours, health benefits and reasons for eating local food. Link to harvest festivals and celebrations in different cultures.

First level

Let pupils observe and discuss the shadows cast by a stick in the ground over the period of a school day. Challenge pupils to make a clock using their results. Use stones and chalk to mark out each hour. Ask pupils to investigate what happens to the shadow if the stick is moved around the playground. Discuss and decide where the most reliable place in the playground would be to locate a sundial. Design and make a permanent sundial for the school playground.

Second level

Combine mapping and art skills to help pupils learn how to sketch landscapes effectively, accurately and aesthetically to record located features. This can also be linked to the use of scale in maths.

Third and fourth levels

What does this place look like? Answer this question from the perspective of different subjects. Within social subjects maps and timelines may be created while paintings may emerge from expressive arts and stories from languages.

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Section 3:

Making connections to the curriculum

Curriculum for Excellence through Outdoor Learning states that all children and young people should be able to participate in a range of planned, progressive and creative outdoor learning experiences that are part of the curriculum. These should be frequent, regular, enjoyable and challenging opportunities that take place throughout a child's school career and beyond.

The challenge for practitioners is to ensure that outdoor learning is embedded in the curriculum so that it becomes a reality for all children and young people. It is the responsibility of all staff. This means that every teacher and educator needs to plan and integrate outdoor learning as part of a range of learning and teaching approaches within interdisciplinary projects as well as within and across all curriculum areas.

Each curriculum area lends itself to outdoor learning. There are specific benefits within each subject. When planning outdoor work, consider the connections to be made with work undertaken indoors and in the context of the curriculum as a whole. Rather than offer an 'outdoor learning week' or a special 'outdoor learning day', most formal activities that take place outside need to be part of a planned holistic approach to learning and teaching that links to ongoing work.

'I used to write 'outdoor learning' on the daily mind map planner. Now I write down 'maths' or the aspect of topic work we are undertaking outdoors. Being outdoors is no longer the focus. It's the learning we do there that is.'

Class Teacher, Mile End Primary School, Aberdeen City

The ideas and suggestions which follow serve to illustrate the potential of taking learning outdoors. The activities should not be treated in isolation from other curriculum work but be used judiciously so that the outdoor learning opportunities deepen and contextualise learners' understanding and knowledge.

Contributions to curriculum areas

Expressive arts

The use of drama, art, music and dance allows children to experience the world in different ways. The use of expressive arts ensures diversity in the interpretation of places and natural and social events happening outside. Developing an awareness of space and its use as a stimulus for creativity and expression is another reason for taking learning outdoors. Expressive arts outside can offer opportunities for collaborative working on a large scale.

Outdoor spaces and places also offer an increased variety of contexts for creating and presenting ideas. Contributing to or creating public performances outdoors can enhance the sense of community and understanding of what it means to belong to a place.

There are specific practical skills and problem solving associated with taking expressive arts outdoors, such as projecting voices, making works of art that can withstand the elements and managing musical instruments outdoors.

An introduction to expressive arts outdoors

When in a natural place or space, create transient or land art outdoors. Before going outdoors, have a look online at work by Andy Goldsworthy, Richard Schilling and Marc Pouyet. Think about the best place to undertake the task and the elements of art that will feature most prominently.

Identify and visit public works of art in your community. Build up a journal or blog about one or all of them. Find out other people's thoughts about the artwork and their ideas about what the pieces represent.

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Use audio recorders to capture different sounds in an area that includes a range of habitats or urban places. On return, use audio editing software to create a story of a journey that uses the different sounds for inspiration and its soundtrack.

Hold a dancing event outdoors. This could be dances:

- from different countries
- created by the children based on mirror work or to interpret music
- to retell a local story or poem
- which are traditional or popular within the community, for example invite Highland dance or Morris dancing instructors to deliver a session

Health and wellbeing

During the past 15 years there has been a growing body of research that suggests that direct, frequent experience of being outside, particularly in contact with nature, produces positive physical, mental and emotional benefits that affect children's overall development. There are times and places to be noisy and active or to be quiet and reflective. By working with others outdoors, children and young people learn about relationships and develop effective communication skills.

Through exposure to everyday risks outside children and young people can develop an awareness of their own and others' safety. They can learn to assess and manage risk for themselves.

Many outdoor activities require more physical activity and skill than those indoors. This develops motor skills and puts in place good exercise habits that will enable children to stay fit and healthy throughout their lives.

An introduction to health and wellbeing outdoors

Draw a road on the playground with chalk. Add a zebra crossing or traffic light. Practise crossing the road safely. Make up some road safety action games to play.

In a natural space or school grounds, create a temporary fitness trail using natural materials and PE equipment. Include activities that will build up stamina, speed, strength and agility. Remember to take account of risk and safety in your design. Use your trail to test and build up your fitness.

Find out about labyrinths online. The purpose of these structures is to enable controlled, reflective walking. Look at ways of creating simple temporary labyrinths in your school grounds, using chalk or paint, or by mowing the grass. Give learners the opportunity to walk in these structures as part of an outdoor circle time that focuses on a theme that requires an element of reflection. Link to pattern work in maths about mazes.

Using Google Earth explore the layout of streets and pathways. As a group or class, choose a route to walk that creates an interesting shape on a map, eg the name of the area where you live or a zig-zag pattern. On the walk note all the street furniture used to direct traffic and keep pedestrians safe.

Languages

Many of Scotland's well-known poets and authors use nature and outdoor events as creative inspiration. Some children and young people who are reluctant to write or mark-make indoors will choose to do so outdoors in a less formal setting.

Engaging with events and processes outdoors allows children and young people to build specific vocabulary. Back inside, their practical outdoor experiences can help them understand the content of books and the information in written text.

Learners benefit from engaging with environmental print and learning about the process and purpose of writing in the real world. There are meaningful opportunities to use different texts, including charts, maps, instructions and timetables.

An introduction to languages outdoors

Try to find different ways of mark-making or writing in the outdoors with natural materials. Write on different types of ground, in the air, with water and on leaves. Make short poems or phrases and photograph as a way of recording the work.

Ask each participant to find an object outdoors and bring it to the gathering place. Select an object and begin telling a story that includes your object. Pass the story to each person in turn, who continues it, including a new object each time. To increase challenge incorporate subject-specific knowledge connected to the objects in the story.

Create a 'Kids Read Anywhere' presentation where children choose specific books to read in different locations in the school grounds such as up a tree, upside down from a climbing frame or lying on the ground. The title of the book must reflect the location chosen. Decide how best to record and present the work. This can also work for poetry readings in different places.

Create a poem based around an outdoor or subject theme. It could be a particular type of tree, plant, animal, activity, weather or scientific process observable in the outdoors. Consider the characteristics, appearance, actions and emotional connections of the subject and use these to structure the content and shape of the poem.

Develop learners' vocabulary in modern languages and Gaelic through games and activities that reinforce vocabulary. Build up a map of the local area using relevant vocabulary.

Mathematics

In order to develop deep mathematical understanding and secure numerical skills, children and young people need to engage with maths in meaningful contexts where abstract mathematical concepts can be applied to real-life situations. Taking maths into the outdoors provides an ideal vehicle for this approach. Numbers are tools people use to make their lives less complicated outside or in.

Children and young people benefit from learning maths outdoors through having access to limitless mathematical resources and contexts. There are increased opportunities for dialogue and developing mathematical language and concepts when working practically with others.

An introduction to maths outdoors

Pick a spot in the playground and mark it. Spread out in the playground at a distance from the spot and choose a way of moving to get back to it. Estimate how many of those moves it might take. Test your estimate. Repeat with different types of movement.

Grab a handful of stones and find a partner. Who has the most and least? Chalk a symbol (<, > or =) to show what you have found. Move to a new partner and repeat the activity.

What factors affect the flow or speed of water? Use the formula $\text{speed} = \text{distance} \div \text{time}$. Decide what equipment you will need. Allocate roles if needed. Groups will be expected to demonstrate their work to the rest of the class.

How big are the school grounds? How can pupils work this out? How can the height of the tallest school building be measured accurately?

Religious and moral education

Outdoor learning can provide opportunities for exploring how beliefs and values are held, expressed and developed. There is an immediacy to being outside that heightens the senses, prompts a sense of connection to the environment and raises the questions of identity, meaning and purpose fundamental to learning about what it means to be human in religious and moral education (RME). The major faith traditions of the world present us with frameworks for thinking about these 'big' questions and serve as examples of collective responses to shared human experience, beliefs about God, self and the nature of reality, as well as issues of ethics and morality.

Outdoor spaces often provide new and inspiring contexts for philosophical exploration and discovery, and serve as a useful resource for personal reflection and spiritual development. Times to be still, to look and listen, to touch, to move and to wonder offer rich experiences for discussion about ourselves and our sense of belonging and uniqueness, as well as issues of beauty, truth and goodness. Direct encounters with nature and the world outside the classroom can invigorate learning in RME.

As well as making the most of religious and cultural events taking place in local communities, establishments can develop opportunities for learners to explore spirituality, religious texts, symbols and festivals in their school grounds or outdoor space. Examples include:

- creating peace gardens and quiet areas outside for reflection
- designing temporary or fixed labyrinths
- putting multicultural games and markings on the asphalt, such as an Islamic hopscotch or dance steps from traditional dances in different cultures
- creating murals that depict an aspect of this curriculum area
- placing artefacts that capture important or special events, the passing of the seasons, reminders of growth and change
- providing pathways for journey making, doorways and entrances for moving through different spaces, circular trails for work on life stages and life cycles

Through community events and practical work to care for their environment, children and young people are able to put their beliefs and values into action. Visits to different places of worship and participating in cultural celebrations enable learners to witness first-hand how religions express themselves. This exposes learners to alternative belief systems and ways of thinking. This shows that outdoor learning does not just use the natural environment but includes the built environment.

Scotland is rich with religious sites, symbolism and spaces where children and young people can develop their understanding of the meaning, value and purpose of life. From mountains and beaches to stone circles and churchyards, different contexts and situations inspire deeper questioning about the world around us and our presence in it.

'It's this whole idea of journeys and moving through the landscape. There's something about that process that's deeply human, touching on who we are and what we're here for. It's fundamental to RME to spend time outside. You don't need to visit a religious place or sacred site. You can explore that sense of the specialness of things which is at the root of all RME. The starting point is the natural world around us. There is a connection that all humans feel, a resonance that prompts us to explore the profound, the existential and the ultimate. When children see, hear, feel or think about something new for the first time, that wondering puts them on the road to deeper reflection and their own beliefs and values grow from that process.'

RME/RO Development Officer, South Lanarkshire

Many world faiths have sustainability, stewardship of the earth and simple living as important aspects of religious life and practice. Beliefs about God and creation provide a focus for prayer and worship as well as times of celebration and religious ritual.

An introduction to RME outdoors

Using a multicultural calendar, make a note of key religious events and celebrations that take place throughout the year. Plan simple outdoor activities related to one or several of them. This can be linked to outdoor assemblies and seasonal times for reflection.

Sing spiritual or religious songs indoors and outdoors. How does singing the same song outdoors change how the experience feels? Drawing inspiration from Scottish hymns and landscape, ask learners to write songs about a place that you are visiting.

Play games that explore the meaning and importance of values such as fairness and trust. For example, blindfold players, who become dependent on instructors to navigate an obstacle course of noisy things on a playing field.

Look at symbols in your locality, especially on road signs, buildings and advertising hoardings. Do any of them have a religious association? Use these experiences to investigate the role of symbolism in understanding and articulating personal faith.

Have children design and construct a 'sukkah' from natural materials and plan a small meal to share inside it. The Jewish Harvest Festival of Sukkot involves the building of outdoor shelters in remembrance of the Exodus story and God's provision during a long desert journey.

Lantern making, campfires and stargazing can all lead to discussion and reflection on light and dark in different religions and the festivals and activities associated with those themes.

Engaging with animals and minibeast collection stimulate work on life cycles and introduces children to questions of life and death, loss and bereavement in a natural and uncomplicated way.

Sciences

All science subjects have elements that are better taught outdoors. Environmental sciences are particularly relevant and demonstrate principles and practice that cut across biology, chemistry and physics.

Children and young people can have a very different learning experience outdoors from that in the classroom or laboratory. Outdoor learning frequently involves teamwork and a different ethos of working in a less structured environment. In sciences this learning can lead to a lifelong interest in a particular aspect of the environment.

Science taught outdoors encourages considered thought about our use of resources and the impact of this on the local environment, and about the scale of the natural world. It demonstrates the wonders of the environment and allows learners to learn to interact with the living world in a climate of safety and respect.

The learners' experience of observing class-based theoretical examples can be enhanced through real-world experiences. Many basic scientific concepts can also be demonstrated through games. A simple walk around the school grounds can provide opportunities for learners to experience and observe a range of scientific principles and their applications.

An introduction to sciences outdoors

Germinate broad bean seeds in jam jars in the classroom. Use the germinating seeds to identify the parts of the plant. At a suitable time, plant some seeds or plants outside in pots or the school garden. Discuss and plan how to look after the plants outside. What do they need to help them grow? How can pupils help them to grow?

Send pupils out into the playground with cameras. Challenge them to photograph living and non-living things beginning with the letters in their school's name. Display their results with reasons for their choice. The same activity can be done on a walk or in a different environment.

Take children and young people into the school grounds. Ask them to write down lots of questions about what they see, hear and feel outside within the space of a few minutes. With a partner or small group, share the questions and identify which ones are science-related. Put together a list from the whole class and decide which ones to research the answers to.

Does the sun warm the tree trunks and cause the snow to melt around them? During snowy weather, send pupils out to find out if the snow is melting evenly around the playground. Look at the area around tree trunks and at the base of railings, the mounds of snow pushed up in the car park, next to busy paths etc. Have pupils take photos of their observations and explain them in terms of particles, the heat energy from the sun and changes of state. Try this with jars of warm water, poles of different materials etc.

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Social subjects

Real-world learning outdoors is a fundamental experience all young people need in order to have a good understanding of past, present and future societies, places and environments, and Scotland's rich culture and heritage.

Experiencing the sights and sounds of their school grounds, outdoor space and local area can help children and young people to become more connected to their local community. It is an opportunity for learners to meet and talk to people in context and experience different points of view. When studying local or national issues the subject may become more relevant and meaningful and make greater sense. Using local outdoor spaces and engaging with their sights and sounds enables pupils to empathise with past or present communities and environments. Enterprising projects that have an element of outdoor work foster community links.

Developing social studies skills such as map making becomes purposeful and relevant outdoors. It improves learners' spatial and temporal sense of place in the world through learning experientially how to locate, explore and link features and places locally and further afield.

An introduction to social subjects outdoors

Create an outdoor museum. Ask children to bring something old from home that they could use outside. Share everyone's ideas during an outdoor gathering time, extended over several days if needed. Enjoy playing with and using the old objects. Invite parents and grandparents into the class to talk about their favourite old outdoor objects.

Go on a planned walk with a selection of pictures that have been taken of people along the route. Ask your group to work out where they were taken and to stand where the photographer would have been. Can they put the pictures in chronological order?

Ask pupils to use coloured pencils to create value maps of their school grounds that reveal places that are (un)fair, (un)equal, (un)caring and (un)sharing, and that show different degrees of love or the respect of human rights.

Visit a battlefield, taking with you a number of short readings and evidence about the soldiers who fought there and why. Allow time for your group to develop a sense of place and the history of the location before sensitively exploring the role of key cultural or religious issues in the battle. Depending on the battle, you could also discuss the battle's role in changing the history of a religion or country or relate this to current wars that are happening in the world today.

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Technologies

Undertaking technologies outdoors provides opportunities to investigate and experiment with the earliest and latest in human technology, making connections between our past and present. Being outdoors aids reflection on the designs, materials and processes that are used and which influence all our lives.

By visiting and considering the producers and consumers of products within the local community or authority, learners can see innovation and change management in work environments and evaluate 'live' products, systems and services. This is an opportunity for partnerships to develop and to support the transition process through work-related learning in a diversity of careers, which might include jobs in the 'green' or environmental sectors.

The links between the planet and consumption of finite resources can be made through gardening, allotment and farming projects. Growing plants that have different purposes, such as medicinal or dyes for clothing, can help embed sustainable principles when explicitly taught and demonstrated. School grounds and outdoor spaces benefit from design projects such as building window boxes, animal homes, outdoor ovens, seating, etc. Interpretation of the grounds and signage is a design process.

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An introduction to technologies outdoors

Build dens in groups either in your school grounds or in a natural habitat off-site. Make some basic technologies like string available to help. What techniques work best and why? How can these ideas be used in modern buildings?

Look around outside. Ask students for a definition of technology and then ask each person to give an example that they can see or hear. If necessary, encourage learners to categorise the examples they give.

Build a structure one metre high from natural materials. Agree criteria with learners such as accuracy of height, load-bearing capacity and structural strength. Give learners time to find these matters out in advance.

Investigate how food travels from farm to mouth. Go on a trip to follow a food product from being grown or reared to being manufactured, sold and then consumed.

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Developing learning through the planning process

When planning to go outside it is important to involve children and young people in the process. By involving learners at an early stage it is possible to gain a better understanding of what motivates them or captures their imagination. The result is that any subsequent outdoor learning experience is more likely to engage children and young people.

Points to think about:

- what will be achieved by going outside and what are the desired learning outcomes? Focus on this before thinking about particular activities or about resources
- what themes or approaches have worked well indoors and how could these be extended outside?
- consider current affairs or events that could help place learning in a more meaningful or interesting context for young people. For younger children think of some well-known characters or places that would add a twist to what the group is going to do through engaging their imaginations
- perhaps there is a local issue, place, building or community that young people are familiar with but do not yet fully understand. Focusing on this may help to develop the desired outcomes

Be imaginative when planning outdoor learning experiences and ask learners for their ideas. By structuring discussions around preferences and issues to explore, and modelling approaches to communication, you will enable children and young people to learn a huge amount about how to work effectively together, and understand one another's opinions and values as part of the process. They will hold a sense of ownership of their learning and understand the relevance of what they are doing outdoors from the outset.

Planning the logistics

There are issues that need to be considered when going outside, that can help children and young people to develop skills and understanding whilst also helping them to prepare practically for the outdoors.

Think about the issues or challenges posed by taking learning outside, such as the weather, organising resources and transport, group management and communication. By presenting these issues to children and young people as 'challenges' to be overcome it is possible to work with them to draw out the issues and enable them to seek solutions. In the outdoors this process has a hugely beneficial impact because young people are able to organise their thoughts and behaviours before stepping outside. For example, when children understand the link between weather and suitable clothing they are much more likely to be prepared to go outside.

Points to think about:

- the 'challenges' in the context of where you are going, time of year, age of learners, length of time outside, etc
- providing a structure that is appropriate to the age and level of development of the learners and that will allow them to problem solve around these issues
- the learning outcomes that will arise from the planning and preparation work undertaken with the learners
- reviewing what has worked well with the learners so that they can be even better prepared next time and therefore the routine of going outside becomes smoother

The process of planning can be structured in many different ways to suit a range of ages and levels of development. At one end of the spectrum many early years establishments operate on a 'free flow' basis, meaning that children can choose the direction that their learning takes by moving freely from indoor to outdoor space and accessing available resources independently. At the other end of the spectrum, secondary schools have allowed groups of young people to manage the planning and preparation of complex and demanding expeditions abroad, including the preparation of training plans, risk assessments, equipment and food requirements.

Starters for engaging children in the process and making the planning an exciting part of an outdoor adventure are given below:

- show children photos of two or three places to visit in the local area, such as a nearby woodland, beach or housing. Fly in, using Google Earth!
- provide materials for the children to feel, such as leaves, shells and gravel, that represent different places outside. Let the children ask questions about each place and then agree which place they would most like to visit
- invite a guest toy such as 'Outdoor Edgar' to come and provide advice about what to wear, how to behave responsibly near roads, etc. He can also accompany the children during an off-site visit
- ask older children who have visited the destination or undertaken similar work to talk about the experience, show photos and answer questions
- play games that reinforce basic safety measures, such as gathering routines
- create a small world play area and tell a story about going on a visit. Children can add in their ideas about what to do and appropriate behaviour
- use chalk or paint to map out street furniture and roads. Children can practise crossing safely in the outdoor space before going off-site
- use tourist brochures and other pictorial guides to find places of interest in the local area to visit. Create a collage and add photos to it as children explore different places
- challenge learners to investigate different ways of visiting an agreed destination. What method of transport can be used? Which is the cheapest way? What is the most direct route? Use route-finding sites on the internet to assist

For more complex activities or for planning expeditions there are some excellent resources and guides available. See Appendix 1 for examples. There is also general advice on logistical planning and communication with parents in the health and safety section of the Education Scotland website:

www.LTScotland.org.uk/learningteachingandassessment/approaches/outdoorlearning/healthandsafety/index.asp

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Section 4:

Places to learn outdoors: school and centre grounds

There are significant advantages to using school and centre grounds as a place for learning. It is usually the first outdoor space beyond the building and thus is quick to access on a planned or spontaneous basis and the connections between indoor and outdoor learning can be immediate. Becoming familiar with leading learning in your school or centre grounds can also give opportunities to develop the skills and confidence that will allow the use of outdoor spaces further afield.

Children and young people can develop a more intimate relationship with their grounds than almost any other outdoor space, exploring it at break times as well as in class. Children and young people view school grounds as their space and can be given opportunities to be stewards of their environment.

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'When I made the decision to get my class outside more frequently, I realised I had to be prepared. I looked at my termly plans in all curriculum areas and decided where being outside would make a positive difference to an activity or series of activities that I intended the class to undertake. My plans included investigating angles in maths, environmental art, exploring Buddhism outdoors and sensory activities in science. This may appear a lot but it was only one or two activities per week.

I informed my headteacher about my intentions as well as submitting the plan and a risk assessment for using the school grounds for curriculum activities. I wrote to parents to let them know their children would need to bring outdoor clothing and footwear. As it was the winter term, I had emergency indoor plans. I thought this would reassure everyone that I was sensitive about the need to account for the weather.

I put together a bag of items that I knew would be helpful. This included small plastic bags, handwipes, a selection of magnifying glasses, bug boxes and mirrors and a whistle. It was a different sort of preparation from being indoors. I found myself checking out the areas of the school grounds to see which area would work best for an activity.

Initially the preparation and planning took longer than for indoor activities. The children were very excited and it took several sessions to get them used to the idea that it was class time and not play time. For example, the best gathering place was on a decked area. The children just wanted to jump up and down on it the first two sessions! Another time, a child uprooted a small holly tree to show me her prickly object during a sensory activity. So we all learned about leaving living plants alone in a very experiential way.

Surprisingly the weather was always good enough to go outside when planned, although the children didn't always have the right footwear. One child often turned up in slippers. She would borrow a pair of gym shoes and used them instead.

By the time the summer term arrived the children and I had got into the routine of going outside. My mindset had changed and I was able to 'think outdoors' naturally without having to put any more effort in than I would with an indoor activity.

That was three years ago. I'm still taking children outside almost every day that I teach.' *Supply teacher, Aberdeen City*

Getting outside

Often the hardest step is actually getting into the routine of going outside. Initial planning and preparation can make this easier. The following advice may help:

- send out letters to parents requesting that outdoor clothes and footwear are brought to school daily throughout the year. The Scandinavian proverb states, 'There is no such thing as bad weather, only bad clothing'
- save time and do an activity outdoors just before or after break, lunchtime, arriving in the morning or leaving in the afternoon. In secondary schools, arrange to meet your class outside at an agreed spot for outdoor sessions. This works well if it can happen on a regular basis for a period of time
- get pupils practised at getting outdoor clothes on and off. Routines can be developed that encourage learners to do this quickly and without fuss. This includes going to the toilet before going outside
- have outdoor clothes in a class dressing-up box and let children in younger classes practise getting outdoor clothes on and off
- have bags and resources easily accessible and ready to go. Encourage children to carry resources and put them in a designated place outside and back inside
- undertake a risk–benefit assessment with the class(es) being taught outside. Ensure the learners are part of this process. Informed and involved children and young people will consistently make better decisions about how to handle risks and this builds on the existing skills of the learners
- spend time planning a series of outdoor activities that link to indoor classwork. Initially keep these short and simple whilst learners get used to working outside. Often games work well to begin with

'The active problem-solving activities were a brilliant beginning for me. I gained confidence through trying them with my class. It's really important to have success early on, or it puts you off going out.'

Class teacher, Newhills Primary School

Clothing

- ask for donations of spare outdoor clothing in case any pupil forgets or does not have any. This can take a long while to establish as not everyone will remember to do it. It needs frequent reminders in newsletters and on websites. Alternatively, source some sets of outdoor clothing, wellies and woolly socks. Over-trousers are especially useful as these are rarely donated
- develop a class enterprise project where learners write to different outdoor clothing companies for samples. They evaluate the products according to agreed criteria on cost, durability, comfort, etc. Then the learners plan a fundraiser to raise the cash for a class set of outdoor clothes
- have a stock of cheap plastic ponchos or challenge the pupils to design a reusable outdoor suit from black bin liners
- in secondary schools, an interdisciplinary approach can be taken to developing a bank of outdoor clothing. The art department could work with pupils to brighten up pairs of welly boots. The home economics classes can create designer hats. Science departments can involve students in testing samples of outdoor clothing for effective wear

Thinking about space outside

Be aware of the possibilities or restrictions of any outdoor space. Learners may need to safely stand, sit down, squat and move around. They have to be able to hear the leader, and each other. Consider the weather conditions and the space and decide whether it is suitable for speaking activities, or whether movement and dance need to be the focus. Choose an outdoor space that will suit your needs and exploit that space to the advantage of the children and young people.

Using sound calls or a whistle can be an excellent way of setting boundaries for children in a range of environments, especially where there are no physical barriers. It can be an interesting investigation to find out how far sound can carry in different weathers and to use a 'sound map' to mark out the boundaries. Using this approach also gives learners responsibility and develops trust. Another option is to request that learners work where they can see an adult at all times.

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Gathering outside

Having a gathering place is helpful for children and young people. This may vary according to the weather. Go for a sheltered spot in windy or wet weather. Find shade in hot, sunny weather.

‘Quick Circle’ can be a good motivator for getting pupils into a circle. Shout out the name of your class and start counting. The challenge is to decrease the time it takes to get into a circle. For quick classes, add in additional challenges, such as doing it silently or remembering who is beside whom and getting into the same place back in the circle. This is a form of whole-class problem solving, so encourage the learners to discuss strategies for this.

‘Sticky elbows’ is a technique where everyone puts their hands on their hips and gets their elbows to touch each other to create the circle. ‘Sticky shoulders’ is good on windy days where learners might need to huddle to hear you. Ensure that you are facing the wind and the children have their backs to the wind.

Use a whistle or signal to let learners know to gather round. The sound needs to be heard in the wind. Challenge the class to devise a sound or call and response that can carry over a large space. This becomes the signal to which everyone responds, for example a long call of ‘cooo-eee!’ The pupils can respond with an echo of the sound as they gather.

Very young children often enjoy singing a song that signals that it’s time to gather round, tidy up or move to a different place.

The weather

‘There is no such thing as bad weather, only bad clothing.’

Scandinavian proverb

In terms of mindset, it is helpful to compare Scotland to Norway. By comparison we have a very good northern climate. Ways of managing outdoor learning in all weathers include the following:

- go for planned spontaneity. If the weather is inclement, wait until it improves before going out but don’t let a light shower dampen your plans. There is usually a let-up at some point in the day. In secondary schools look for opportunities where there is flexibility about when a specific skill or focus is taught outside
- learning intentions can be shared prior to going outside to ensure a relevant and coherent purpose. Review sessions can happen back inside too. In secondary schools, this can happen the period before and after the outdoor session

- on cold days plan activities that involve moving about. When using dens or shelters, have fleece blankets and other warm material to help children stay warm if they are sitting down or staying still
- poor weather can add interest and challenge to outdoor experiences. However, consult the children and young people and consider their thoughts. Some classes enjoy a wet and windy session outside, especially if appropriately dressed
- children and young people need to learn to cope with ice and snow. Invite them to think about how to behave on icy surfaces. Plan investigative activities where the children can move but have no need to run around. If the ground is like an ice rink, then consider postponing an activity. In any case, proper briefings, clear expectations and a sense of purpose will help to limit slips and falls. Use common sense
- children and young people should bring sun hats and wear sunscreen, in line with school or local authority policy, on sunny days if they are outside for a long time. On sunny days, the teacher or responsible adult should face the sun. Wear light-coloured lenses if wearing sunglasses so that eye contact can be made
- use portable insulated seating mats if there are activities that involve sitting. These can be put on benches, grass or anywhere, ensuring there is always a warm, dry place to sit. Portable mats can be purchased from outdoor shops. Alternatively, challenge the children to create their own from basic household materials, which meet agreed criteria

'Anyone who says sunshine brings happiness has never danced in the rain.' Jo Liversidge

One teacher and 33 children

In the school grounds, the same ratios generally apply as indoors.⁴⁷ Initially teachers do need to think about and plan outdoor activities carefully. Over time the effort required does subside. The more frequently a class of children learn outside, the more normal this becomes for everyone as routines become established

To begin with, plan activities that you feel most comfortable with outside. For instance, if you like doing art inside, take art outside. Build up your confidence over time and look for support from others who might have more experience. Often it helps just to start with simple games that develop the routine of going outdoors.

If you have a classroom assistant allocated to your class, then use this time to go outside. Literacy and numeracy activities can be undertaken outside. Alternatively use parents or other volunteers.

47 You should always check with your senior management team or local authority.

It is helpful to find other practitioners who are also developing outdoor learning. Brainstorm planning sessions and look for opportunities for joint work outside through shared projects and activities.

Behaviour outside

Staff frequently comment about the positive impact of an outdoor activity. Children and young people often enjoy the opportunity to work on practical tasks outside.

It can take time for children to acclimatise to being outside. Some pupils who present challenging behaviour indoors can manage better outside. Likewise, some find a new situation harder to manage. Practitioners need to be sensitive to this and be prepared to tweak their techniques for supporting children and managing their behaviour outside.

Initially, keep the sessions short and focused until routines have been embedded. Ensure that the time outdoors is part of ongoing curriculum work and not a bolt-on activity. Discuss, share and enjoy being outside. Extend the collaborative learning environment to being outside. Allocate roles and tasks, and make sure everyone knows what to do. Have equipment and resources accessible and organised.

Raising the profile of being outside as part of learning and teaching activities helps too. Displays inside and out of children enjoying their learning outdoors help. Keep class or individual journals about what happens. Spend time making the outside areas attractive and demonstrate that the school or centre values the outdoor area.

Have the same expectations as inside. If a pupil is misbehaving, then follow your school behaviour policy. Generally, the approaches used effectively indoors will work outside too. After an outdoor activity, review what worked well and what would be even better the next time.

It is worth discussing the use of school grounds if there is limited space outside with other staff. Indoor activities can be affected by classes working outside. It may be necessary to have shared agreements in place.

Involving parents and carers

Parents and carers are generally positive about learning outdoors.⁴⁸ It is important to share the benefits of taking learning outdoors with parents and to discuss concerns and practicalities about children spending time outside throughout the year and in different weather conditions. Create opportunities for parental involvement. For example:

- discuss and share ideas and plans for outdoor activities with parents through standard communication channels
- invite parents to assist with outdoor activities
- consult and involve parents, the Parent Council and PTA with any school grounds improvement work and opportunities within the curriculum for learning outside

48 Scottish Parent Teacher Council, Grounds for Learning (2010), Outdoor Learning and Play: Parental Survey Report www.itl.org.uk/pdf/1295453810Outdoor-Learning-and-Play-Final.pdf

- have a large number of photos and positive images of the learning that goes on
- share the research about why it is important for children to be learning outside. Combine this with quotes and positive feedback from the children and insert these into newsletters and add to classroom and outdoor displays
- organise a parent workshop or include a session on outdoor learning when children first start at the school
- look at the factfile on outdoor learning on the Education Scotland website and share this with parents and staff. This can be found at http://www.educationscotland.gov.uk/publications/c/publication_tcm4660547.asp?strReferringChannel=parentzone&strReferringPageID=tcm:4-633325-64
- provide engaging and meaningful outdoor activities as homework

'The children have a good appetite, a more positive attitude and sleep better when they have been outside. If the children are stuck inside all day, they are agitated and crabbit.' Parent volunteer, Woodlands Nursery, South Lanarkshire

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Equipment and resources

This is a matter of personal preference, subject, project and activity. Experiment and find out what is most useful for your context. Some resources will be useful on an ongoing basis whereas others will only be needed for particular aspects of your work.

Outdoor items will get worn much more quickly. Thus the best resources are those which are cheap or free to replace, such as ex-household items and natural materials. This is also important in demonstrating a whole-school commitment to the sustainable and wise use of resources. Safe 'junk' can be used for den building, bridge making, machine producing and other activities. Buy a class set of portable seats and clipboards that can be used anywhere instead of benches and tables, allowing greater flexibility in where learning takes place outside.

Outdoor resources need to be accessible. Have them organised and ready for immediate use. For example, ensure you have a shed for tools beside the garden area. Know how wet resources will be managed and dried. Encourage independence and make routines less demanding through allocating routine jobs around managing equipment and resources to learners.

If natural materials are not readily available within the school grounds or outdoor space then they can be collected or purchased very cheaply. When collecting natural materials always check by-laws, follow the Scottish Outdoor Access Code⁴⁹ and gather a little at a time. Some materials, such as fossils, bulbs, mosses and lichens, have strict collection codes. Never remove rocks and stones from walls, no matter how derelict, without the landowner's permission. More information can be obtained from Scottish Natural Heritage.⁵⁰ Advice can also be sought from countryside rangers and Forestry Commission Scotland, especially if you need sticks and wood products. For logs, contact your nearest sawmill. Give specific instructions about the material and the level of finish required.

Examples of natural materials that can be used for learning activities include twigs, sticks, bark, logs, shells, leaves, seaweed, nuts, seed pods, pebbles, rocks, compost, soil, hay, organic cotton, silk, wool, jute, dried flowers and plants. Natural materials look aesthetically more pleasing when stored in natural containers such as jute bags and willow baskets. This is, of course, in addition to all of the materials that can be used in situ in a natural outdoor environment that do not need to be collected.

Schools and centres may need to agree how available natural materials should be used within the outdoor area. For example, picking common weeds from the playing field may be fine. Stripping the formal display at the school entrance may not be acceptable.

49 Scottish Outdoor Access Code www.outdooraccess-scotland.com

50 Scottish Natural Heritage www.snh.org.uk

Transforming outdoor spaces

Children and young people may easily spend one hour per day, every day, of their school lives in the school's outdoor space. Well-designed and thoughtfully developed school grounds enrich learning and play opportunities. Improving outdoor spaces dovetails naturally with most school improvements and strongly links with the approaches to learning and teaching advocated in Curriculum for Excellence. In particular, an outdoor space developed along sustainable principles can lend depth and relevance to learning activities within the Sustainable Development Education (SDE) theme, actively demonstrating sustainable approaches to living.

Developing an outdoor space gives pupils of all ages real-world learning opportunities, including project planning, consulting peers, reviewing options, budgeting, fundraising, practical work and evaluation. All of these develop skills, citizenship and a sense of participation and pride in school. Learners who struggle with classroom learning can demonstrate other skills and be publically recognised for them. There are strong links between OL and enterprise in education.

Alastair Seaman, General Manager, Grounds for Learning,⁵¹ gives the following advice:

- understand where you are starting from. Take time to find out how the space is currently used. What works well? What doesn't? What interests and skills do staff and parents have? Who could help, including partner organisations and local authority staff?
- identify what you want to do outside and the difference you want this to make for children or young people. For example, is the priority a need to tackle behaviour at break times? Do you want to develop more engaging ways of delivering the curriculum? Or is there a need to get children more active? This will enable you to work out what changes are needed. Seek permission to make changes, if needed
- develop a long-term vision with the whole school community. Try to work out what everyone would like the grounds to look like in 15 years' time – and then do a little bit every year to work your way towards this. Try to avoid piecemeal approaches based on 'What should we do this year?'
- think about ongoing maintenance. Who is going to look after your new garden? Who will water the plants during the school holiday? Who will carry out any inspections of the new play equipment?
- get everyone involved in a participatory and inclusive approach. Include pupils, parents and staff, from setting the vision through to implementing work on the ground and ongoing maintenance
- think about how the whole project can be a learning experience. What opportunities are there for teaching and learning? Involve a number of members of staff in developing plans. This will increase the sustainability and viability of the project as well as sharing the workload. It will also improve the likelihood and quality of interdisciplinary teaching and learning
- consider inviting an accredited school grounds facilitator to your establishment to provide advice, support and training. This may save substantial amounts of money in the long term

Engaging partners in transforming spaces

Practical grounds projects offer good opportunities to establish and develop strong links with the local community and partner organisations. Examples include:

- ranger services advising on plants that improve the biodiversity of the outdoor space
- British Trust for Conservation Volunteers assisting parents with the clearance of a disused part of the grounds and preparing a site for development
- local businesses donating unwanted scrap materials for developing free play with loose parts at break times
- landscaping services advising on where to obtain top soil and donating bedding plants as part of Britain in Bloom work
- an egg producer supplying a school with egg-laying hens
- local allotment holders helping to set up and run a school vegetable garden
- older residents sharing their childhood playground experiences and games

Parents and staff have skills and interests that can be tapped into. It may be worthwhile creating a database of local organisations and individuals who can help with different projects within the school. This can also be a way of engaging male adults in school activities.

At a national level, the John Muir Award scheme can include developing outdoor spaces and school grounds activities as ways of meeting its criteria. The Eco-Schools Award includes school grounds as one of its nine topics. Other local award schemes may also provide an incentive to develop outdoor spaces using a participatory approach that involves pupils.

Funding

The amount of funding required to improve an outdoor space varies enormously. The most sustainable and effective approaches happen when schools or centres decide to make year-on-year small-scale improvements in line with children's interests, school improvement priorities and ongoing projects and events. This can be achieved through using scrap materials such as tyres as planters. Consider how flowerpots, hanging baskets and bird boxes can be used to bring nature into built areas. Outdoor art displays can brighten up a dark corner of the grounds on a temporary basis.

Find financial support so that the ideas can be developed properly. There are grants available locally and nationally. Think creatively about school budgets, apply for funding or hold a fundraising event to secure what you need to do the job properly.

Getting to know your school grounds or outdoor space

These activities are designed to help learners and practitioners get to know and use the school grounds.

Play games such as follow my leader, grandmother's footsteps and hide and seek. These help children develop spatial awareness. Play guessing games, asking questions such as 'Look around you, who or what lives in here?'

What are your top ten favourite things about the school grounds? List them and create a group wordle.⁵² What are the most popular features or activities? Is anything missing that would improve the school grounds? Share your findings with the pupil council or eco committee for further action.

Which is the most interesting part of your school grounds? Justify your decision with evidence collected within 30 minutes.

Find an interesting object outside and write as many questions as you can about it. Think about its physical features, construction, function, age, value, origin or design. Which question would you most like the answer to? Have a discussion about questions and whether it is better to be able to ask one good question or lots of questions of varying quality. Decide what makes a good question.

Send pupils out for a very brief look at the plants growing on the playing fields. Discuss the common types of plants that can be found on playing fields. The pupils should choose a small selection of plants to survey then compile an identification board, making sketches and notes about the chosen plants. Use a quadrat to randomly sample areas of the school playing fields. A systematic survey can then be carried out using a transect line across the grounds. Results can be analysed in a variety of ways showing plant distribution, effect of trampling and line-marking, shade etc.

Section 5:

Places to learn outdoors: using the local area and community including day visits by foot or using transport

The local area and the wider school community provide a unique place that can be used to engage learners in understanding and investigating the richness of where they live and belong.

'Schools need to use local National Nature Reserves and the nearby National Parks. So many schools spend a fortune on transport to travel miles when there are fabulous places to learn close by. Maybe there is an assumption that pupils visit these places in their own time, but I think this is not the case for the majority. The idea of local learning fits well with structure and themes of Curriculum for Excellence. The most exciting and relevant places are on the doorstep.'

Jill O'Reilly, Outdoor Learning Consultant, Highland

Repeated visits to the same, or similar, local places and spaces allow learners to see changes and cycles daily, monthly, seasonally and annually. They also allow different perspectives on the same place, and time for children to develop questions and answer them. Similarly, using archival records such as maps, photos or engravings of the same outdoor place allows comparisons over years, decades and centuries. Encouraging young people to research the places that they visit can further develop many of the skills for learning, life and work. These skills can be also be used as a framework for later investigations into places further afield.

Projects which explore local areas

Activities undertaken in the local area need to be planned in line with curriculum design principles. As the following case study illustrates, a participatory approach where learners are personally involved aids understanding about the potential for living well and being part of a community.

In 2009 Dalmally Primary School P6/7 class participated in six whole-day visits to the glen opposite the school throughout the summer term with Sam Harrison, a place-based educator from Open Ground, and the class teacher.

The class looked at experiencing the place through different senses, through different people's stories and through artwork such as journaling, mapping, poetry, drawing and storytelling. The pupils learnt about the ecology, geology, geography, history, Gaelic heritage and land use in the glen through interactive experiential exercises and talking to estate staff.

The trips involved considerable physical exercise and helping in simple tasks on the farm, such as folding fleeces and collecting pheasant eggs. The project involved imaginative activities such as a re-enactment of a story from the glen and also allowed time to explore.

The work from each trip was taken back into the classroom, where further study was completed, and artwork refined and produced. The pupils compiled all their work and presented it over an evening to parents, the local community and estate staff.⁵³

There are many imaginative projects that use fantasy as an effective tool to explore local areas. For example, the East Scotland Sea Eagle Project (<http://cookbooks.glowscotland.org.uk/blog/2010/08/12/east-scotland-sea-eagle-project>) uses a storyline approach to explore issues around the return of sea eagles.

Growing up with Loch Leven (www.ltscotland.org.uk/sharingpractice/g/growinguplochleven/index.asp) was an interdisciplinary project that Kinross High School and its associated primary schools developed. This initiative focused on learning about the local Kinross area and the natural habitat of Loch Leven as an approach to exploring literacy across learning. An artist, a poet and the RSPB contributed their expertise as partners.

Metasaga (<http://metasaga.wikispaces.com>) is a flexible thinking skills approach to exploring a local area. It encourages the young people involved to explore their local culture and understand their place in the wider world, while developing key skills such as teamwork and leadership. It can be adapted for use with children and young people of all ages.

53 Taken from Harrison, S (2010), Place-based education and a participative pedagogy, Briefing Paper No 3, Inverness: University of the Highlands and Islands Centre for Remote and Rural Studies.

Outdoor Journeys (www.outdoorjourneys.org.uk) is an interdisciplinary approach that enables pupils to learn about the people and place in which they live. By planning and undertaking local journeys, pupils are able to learn in a manner that is active, holistic and contextualised. As well as being driven by the learners' interests, Outdoor Journeys has a clear focus on presenting findings and reviewing outdoor experiences.

Create a link with a local farmer and visit the farm. Contact the Royal Highland Education Trust (www.rhet.org.uk) to find your nearest farm. Set up a sheep or cattle diary and take photos of animals at different stages. Investigate the crops being grown and grow some at school to observe their changes. Invite the farmer to see a presentation about the pupils' work.

Ask a local outdoor professional to present a real dilemma or problem that they are facing. If possible, meet the person at the site. Ask your students to research, think about and present a possible solution outdoors. Encourage them to consider the perspectives of different characters so that different styles of critical and creative thinking are used to address the problem.

Community and parental involvement

The local community is a meaningful and relevant source of social, cultural, historical and environmental learning opportunities. The community can support and enhance the experiences of children and young people. Likewise learners can actively contribute to making the school or centre a valued part of the community. This can help individuals and families develop a sense of belonging and ownership that can be empowering for all. Schools need communities and communities need schools.

Links can be established formally through partnerships with local organisations and businesses. However, many informal links happen through parent and staff contacts where advice, information and resources are shared. Taking an enterprising approach towards interacting and being involved in the community benefits schools greatly.

Knowing what resources exist within the community, and making the most of them, is crucial to the opportunities and options for taking learners out of school regularly. The presence of children and young people working out and about in the community raises the profile of a school and a positive spiral of interactions is facilitated. Examples of community work outside include:

- caring for a special place or part of the community, eg a nearby garden or woodland, where the natural resources are monitored and looked after
- contributing to the culture of a community through participating in local events such as arts festivals
- undertaking enterprise activities that involve exploring or being in the community, for example having a stall at a local farmers' market or organising a community event like a garden party
- undertaking citizenship duties such as a litter pick, beach clean-up, conservation work or tree planting

As a practitioner, go for walks in your local community and get to know who lives and works there. Discover for yourself the areas of greenspace and the potential of the area for enriching the curriculum.

Create a database of interests, skills, passions and professions of parents and local people. Very often people will volunteer or assist with a project if asked directly. Include staff in this too. Use parents and other volunteers to maximise the outdoor learning opportunities that exist in your community.

Consider historical societies, museums and social organisations that may have members or volunteers. Agree expectations and the purpose of any involvement in advance and remember to follow school or local authority guidance about volunteers.

Seek advice from the Parent Council and other parent-led bodies within the school. Often these bodies are willing and able to establish links and facilitate connections within the community.

Preparing for visits beyond your grounds or outdoor space

In the School Grounds section there are practical suggestions on preparing and developing the habit of taking learning outdoors. Many of these are applicable to off-site activities too.

Planning and preparation for exploring the local area ensures that everyone has a positive experience. Seek permission from your head of establishment or appropriate person to undertake the off-site visit. If school and local authority guidance exists, then this should be followed. Consult local outdoor education guidance if the activity has an adventurous element.

The Education Scotland outdoor learning website has extensive information and advice about planning and preparation. There are also many other sources of information available from partner organisations. The following advice and suggestions aim to complement this online information.

'I always run a session with the parents before each project, getting them to draw a map of all the interesting places and people for the project.'

Sam Harrison, Place-based Educator, Open Ground

Know where you are going

Visit the place you are going to in advance. Get to know it and speak to people who have been there before for advice and stories. If you are planning or developing activities within your local area then explore your local area by foot. Learn where the greenspaces are and see how long it takes to walk to them. Find out about local businesses and organisations. Use Google Earth and online mapping facilities to learn more about your local area. This will help you to develop realistic plans and feel confident.

Weather

Read weather reports in advance. There are many online sources of weather information and it's normally best to check at least a couple of different sources if you are going to be away from the school or centre for any significant period. Be prepared to change or cancel your plans if the weather changes for the worst.

Clothing

Advise parents and carers how children should be dressed depending on the weather and the activities they will be doing. Provide plenty of time if they may need to source special items such as boots. Have a plan for learners who do not have the required clothing and footwear. Some schools send all parents and carers a text message the evening before an activity, reminding them of anything children need to bring.

Equipment

The equipment taken by practitioners and their group will vary according to the activity and its duration, the weather and season, and the age and ability of the children. As a minimum, leaders should carry:

- a mobile phone
- a suitable first-aid kit that matches levels of training, the environment and the advice of the school or local authority guidelines
- a list of participants (including any medical conditions/allergies)
- emergency contact details
- any prescription medication that might be needed urgently by a member of the group

Ensure that the children and young people carry their own belongings, food, drink, portable seats and other relevant resources, which may include equipment to undertake activities. A few small rucksacks are a useful investment for a school if pupils cannot supply their own.

Mobile phones

If children and young people are carrying mobile phones, then include the management of these in emergency situations. Some local authorities have guidance covering use of mobile phones. Ensure that older children are aware of what to do in any emergency situation or if separated from the group. It is important that their first recourse is not to immediately phone parents or carers as this can cause alarm and confusion, and may not help to resolve the situation.

Food

Everyone in the group, including the leader, should drink and eat enough when away for more than couple of hours. Plan and provide opportunities for each meal and healthy snacking. Keeping blood sugars up, but not too high, is important for energy levels, good behaviour and positive outdoor learning experiences.

Take some emergency healthy snacks. Make sure you are aware of any allergies in your group and keep a record of these on your list of people on the trip. Make appropriate arrangements for managing these allergies. If it's cold then flasks of warm drinks are a good idea, such as warm cordial.

Toilets and hygiene outdoors

Know where the toilets are located and plan for a number of visits to them during the day. If the visit is to a site without public facilities, then follow the advice in the Scottish Outdoor Access Code⁵⁴ and use a 'Leave No Trace'⁵⁵ approach. Remember to consider child protection procedures to ensure privacy of the pupils and consider arrangements for accompanying adults too. With younger groups, pack additional clothing to deal with any 'accidents' that may happen.

It is important that hygiene outdoors is given the same attention as indoors. Health Protection Scotland advises that children wash their hands with soap and running water:

- after using the toilet or changing a nappy
- before and after eating, drinking or preparing food
- after sneezing, nose blowing or coughing
- if hands are visually contaminated

Wipes are only recommended as an alternative when hand-washing facilities are not available. Carrying a bottle of water, a little soap and a few paper towels for hygiene purposes is a sensible precaution if your trip is some distance from a public toilet. Gels and sanitisers are only effective when used on hands that have no visual contamination. It may be prudent to advise learners and their parents and carers about the hygiene and toileting arrangements in case of any specific concerns that need to be considered.

54 Scottish Outdoor Access Code www.outdooraccess-scotland.com

55 Leave No Trace www.lnt.org/index.php

Transport

Many interesting places are often within a short walk of a school or centre and these should be the focus of many off-site visits. There are good reasons for occasionally travelling further afield to compare and contrast habitats or explore features unavailable nearer to school.

Your school or local authority will have procedures in place for transporting children and expectations about behaviour, routines and procedures. These should always be followed.

Always follow the Highway Code for pedestrians when managing groups outside. High visibility vests can be useful when near roads. Allow plenty of time and keep distances reasonable so that the group can enjoy themselves. Build in time for investigating interesting things like puddles and wildlife. Remember to allow time for relaxing.

Group management and behaviour expectations

Thorough planning can mitigate concerns about group management and behaviour expectations.

Agree on a place to meet if anyone gets lost or split from the group, along with procedures over whom to contact and how, if young people have phones. Young children should be told that if they get split from the group adults will always come looking for them and will not stop looking until they are found. Showing how to attract attention and keep warm will also increase the safety of your group. Ensure young children know the name of their setting.

Working with other staff

Involve other staff and parents with planning from the very start. Make sure that all the adults understand planned experiences and outcomes, and how they link to prior learning and the planning activities subsequent to the visit. All staff and accompanying adults should be fully briefed, including their roles and responsibilities, an understanding of any risks associated with a particular place or activity, and details of any behavioural issues.

Outdoor learning led by partner organisations

There are circumstances where the organising and delivery of outdoor sessions by partner providers is worthwhile. It is always advisable for those involved to make a preliminary visit and discuss the purpose of the visit, dates, times and numbers of students, the choice of programme and adjustments (if any), establishing the required curriculum links, contexts and progression, risk–benefit assessments and other needs, and preparatory and after-visit activities for discussion and planning.

'I contract an outdoor learning consultant to run a day's Advanced Higher (AH) Geography Fieldwork Methods and Techniques for my AH students. This saves me time and exposes students to an 'expert geographer'. To make up the numbers I invite other local schools to send their students, with or without a staff member. The consultant organises, prepares materials, and runs the whole day, and we do the follow-up back at school. We use the Museum of Scottish Rural Life's Learning Centre and farm estate, near East Kilbride, and their fieldwork equipment for the day, at no extra charge.'

PT Geography, St Maurice's High School, Cumbernauld

Getting to know your local area

These activities are designed to help learners and practitioners begin to explore their local area:

- explore the local environment through rubbings. Ask your group to find and rub something crusty, smooth, red, straight, funny, natural, hidden and/or other descriptive words. Which rubbing looks most like the thing that was rubbed and why?
- use a memory game to build up knowledge of your local area. Take turns in your group to say, 'I went outside and I saw a...' Try to remember and repeat what other group members say as well as your own idea
- take a walk around the local area. Look at the buildings and the ground, and identify some of the materials that are used to make them. Think about which ones come from the Earth's surface. Why have they been used? Are there alternatives that could be used? Do any of the materials come from local sources? A visit to a local quarry could follow this
- pupils can take different routes through their local community and record the walk as they go. A simple digital recorder would suffice. A map or graphic score of the sounds recorded could then be created after listening to the completed soundwalk. The soundwalk can then be edited using free downloadable ICT software (www.sonicpostcards.org) to explore effects and compositional concepts

Section 6:

Places to learn outdoors: outdoor residential experiences

'I once got into hot water for saying that a week's residential was worth a term in school. Arithmetically that is an overestimate but in other ways it could be an underestimate.' Sir Tim Brighouse, professor and educator

For many staff and pupils an outdoor residential experience is one of the highlights of the school year. Many practitioners find organising an outdoor residential experience thoroughly worthwhile because of the long-lasting impact on young people. The combination of special activities with the shared experience of living and working with peers makes a residential stay a unique outdoor learning opportunity for every young person.

Residential experiences can take a number of different forms. Outdoor activity centres, field study centres, city visits, youth hostels, camping trips and expeditions are several examples which indicate the diversity of options. Each is a worthwhile experience in its own right; thus consideration needs to be given to the type of residential stay that is most appropriate to learners' needs and abilities.

Many residential experiences are delivered by or alongside partner-provider staff, especially those at a residential outdoor centre. There are some extremely experienced and effective providers of residential outdoor experiences, many of whom have an excellent understanding of the curriculum and of the value of what they provide. Schools and others can benefit from the experience of partner providers and the experiences that they can provide for young people. Partners operate in many sectors and organisations, and deciding with whom to work, and how, is key to success.

Different types of residential will often have a different learning focus, but other qualities of a residential experience will also vary. Just as in school, or in the community, a supportive and aspiration-rich ethos is critical to the success and relevance of a residential. Opportunities to participate responsibly in decision making, to contribute as leaders and role models, to offer support and service to others and to play an active part in putting the values of the residential community into practice are all opportunities brought about through well-conceived and planned residential experiences.

Schools and institutions can plan and deliver their own residential experiences. This relies on the motivation, experience and qualifications of staff, combined with the support and resources available within the establishment. Local authority and national guidelines and procedures still apply. For example, when considering Duke of Edinburgh's Award (DofE) expeditions, guidance

and training is available through DofE operating authority officers, whose details can be found online. A range of voluntary organisations and activity clubs provide camping residential experiences. Establishing links may lead to the sharing of ideas and equipment between local establishments.

Finally, local authority outdoor education staff and centres can provide advice and support regarding many aspects of a residential experience. Some local authorities have their own centres or can provide staff and accommodation to create a bespoke programme.

Before you go

Reflecting on who will benefit from a residential experience is an obvious consideration. Outdoor residential experiences have often been seen as an effective way to engage young people who have lost interest in school-based learning or are experiencing difficulties in some aspect of their lives. However, all young people, with differing outlooks and abilities, will benefit in different ways. Making residential experiences an integrated experience enables young people to achieve and have their skills and achievements recognised. Working in different social groups or with unfamiliar peers during residential experiences can also help to develop a greater sense of cohesion in general or support a transition back at school or into the community.

Joint planning, developed early, between the school and residential centre is key to ensuring the experience is part of ongoing learning experiences for children and young people. Whilst specialist activities, especially at residential outdoor centres, will often be facilitated by partner-provider staff, it is essential that teachers and practitioners are involved in setting learning intentions as part of the planning process. All staff should work collaboratively to ensure that experiences reflect the design principles of Curriculum for Excellence. Partner providers should be able to advise on the potential of the experiences that they offer to support learning within a curriculum area.

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Practitioners should recognise the opportunities during a residential experience for the ongoing assessment of knowledge and understanding, skills, attributes and capabilities by using assessment flexibly to meet the needs of learners, regardless of where their learning takes place. Assessment is key to supporting effective teaching and learning, and the many new and challenging situations to which learners are exposed on residential offer practitioners a range of opportunities to understand young people and their learning needs more fully. For these reasons, practitioners need to be actively engaged in the planning of a residential experience.

When beginning to plan a residential experience, practitioners should consider the following:

- where and how does the residential fit into the progression of learning experiences and the resulting benefits for young people? A residential stay should offer meaningful learning opportunities that cannot be easily replicated within normal school routines
- make the residential stay part of an interdisciplinary project with relevant work leading up to, during and following on from, the residential experience. Taking a rich task back to school, for example, can progress and add depth to learning cycles. This can act as a catalyst for deciding on the type of stay required and a focus for activities to be undertaken
- ensure that learners have regular learning opportunities in their grounds and local areas. This will enable them to get more out of the far away experiences as they will be used to working and being outdoors and have routines around this
- put together criteria and information about several options that allow learners to explore and decide which is the most appropriate experience. This may include writing to centres, interviewing older pupils about their experiences and other relevant activities

Choosing a residential experience

Many schools often choose to use the same residential centre year after year. The introduction of Curriculum for Excellence through Outdoor Learning is an opportunity for practitioners to evaluate the value of the residential experience offered. Whilst cost and financial aspects will play a part, the quality of the learners' experience should be the main basis for the final decision. Practitioners may wish to consider the following:

- establish the procedures for joint planning between the centre and the school. Good communication is of paramount importance. Ideally, a person from the centre should be able to visit the school to meet young people and staff prior to the visit. There needs to be a shared understanding of standards and expectations between the school and the residential centre
- activities offered should contain an element of personalisation and choice, and should be sufficiently challenging by taking account of and building on the previous experiences of the young people involved
- look at the activities offered and find out whether or not there is flexibility in the way in which these are facilitated to enable specific and agreed learning intentions to be met. It is essential that teachers and practitioners are involved in setting learning intentions as part of the planning process and that they actively assess the learning taking place during the residential in line with advice contained within Building the Curriculum 5: A framework for assessment

- teachers and practitioners need to have the option of participating in the residential activities. This provides an opportunity to observe and note the impact on the group and individual pupils
- when evaluating progress and the impact of the residential experience, the centre staff and the visiting staff should have an opportunity to share their observations. Time may also be built into the experience for pupils to reflect and self-assess their own personal development or learning journey
- gathering evidence of learning, achievements and personal development needs to be considered in advance. This evidence can take many forms, such as diaries, recordings, photo journals, blogs, Glow or project work. Certificates or individual awards at a final ceremony are an additional way of recognising achievement. Partners may have templates for certificates or logbooks
- the residential experiences need to take account of the design principles of Curriculum for Excellence. Partner providers should be able to advise on the potential of the experiences that they offer to support learning within and across curriculum areas
- look carefully at how the activities are constructed to ensure a holistic approach. Teaching staff and practitioners should know how particular activities impact on learning beyond simple participation. For example, a canoe trip could include activities that allow learners to consider human impact on water quality. A high ropes course located in a woodland can provide an opportunity to explore the canopy layers and woodland ecosystem. Team-building challenges may be specifically adapted to help a class understand an aspect of their interdisciplinary project

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- find out about poor weather alternatives and contingency plans. These need to be positive substitutes for planned activities and should still have a focus on learning outcomes
- think about the support required to ensure that all young people have the opportunity to participate. Consider the accessibility of the site and the activities offered
- find out if there are opportunities to talk to partner staff about the group during the visit. This will help decision making, for example if someone has not been eating well or is not getting enough sleep
- look at the wider routines within the centre and consider how they develop the four capacities of Curriculum for Excellence. For example, consider the routines around meal times and whether these encourage young people to become responsible citizens
- think about the ethos of the centre or residential setting and whether or not it is compatible with the aims and ethos of the learners and school. For example, many centres have Eco-School status and try and incorporate sustainable living approaches into their work

It is strongly recommended that the lead person makes an exploratory visit to the residential centre. This will help to determine the ethos of the centre and whether or not it provides a welcoming atmosphere that develops children and young people's capacities through careful consideration of the layout, routines, manner and interactions of staff with visiting groups and other aspects of the residential stay.

Practical preparation for a residential experience

First, seek permission from the head of establishment. Next, gauge levels of interest from pupils and their parents and carers. An initial meeting between all staff involved will help to establish the aims of the residential. This can help to develop the outdoor residential experience as a valued part of integrated learning for a class or group of learners. Alongside this may be a need to ensure that learners who are unable to attend can be involved in a positive way before, during and after the residential visit.

Try to start the planning as far in advance as is practical, and distribute responsibilities. This will help to reduce the administration burden on any individual. More than one person needs to be actively involved in case the lead member of staff is unable to attend due to unforeseen circumstances.

Find out what information and documentation has to be submitted to your line manager or local authority. Completion of these forms is a useful part of the reflective process to aid planning, consider options and ensure a positive residential experience. Keep a copy of all relevant paperwork to take along on the residential. Remember to back paperwork up with conversations. For example, if a child has particular medical needs, ensure this is discussed with relevant residential staff prior to any activity.

Remember to refer to school and local authority guidelines and Adventure Activity Licensing, if applicable, regarding health and safety aspects of the residential experience. Child protection matters need to be considered too.

Preparing children and young people

Involving participants in planning from the outset will help pupils understand the purpose of the residential and contribute to their personalisation and choice. It may help to:

- set up channels of communication such as a Glow Group or a blog specifically for the residential
- develop learning activities and games around tasks such as 'what to bring' and encourage learners to take responsibility for aspects of the organisation (remember to include activities that address young people's thoughts and feelings about the residential experience and encourage the group to come up with strategies for managing perceived issues or concerns)
- allocate or let pupils decide groups and teams in advance so children and young people know with whom they will be spending time – careful grouping will contribute to the success of the residential

Keeping parents informed

Communication to parents and carers is important so they also know what to expect and what their children need to take with them. Share the dates as soon as possible so parents and carers can plan other arrangements around the residential period.

Initial communication can be followed up with a presentation that will allow time to expand on plans and opportunities for additional questions. This may be arranged by staff but could be delivered by partners or children who have been on previous residential visits. Consider how this information may also be communicated to those who are unable to make the presentation, for example an information leaflet produced by pupils as part of the residential project from the previous year or posting the presentation onto the school website.

Making reference to some of the benefits of outdoor residential experiences will help parents and carers to understand why their child is going away. Developing independence, confidence, social skills, responsibility and reflection are often highlighted.

Cultural differences, dietary requirements, medical needs and associated issues, hygiene and dormitory arrangements are factors to plan for and share with pupils and parents, especially to reassure concerns about privacy. Explaining what the facilities are like, such as where the toilets are, use of separate showers, if there are baths or en suite facilities to rooms or how many people will be in each dormitory, can help to alleviate concerns.

For older age groups an agreed Code of Conduct, signed by pupils and parents, will clarify the behaviour and actions expected on the residential.

A list of equipment is important to parents and pupils. A partner provider or residential centre may well provide this if you are using their services or centre. Below are a few additional considerations:

- in winter, ask participants to donate any old hats and gloves and bring them as group spares. In summer, ask parents and carers to provide sun cream and hats
- provide advice about pocket money and have procedures in place around the handling and storage of cash
- participants who wear glasses may find it useful to bring a second pair
- does the establishment or local authority have guidance or a policy for mobile phone use and communicating with parents?
- does the school or centre have guidance or a policy for listening to personal music players?
- what are the drying facilities? Will this dictate the number of clothes to bring?
- what practical skills do participants need prior to the visit that can be practised at home?

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Section 7:

Places to learn outdoors: going abroad

Each year thousands of primary- and secondary-aged Scottish children benefit from a wide variety of different activities, foods, language and cultures in different parts of the world. Planning, organising and facilitating an overseas outdoor learning experience is one of the most challenging and worthwhile activities that an educator can do. The benefits of such a visit are huge but, just like any well-planned outdoor experience, there are lots of matters that require careful thought. Before deciding to lead a visit abroad, it is strongly recommended that practitioners work alongside an experienced leader, supporting an international visit.

Do you really need to go overseas?

One of the first questions to ask when planning an overseas trip is, 'Do we actually need to go overseas?' Overseas visits are expensive and need to be thought about in advance. Overseas trips should not just be a replication of something that can be undertaken in the UK. The overseas element of the experience must add value. There are thousands of outdoor learning venues in Scotland. The Education Scotland 'Where to go in Scotland: Interactive Map' (www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/placestolearnoutdoors/wheretogomap/index.asp) provides a searchable database to assist practitioners in locating venues for outdoor learning activities.

An overseas visit that might add value could include a trip to the French World War II battlefields. This type of experience is almost impossible to replicate in Scotland. An overseas trip with a more questionable objective might be an introduction to kayaking course in the south of France. This could easily be replicated in Scotland.

Think about: Work with your group of learners to consider the environmental implication of your excursion. How will you off-set carbon emissions and should you include this in your budget?

Where to find advice

There is plenty of advice on organising overseas trips available online. The Curriculum for Excellence through Outdoor Learning (www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/about/cfethroughoutdoorlearning.asp) and the Scottish Government Health and Safety on Educational Excursions: Good Practice Guides (2004) (www.scotland.gov.uk/Publications/2004/12/20444/48943) documentation provide a good place to start. Local authorities, independent schools and third-sector organisations all have advice and safety guidelines that need to be followed.

An overseas expedition that encompasses an extended period of time away from home and contains some degree of adventurous activity or community project is a significant undertaking. The Young Explorers' Trust (www.theyet.org), the UK's national association of youth exploration societies, offers advice, guidance and expedition screening via its website. The Young Explorers' Trust also evaluates for British Standards Institution (BSI) BS 8848.

(BS 8848) (www.bsigroup.com/en/About-BSI/News-Room/BSI-News-Content/General/Safer-adventure-holidays) is the national standard for adventurous activities, expeditions, visits and fieldwork outside the UK. It stipulates that one person or organisation is identified as the 'expedition organiser' and takes responsibility for all aspects of the trip, including safety. If registering with a commercial provider for this type of activity it is worth seeing if they conform to BS 8848. If the venture is being organised in-house, then the organiser should consider applying for the standard. For youth groups this is best done through the Young Explorers' Trust.

If you are considering an exchange visit with another school or organisation a great deal of preparation and organisation is required to make the exchange visit a success. One good source of advice is Young People's Exchange Visits (https://secureweb1.essexcc.gov.uk/EducationalVisits/docs/oeap_guidance_on_pupil_exchange_visits.pdf).

Think about: Before organising an overseas trip from whom do I need to get permission? Who do I know who might act as a critical friend to help me plan my venture?

Where in the world?

Once the decision has been taken to organise an overseas experience and permission has been gained, the next step is to know where to go and how to get there. The best advice will come in the form of a personal recommendation from someone that you trust. Other websites such as Lonely Planet (www.lonelyplanet.com/uk), The Young Explorers' Trust (www.theyet.org/index.php) or The Royal Geographical Society (www.rgs.org/OurWork/Fieldwork+and+Expeditions/Fieldwork+Expeditions.htm) may also prove useful, or you could try a Google search (www.google.co.uk).

A Google Blog (<http://blogsearch.google.com>) search is useful to read first-hand accounts from people who may have undertaken similar journeys or experiences. Similarly, exploring places using tools like Google Earth (www.google.co.uk/intl/en_uk/earth/index.html) can give a really good idea of the sorts of locations that may be available.

Taking young people and leading groups to less economically developed countries can be rewarding. However, this sort of trip must be carried out for the right reasons and the selection of young people needs to take into account their level of emotional intelligence.

Think about: Where do your group want to go? What is your justification? How might you get there? Will there be problems with language? Can you afford it? Will I need vaccinations? How high up is the place I intend to visit? Does the altitude of the place you intend to visit present any issues for consideration?

Commercial providers

There are many commercial providers who will happily organise an outdoor learning experience. There is nothing wrong with this and it often moves the overall accountability to a third party. Commercial providers are, however, expensive and although they will work with a school or centre to provide a tailor-made package it is unlikely that the participants will really own the programme, journey or experience.

Think about: Do you have the expertise to lead a group overseas? Do you require any additional training and qualifications to lead your group?

The law

Just like for any outdoor experience, the adult leader is responsible for the young people on the international visit. There are additional complexities in that whilst operating overseas the party may be subject to Scottish, European and International Law. If there is a specific enquiry regarding laws, this may have to be addressed through the embassy of the country to be visited.

Appropriate and comprehensive insurance is also required. Some local authorities have insurance cover in place for educational visits within the UK and abroad. A local authority officer will be able to advise. However, organisers should always check with parents and carers that the level of insurance is sufficient for their needs. If this is not the case, parents should be encouraged to make their own insurance arrangements.

Think about: How can I ensure that my risk–benefit assessments and learner consent forms take into account international law, insurance and other matters relating to the supervision of young people within the UK and abroad?

Consider the learning activities that happen on your overseas visit

Make space for circle time debrief sessions each day to explore and reflect on the contrasts between Scotland and your host country. These could be recorded in a daily diary.

Go on a fact-finding trip to research the costs and benefits of National Parks or another tourist destination. Provide opportunities for your group to speak to local farmers, people living immediately beside the park, tourists and park rangers. Ask your group to think of ways to increase the benefits and reduce the costs of your overseas visit.

Sample local food and ask the chef or cooks for the recipes. Make a food journal or blog, complete with photos and top tips from each cook.

Ask your group to look for differences and similarities in the way that religion shapes different places. What ideas, values or activities would they like to bring back with them that are not prevalent in Scotland?

Cost of residential experiences and international visits

The cost of residential experiences and international visits are a significant factor and vary considerably depending on the distance travelled, the duration and the staff-to-student ratio.

Some of the following questions may help when considering cost:

- are there subsidies or bursaries available through the local authority or a charitable organisation, for example to pupils on free school meals or with particular needs or backgrounds?
- could the residential or international visit form part of a fundraising enterprise project?
- could you organise your own food and accommodation but buy in specialist staff and equipment?
- are there other schools or establishments in the local area with whom you could join forces? Is the expertise required available elsewhere within the school or organisation?
- have you considered the overall learning in relation to the planned expenditure?
- how much increased cost would there be to increase the value of the experience?
- is there a centre or country that is closer that can provide the experiences for learners with fewer travel costs?

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Section 8:

CPD framework and planning tools

The CPD framework offers suggestions to assist practitioners in developing and implementing the guidance outlined in Curriculum for Excellence through Outdoor Learning and the suggestions contained in this resource.

These activities encourage participants to think about why outdoor learning is necessary. Practitioners need to understand the benefits and principles of outdoor learning, the reasons behind this approach to learning and teaching, and why it is the responsibility of all staff.

There are activities designed for staff to undertake individually, with other staff in their schools and cluster, and with parents as appropriate. They are designed to complement and extend the standard CPD activities that practitioners may undertake such as related reading, watching video clips or general school improvement tasks.

The suggested time allocations are approximate guidelines. How long each activity takes depends on the size of the group, the amount of discussion that takes place and the general flow of each activity.





Schools and centres should choose and adapt activities appropriate to the needs of their staff. By making small adjustments, it is also possible for an individual to work through most of the activities, using a journal to record and reflect on responses.

Outdoor work is an essential part of these sessions. It enables practitioners to have direct experience of the world outside their classroom and reflect on issues particular to their local environment and the children with whom they work. Participants should come with appropriate clothing and footwear for being outside.

The organiser should undertake a risk assessment for each CPD session.

If there are more than 25 participants, consider having more than one facilitator with the CPD session.

The following symbols are used as guides to where the CPD activity can take place:

- activity should be undertaken outdoors 
- activity may be undertaken outdoors or indoors OR have an element of both  
- activity is best undertaken inside or sheltered from the elements 

An outdoor tea break



20 minutes, allowing for staff to get a cup of tea.

This activity is a useful introduction to some of the issues around taking learning outside.

Aim

People behave and interact differently outdoors.

Equipment

Portable seating, picnic blanket, food and beverages as you would normally provide at the start of a CPD session.

Activity

Ask participants to get a cup of tea or coffee to drink as they arrive for the CPD session. Direct the participants to the designated place outside for drinking, instead of sitting in the staff room.

Questions

- how is having a cup of tea outside different from being indoors?
Responses may include: fresh air, a chance to observe nature and outdoor activities other people are doing, the weather, discovering insects, having to walk to get outside to a seat
- what did you notice about the layout of the seating and people's behaviour?
Responses may include: a more relaxed atmosphere, excitement, quieter or noisier than indoors, people changing the layout of the seats to suit, lying or sitting in different ways, playing with grass or other material lying around
- what adaptations would be needed if we did this again?
Responses may include: mugs that don't spill, or a place to put them down safely, having cushions or more comfy seating, shelter, wearing more appropriate clothing, etc

Summary

Children may behave differently outside too. We need to be prepared for this, especially if the children are not used to working outdoors and will need time to acclimatise. We may need to consider how we adapt our methodology, routines and resources to being outside.

Optional follow-on

Group discussions and feedback about adaptations are needed to enable learning outdoors to happen. Focus on what can be done, especially within the school grounds and local area, and develop creative solutions rather than barriers to going outside.

The taste of chocolate

10 minutes



This activity is useful to demonstrate why it is necessary to go outside, even during a CPD session.

Aim

Direct, first-hand experience is important and often more effective than gaining information by reading or watching a screen.

Equipment

Chocolate (check for allergies prior to distributing), flipchart paper or magic whiteboard sheets.

Activity

Keeping the chocolate out of sight, ask participants to describe chocolate. Write their thoughts on the flipchart or whiteboard. Hand out the bars of chocolate to share and eat. Ask participants to describe the chocolate as they are passing it around and eating a piece. Add the additional words and phrases to the flipchart or whiteboard.

Questions

- in what way did the sharing and eating of chocolate help you describe it?
- what did you notice about the atmosphere when we began to share and eat the chocolate?
- how is this similar to the experience of being outdoors compared with being indoors?

Summary

The outdoors may offer added opportunities to know things in a variety of different ways – through taste, touch, sight, sound, smell, as well as intellectually, physically, emotionally, aesthetically and spiritually.

Personal outdoor experiences



10 minutes

This activity can take place whilst participants are walking between two different places, for example when exploring your local neighbourhood or moving outside after an indoor activity.

Aim

To reflect on the personal impact of outdoor learning experiences.

Activity

Think back to your own childhood. What positive learning experiences did you have outside? Discuss this with other participants in small groups.

- what happened?
- what did you learn from it?
- what made it memorable?
- ask a couple of groups to summarise their thoughts

Questions

- what common factors do our recollections have?
- what worked well for us and how applicable is this to the children with whom we work?
- ask participants to consider whether their outdoor learning experiences are more memorable than their indoor ones. If so, why has this happened? What makes an outdoor experience more memorable?

Summary

It is important to draw attention to the experiences that could not easily be replicated indoors. Encourage participants to think about fresh air, multi-sensory experiences, elements of risk and challenge, exposure to nature and the elements and real-world experiences.

What the research says

20 minutes



This activity can also be adapted for reading through and getting to know the document Curriculum for Excellence through Outdoor Learning.

Aim

To read and reflect on research about the impact of being outdoors.

Equipment

There are research snippets available on the Glow National Outdoor Learning Group in the resources section that may be more appropriate for your setting.

Activity

Read through the research snippets. Highlight any research that you find surprising, interesting or useful. With a partner or in a small group, discuss:

- which research is most relevant to your work and why
- what action you feel you could take based on the research evidence
(It may help to focus on one child or a small group within a class)

Ask pairs to feed back their thoughts to the rest of the group.

Questions

- how can we make use of this research within our setting?
- what ideas can we try?
- what do we need to feed into our audits and improvement plans in terms of increasing or improving outdoor learning provision?

Summary

From the handout, it should be apparent that the positive impact on health and wellbeing of being outside makes outdoor learning the responsibility of all staff. It's helpful to start building up a list of possible actions that practitioners can take to improve their outdoor learning provision.

Getting started

40 minutes



This activity enables participants to plan ideas that they can begin to implement promptly. A simple adaptation is to let participants look at the experiences and outcomes relevant to their subject and level, and to choose and design an outdoor activity to meet requirements of one of them.

Aim

To begin to develop and implement ideas for taking learning outdoors.

Equipment

Copies of relevant sections of the resource pack for each participant. Which sections are required depends on the focus.

Activity

Participants should read through the ideas for taking learning outdoors. As they do this, they can categorise them, for example:

G – Good idea that I know I can do

M – Maybe worth trying as it seems interesting

N – Not yet

Outside, working in small groups, the participants take one idea that they liked and develop further ideas for extending the learning outdoors. The focus needs to be on how their idea will be extended and ways of constructing and organising the activity. Each group should demonstrate the extension to the other groups.

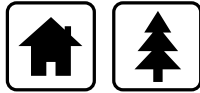
If a group of participants do not like or see the relevance of any of the ideas in the handbook, then the challenge is to come up with an activity of their own choice, outside.

Questions

- how does this activity or idea complement and extend the programmes or projects we already teach?
- which part of the activity will be the easiest to facilitate?
- what matters need particular attention, eg the allocation of resources, the grouping of pupils, etc?

Where do we begin?

20–60 minutes



This activity is useful for getting to know the local area. Often practitioners drive to school from outwith the local area and are unaware of local potential. Also, passers-by will take the time to chat and useful advice can be gained this way.

Aim

To explore the local area as a context for learning.

Equipment

Access to Google Earth on a computer or portable device, maps, digital cameras.

Activity

Participants look at Google Earth and local maps to find key features that can be visited. This is worthwhile doing with children and young people as it can be a way of sharing the planning. There is also an interactive map of Scotland on the Education Scotland website that can help to identify places to go.

www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/placestolearnoutdoors/wheretogomap/index.asp

Questions

- which places have a lot of potential for learning outdoors?
- how can Google Earth, maps and other tools be used to involve children in planning and going off-site to learn?

Participants can go for a walk to explore the features observed online. They may wish to take a map, digital camera and other resources such as GPS to record key points of interest and possible hazards, including:

- places to gather or stop
- historical, social and natural features of interest
- layout of streets, including the safest places to cross roads
- the location of toilets, different shops and other facilities
- places for shelter in inclement weather

The time taken to walk to different places should also be noted.

The added value of natural materials

40 minutes



Aim

To demonstrate why using natural materials for learning and play is effective from an education perspective.

Equipment

Five pieces of lego and five smooth stones per pair of participants.

Activity

Ask participants to build a tower with five pieces of lego with their partner. Next, hand out five stones and ask the participants to build a tower with these. This task is much more demanding.

Questions

- which materials were the most challenging to use? Why?
- what skills were involved? Look for answers such as:
 - communication and co-operation - working together is required to complete the activity
 - higher order thinking skills – the activity is not straightforward
 - creativity, imagination and problem solving – the activity is time you repeat this activity you will have to find a different way to complete it as the stones are all different
 - determination to succeed – some pairs will have tried several times before successfully building a tower

Follow-on activity

In a place with lots of natural materials, such as a beach or woodland, ask the participants to devise a challenging problem or investigation for a class or year group to carry out using only natural materials. The task should link to a project or programme of work. Participants should work in small groups and be prepared to share their ideas with whole group.

Summary

Natural materials such as sticks, stones, shells and leaves are open-ended, multi-sensory and irregular. These attributes can be used to create experiences that challenge children in a way that synthetic resources do not always manage. Furthermore, they are often freely available in greenspace.

Problems and solutions



10 minutes at the start, 15 minutes at the end

This is a before and after activity that can change the focus from ‘What is stopping us from taking children and young people outside?’ to ‘What we can do to overcome these concerns or issues.’ The carousel activity tends to work best towards the end of a CPD session once ideas and discussion about the possibilities of outdoor learning have been shared.

Aim

For participants to collectively and individually help each other and themselves improve the quantity and quality of outdoor learning taking place.

Equipment

Flipchart paper stuck on sheets on the wall at a suitable height. Post-it notes and pens.

Activity

At the start of the training session ask participants to list one benefit of taking learning outdoors on one Post-it note and put this on a flipchart sheet titled ‘Benefits of Outdoor Learning’. On a second Post-it note, each participant should write their biggest concern about taking learning outdoors. This should be stuck on a second flipchart sheet titled ‘Concerns’.

The facilitator can read through the benefits and concerns and share some of them with the participants. Whilst the participants are undertaking another exercise, prepare the carousel activity.

The carousel activity

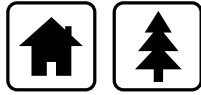
Each concern should be written on top of a separate sheet of flipchart paper. These are displayed on the walls around the room. Allow 15 minutes for participants to move from concern to concern, writing practical and realistic suggestions underneath to overcome or manage the issue raised. Examples of concerns may include:

- how to avoid making learning outdoors contrived
- health and safety concerns
- children and young people running away or leaving the group
- behaviour management outdoors
- weather and lack of appropriate clothing
- lack of ideas for, and experience of, taking learning outdoors
- potential costs or the need for additional resources

After this activity, take photos of the suggestions and post on your school’s Glow page so that everyone can benefit from other practitioners’ ideas and suggestions.

Review and next steps

20 minutes



Aim

To share thoughts about how the training session has gone.

Equipment

Pens, clipboards (if outside), flipchart or magic whiteboard sheets.

Activity

Participants should consider what they heard, saw and did during the workshop and how this will impact on their future practice. On the flipchart or magic whiteboard sheets write down ideas to be considered and realistic timescales.

Heard, saw, did	Impact on future practice	Timescale for achievement

Appendix 1:

Resources and web links

The information below relates to specific material mentioned in the resource materials and is not a comprehensive list of organisations or resources. The Education Scotland website has resources, advice and links to relevant organisations.

www.educationscotland.gov.uk/learningteachingandassessment/approaches/outdoorlearning/index.asp

The information below relates to specific material mentioned in the resource materials.

Outdoor learning research websites⁵⁶

Education Scotland outdoor learning research section.

<http://twurl.nl/uwhcon>

Centre for Confidence and Well-being learning and playing outdoors section, which includes a research section and suggested activities.

<http://twurl.nl/1ujlpp>

Children and Nature Network. Excellent summaries of international research concerning the impact of nature on children.

www.childrenandnature.org

EEResearch. Communicating environmental education research to educators.

<http://eelinked.naaee.net/n/eeresearch>

Grounds for Learning has a research section on its website that contains lots of school grounds data and publications.

<http://twurl.nl/rpg7cc>

The Institute for Outdoor Learning has a literature review 'What is outdoor learning?' by Dr Roger Greenaway, providing an adventure-based perspective.

<http://www.outdoor-learning.org/Default.aspx?tabid=207>

Education Scotland outdoor learning website has a specific research section.

<http://twurl.nl/uwhcon>

Learning Outside the Classroom.

www.lotc.org.uk

Outdoor Education Research and Evaluation Centre has relevant US-based research.

www.wilderdom.com/research.php

Scottish Natural Heritage has research and commissioned reports that can be accessed or bought.

<http://www.snh.gov.uk/publications-data-and-research/research>

56 Adapted from Creative STAR blog <http://creativestarlarning.blogspot.com/p/outdoor-learning-research-websites.html>
Accessed 13.3.11.

University of Edinburgh, Outdoor Education research page. Offers an overview of much of the Scottish research.

<http://www.education.ed.ac.uk/outdoored/resources.html>

Organisations offering award-bearing courses

Amazing Things 2 is a guide to youth awards in Scotland and is a good starting point for considering structured educational packages and awards:

http://www.awardsnetwork.org/pdfs/Amazing_Things_2.pdf

John Muir Award

www.jmt.org/jmaward-home.asp

Eco-Schools Scotland

www.ecoschoolsscotland.org

Duke of Edinburgh's Award

www.dofe.org

ASDAN

www.asdan.org.uk

The Young Explorers' Trust

www.theyet.org

Forest Schools

www.foresteducation.org/woodland_learning/forest_schools

Curriculum links

Expressive arts

Andy Goldsworthy is well known for his environmental artwork.

Google his name for images or visit www.goldsworthy.cc.gla.ac.uk.

Richard Schilling is a land artist who has published some books for children on the subject of land art.

<http://richardshilling.co.uk>

Mantle of the Expert is a drama-based approach to developing the curriculum that works very well outdoors as well as indoors.

www.mantleoftheexpert.com

Health and wellbeing

TOPPS Outdoors pack. This has recently been revamped and extended. It includes ideas for traversing walls, developing orienteering and team challenges within the school grounds.

<http://www.trailo.org/top/topoutdoors.htm>

Many Scottish schools and Active Schools coordinators are now also using the Outdoor Learning Cards, designed to support activities in the school grounds based around Team Building, Bouldering, Journeying and Orienteering – read about them in the TES:

<http://www.tes.co.uk/teaching-resource/Outdoor-Learning-Adventurous-activities-6016734>

Literacy and English

Alec Finlay is a visual artist, poet and publisher with an interest in the use of words and landscape. His websites take some exploration. Have a look at www.alecfinlay.com and www.alecfinlay.com/yai/index.html

Little Sparta is the internationally acclaimed garden of Ian Hamilton Finlay. It integrates text and landscape with many powerful images and metaphors.

www.littlesparta.co.uk

Numeracy and mathematics

The National Centre for Excellence in the Teaching of Mathematics has website pages dedicated to outdoor maths activities.

<https://www.ncetm.org.uk/resources/9268>

Outdoor Maths is a small site but useful nevertheless.

www.outdoormaths.com

Religious and moral education

Sacred Space – An outdoor RME website. This website gives some inspiring and real examples of the compelling learning experiences that have taken place within the UK.

www.refuel.org.uk/sacred-space

REEP is a registered charity that provides unusual and thought-provoking resources for teachers and learners, promoting the links between religions and the environment.

www.reep.org/index.php

Buddhism and Gardens website.

www.reep.org/gardens/buddhism

Religious heritage trails. Advice about how to create one in your local area for schools to use on foot.

www.retrails.org.uk

The Tree of Life is an online resource that can be used as a stimulus for a woodland walk and reflective work on trees within the Christian tradition.

www.reep.org/resources/easter/2008/index.php

Try a Metasaga with a religious theme.

<http://metasaga.wikispaces.com>

Sciences

Association of Science Education.

www.asescotland.org.uk

Biodiversity Stories is a collection of Scottish stories relating to the natural heritage and biodiversity – species and habitats.

www.biodiversitystories.co.uk

The Field Studies Council. Buy laminated field guides from this website. There's even one for school playing fields!

www.field-studies-council.org

The Scottish Earth Science Education Forum has a free downloadable Earth Science Outdoors pack for primary schools and several for secondary schools.

www.sesef.org.uk

Biodiversities activity pack created by Scottish Natural Heritage for schools.

<http://twurl.nl/4yc18c>

Social subjects

Royal Highland Educational Trust (RHET). The Scottish farming education charity. Contact is essential should you wish to visit a local farm.

www.rhet.org.uk

Mission: Explore is London based but missions can be done anywhere. Founded by the Geography Collective.

www.missionexplore.co.uk/about

Outdoor Journeys. This approach can be used in many contexts for exploring local areas and using the children's interests as a starting point.

www.outdoorjourneys.org.uk/Outdoor_Journeys_2/Welcome.html

Rephotographing is a website that enables comparisons to be made between new and archived images to chart changing landscapes.

www.bbc.co.uk/scotland/landscapes

Technologies

Growing Schools is a website designed to support schools in England and Wales in getting children outside and beyond their school grounds. Lots of useful resources for all ages with a food and gardening focus.

www.growingschools.org.uk

This is an interesting website about mediascapes.

www.createascape.org.uk

Developing school grounds

Grounds for Learning (GfL), the Scottish school grounds charity, has comprehensive information, research documents and case studies that can provide ideas and suggestions. At a national level, GfL's membership service offers unlimited access to individual advice and support by phone or email, bimonthly mailings full of inspiration and online access to a comprehensive library of resources.

<http://www.ltl.org.uk/scotland/index.php>

The British Trust for Conservation Volunteers provides practical advice and support for developing school grounds.

www2.btcv.org.uk

The Permaculture Association is the national charity that supports people to learn about and use permaculture.

www.permaculture.org.uk

Britain in Bloom is a competition that supports the development of community gardening initiatives.

www.rhs.org.uk/Gardening/Community-gardening/Britain-in-Bloom

Allotments UK provides advice about managing and getting the best from allotments.

www.allotments-uk.com

Health and safety

If your school does not have information covering outdoor learning in its health and safety policy then the next place to check is your local authority health and safety team. Your head of establishment should be able to give advice on how to contact them. If you are undertaking adventurous activities follow guidance issued by the outdoor education team or department where this exists.

The Scottish Advisory Panel for Outdoor Education (SAPOE) is a panel of local authority outdoor education staff and advisors. If you do not know who your local authority advisor is then ask your head of establishment, a member of the local authority staff or have a look at the SAPOE website.

<http://www.sapoe.org.uk/>

If you still need further advice, try the Education Scotland outdoor learning website, which has a health and safety section.

www.LTScotland.org.uk/outdoorlearning/index.asp.

Other health and safety websites and information

Sensible risk management. A useful section of the HSE website that aims to reduce paperwork.

www.hse.gov.uk/risk/principles.htm

'Potentially Harmful Garden Plants' – Royal Horticultural Society, 2004

http://www.rhs.org.uk/Gardening/Sustainable-gardening/pdfs/c_and_e_harmful

'Health and safety Overview' – BTCV, 2003. Available to download free or order from handbooks.

<http://shop.btcv.org.uk/shop/level2/60/stock/962>

The Royal Society for the Prevention of Accidents has an excellent website with sensible and straightforward advice.

www.rosipa.com

'Managing risk in play provision – an implementation guide' from Play England, 2008.

A comprehensive guide to considering benefits as well as risks.

<http://www.playengland.org.uk/resources/managing-risk-in-play-provision-implementation-guide.aspx>

Organisations that support early years outdoor play

Children in Scotland. This national agency provides training and publications about nature kindergartens and other aspects of outdoor play within Scotland and Europe.

www.childreninscotland.org.uk

Mindstretchers. An early years education consultancy based in Scotland providing a comprehensive service covering all aspects of outdoor play.

www.mindstretchers.co.uk

Grounds for Learning. The Scottish school grounds charity that provides support and training on improving outdoor play and the design of play spaces. There are lots of free resources available on the website.

www.ltl.org.uk/scotland/index.php

Creative STAR Learning Company. A social enterprise providing support, training, advice and resources about outdoor learning and play. The blog has many early years posts about outdoor play.

www.creativestarning.co.uk

Play organisations

Play Scotland is the national organisation and a useful starting point for further information.

www.playscotland.org

The Inspiring Scotland Go Play fund has a portfolio of organisations who are involved in delivering free play which schools and centres may find it helpful to know about.

www.inspiringscotland.org.uk/Home/Go-Play

Play on Wheels is trialling a 'Play in a Pod' system for primary schools to enable free play to happen.

www.playonwheels.org.uk

Education Scotland accepts no responsibility for the quality of the goods or services provided by the companies or websites listed in this document. We do not endorse other organisations.

Appendix 2: Myth busting

The relationship between outdoor learning, adventure activities, environmental education and place-based learning

Outdoor learning encompasses the entire range of learning experiences undertaken outside.

Outdoor education or pursuits traditionally include adventurous activities such as canoeing, rock climbing, skiing, etc. These activities form a small but important part of the spectrum of outdoor activities.

Place-based education actively engages learners experientially 'in', 'about', 'for' and 'through' the places where they live, encouraging creative ways of participation. This approach deepens learners' relationship to their communities. It provides opportunities to learn in real-world situations and link local issues with global ones.

Environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations and commitments to make informed decisions and take responsible action (UNESCO, Tbilisi Declaration, 1978).⁵⁷

Forest schools and woods for learning

To organise a visit to a woodland or to create and run an outdoor project based in a wood does not require a Forest School qualification. There are many examples of excellent outdoor learning taking place in woodlands. The term 'woods for learning' is used for any activity, regardless of approach or number of sessions, that is led by a practitioner during school hours. For ideas visit the Woodland Learning website.

www.foresteducation.org/woodland_learning

Forest School is a specific pedagogical approach to using woodland as a place for learning and play. It was developed in the mid-nineties within the UK, based on practice observed in Denmark.

It has been defined as 'an inspirational process that offers children, young people and adults regular opportunities to achieve and develop confidence through hands-on learning in a woodland environment'.⁵⁸

The approach is flexible. Generally children visit the same woodland site for a block of weekly or fortnightly sessions during a term or throughout the year, allowing children to experience all weathers and the changing seasons. The activities are usually child-led.

57 <http://unesdoc.unesco.org/images/0003/000327/032763eo.pdf> Accessed 26.4.11.

58 O'Brien, L, and Murray, R (2008), Forest School: A Marvellous Opportunity to Learn Research Summary, Farnham: Forest Research.
[http://www.forestresearch.gov.uk/pdf/SERG_Forest_School_research_summary.pdf/\\$FILE/SERG_Forest_School_research_summary.pdf](http://www.forestresearch.gov.uk/pdf/SERG_Forest_School_research_summary.pdf/$FILE/SERG_Forest_School_research_summary.pdf)

To create and run Forest School sessions, a practitioner must obtain a Level 3 OCN Forest School qualification from a recognised training company. Without a qualified Forest School leader in attendance, a session or project is not regarded as 'Forest School'. Levels 1 and 2 are qualifications to allow people to support but not run a Forest School session.

Health and safety and risk assessments

Risk assessments enable an activity to be undertaken as safely as necessary. The process is a practical aspect of planning an outdoor activity and can involve children and young people of all ages as well as other staff. It is worthwhile considering the benefits of activities and creating risk–benefit assessments, which is a more balanced approach to the process.

Practitioners need to refer to local authority guidance. There is extensive information on the outdoor learning pages on the Education Scotland website to further information. Risk assessments are required under a range of legislation to ensure that risks are identified and suitable measures are in place to reduce and manage them.

'Childhood is a time for learning and exploring, and wrapping children in cotton wool, or minimising all risks, however small, for fear of litigation, is having a negative impact on children's play opportunities and their more general freedom to explore and encounter the world, appropriate to their age.'

Staying Safe (2008), Department for Children Schools and Families

Costs

Concern about the costs of outdoor learning provision is one of the main reasons cited by practitioners for not taking children outside. A misconception exists that outdoor learning is about taking children on residential trips, international expeditions or day trips that require transport.

If a school or practitioner ensures that most outdoor learning takes place in the school grounds or within walking distance of the school, then costs are significantly reduced, if not removed entirely. Breadth and depth of learning experiences can be undertaken anywhere, regardless of distance from school. This is a sustainable approach that allows frequent and regular visits all year round.

Always follow your local authority's financial compliance policy if you do have to budget and manage money to enable an excursion to happen. Always plan for a contingency fund for unexpected situations. Decide in advance how you will manage any spending money that your group has.