

Evidence supporting the benefits of learning outside the classroom

Index:

1. [Education, Wellbeing, Health & Environment](#)
2. [Education and Culture](#)
3. [Inclusion, alienation, social deprivation, youth crime, social mobility](#)
4. [School Grounds](#)
5. [Other reports, surveys, books and journals](#)

Education, Wellbeing, Health and Environment

1. Natural England (2010) [Great Outdoors: How our natural health service can use green space to improve wellbeing](#)
This paper argues that green space can play an important part in tackling a range of health and social problems - obesity, cardiovascular disease, mental ill-health, anti-social behaviour and health inequalities..
2. De Vries, S.(2001) "Nature And Health; The Importance Of Green Space In The Urban Living Environment"
3. Henwood K, (Feb 2001), [Exploring linkages between the environment and health: is there a role for environmental and countryside agencies in promoting benefits to health?](#)
This report responds to increasing interest in the 'health benefits' of natural surroundings and the extent to which they contribute to the provision of public goods and services.
4. Peacock A, (Feb 2006) [Changing Minds, the lasting impacts of school trips,](#)
A study of the long-term impact of sustained relationships between schools and the National Trust via the Guardianship scheme
5. Malone, K. (2008) [Every Experience Matters: An evidence based research report on the role of learning outside the classroom for children's whole development from birth to eighteen years,](#) Report commissioned by Farming and Countryside Education for UK Department Children, School and Families, Wollongong, Australia
The report draws on research from around the world and provides evidence that children engaged in LOtC achieve higher scores in class tests, have greater levels of physical fitness and motor skills development, increased confidence, self esteem, show leadership qualities, are socially competent and more environmentally responsible.
6. Barrett J. and Greenaway R. Dr, (1995) [Why Adventure?](#) The Role and Value of Outdoor Adventure in Young People's Personal and Social Development: A Review of Research, The Foundation for Outdoor Adventure*.
Literature review: Its scope covering youth and community work, education, youth social work and youth training, both in the UK and abroad.
 - What is the value to young people of adventure activities?
 - Can such activities contribute to young people's development?
 - What constitutes an effective outdoor adventure?
 - How might the quality of young people's experiences be improved?
 - What are the tools for effective evaluation?

*Research now out of print - Reprint is due through the Institute of Outdoor Learning.

7. Countryside Alliance Foundation, [Outdoor education: the countryside as a classroom](#), (2010)
Research showing the considerable health and well-being benefits of spending time in natural green spaces is growing
8. Rickinson M. et al. FSC (2004), [A Review of Research on Outdoor Learning](#) (UK)
Literature review of 150 studies in the period 1993-2003.
9. Philliber Research Associates, et. al. (2005) [Youth Development Outcomes of the Camp Experience](#) (USA)
Major study involving over 5000 families from 80 youth camps..
Report found significant growth in young people's
 - Self-esteem
 - Peer relationships
 - Independence
 - Adventure and exploration
 - Leadership
 - Environmental awareness
 - Friendship skills
 - Values and decisions
 - Social comfort
 - Spirituality
10. Morris N, (2003) [Health, Well-Being and Open Space](#), OPENspace Research Centre, Edinburgh College of Art.
Literature Review about the benefits of being outdoors.
11. Hattie, J. et al (1997) '[Adventure education and Outward Bound: out-of-class experiences that make a lasting difference](#)' [Review of Educational Research](#)
Examines the effects of adventure programmes on young people's self concept and awareness, leadership skills, etc.
12. Ward Thompson C., Travlou P. & Roe J., [Free range teenagers: The role of wild adventure space in young people's lives](#),
Undertaken on behalf of Natural England (formerly English Nature and parts of the Countryside Agency and Rural Development Service) to investigate how the "wild adventure space" can play an important role in meeting the developmental needs of young people (12-18yrs) across England. Evidence supports social development, physical health, educational development, community development etc.
13. Rees G. et al., [Understanding Children's Wellbeing: a national survey of young people's well being](#), Children's Society
Research trying to determine what factors have the greatest impact on a child's well-being. It looks at the components of well-being as: relationships; environments; self; freedom, choice and safety. "Young people who described themselves as having difficulties with learning were less happy with all aspects of their lives"
14. Lester, S. & Maudsley, M., (2006) [Play, naturally: A review of children's natural play](#), Children's Play Council
Reviews the substantial evidence that supports the wide-ranging values and benefits arising from children's play in natural settings.
15. Muñoz, S-A. (2009) [Children in the outdoors: a literature review](#)

This literature review examines existing research on health and the outdoors - highlighting the key ways in which researchers have, thus far, examined the links and reported causality and effects.

16. Gleave J, (2008) [Play Day, Give us a go! - Risk and Play, a literature review](#); Play England
A study commissioned for Playday, shows that 51 per cent of children aged seven to 12 years are not allowed to climb a tree without adult supervision. It also showed that children's experiences of adventure are now confined to designated areas such as playgrounds, their homes or theme parks. Play Scotland, the body which works to promote the importance of play for all youngsters in Scotland, responded to the research by backing the call for a re-think of the risk-averse culture when it comes to children's' play.
17. Statistics on Obesity, Physical Activity and Diet: England, The Information Centre, January 2008
A statistical bulletin which presents a range of information on obesity, physical activity and diet, drawn together from a variety of sources. It shows how obesity and inactivity in young people is on the rise.
18. Passey, R., Morris, M. and Reed, F. (2010). [Impact of School Gardening on Learning: Final Report submitted to the Royal Horticultural Society](#). London: RHS,
Shows how the use of gardens as a natural sustainable resource can support schools in addressing the curricular, social and emotional development of young people. Findings show improved literacy and numeracy, greater scientific knowledge, positive attitudes to healthy eating
19. Pretty J, Angus C, Bain M, Barton J, Gladwell V, Hine R, Pilgrim S, Sandercock S and Sellens M. 2009. [Nature, Childhood, Health and Life Pathways](#). Interdisciplinary Centre for Environment and Society Occasional Paper 2009-02. University of Essex, UK.
Looks at activity in green places (in the presence of nature) has positive health outcomes and promotes ecological knowledge, enhances social bonds and influences behavioural choices. Recommends children should be given opportunities to learn in outdoor settings.
20. [England Biodiversity Strategy group on Education and Public Understanding](#)
The Vision: A society in which people recognise, value and take action to maintain and enhance biodiversity as part of their everyday lives – in the same way that they might address health issues, the community in which they live, or their economic circumstances.
21. BTCV, [Inspiring People, improving places](#): the positive impact and behavioural change achieve through environmental volunteering.
Although this focuses on volunteering there is a link with learning outside the classroom and shows being outdoors has a direct impact on young people and societal targets including social cohesion, health, mental well being etc. 'Nine out of 10 young volunteers said they learnt something new'. The report also Looks at social return on investment.
22. Environmental Socialization: Quantitative Tests of the Childhood Play Hypothesis. Environment and Behaviour 34:795-818.
Two studies with adolescent youth (N = 1,376, N = 450) help clarify the relationship between childhood play experiences in wild environments and later environmental preferences in the life domains of work, leisure, and school. Respondents reporting having played in wild environments had more positive perceptions of natural environments, outdoor recreation activities, and future indoor/outdoor occupational environments. No significant differences were found for preferences for

environmental sciences activities conducted in schools. Results suggest that childhood play in wildland environments is related to environmental competencies and preferences but not necessarily an intellectual interest in environmental sciences or environmentalism.

Full text not available online without subscription

23. Parsons, G. (2007) [Heading Out - Exploring the impact of outdoor experiences on foundation stage children](#), Learning through Landscapes.
Explores the impact of outdoor opportunities upon the development of foundation stage (3-5 year old) children and in particular the provision provided by early years settings. It includes the findings from published research and the impact of positive intervention at two case study early years settings.
24. Amos R. Reiss M, (2009) [London Challenge Residential Initiative Main Phase Evaluation 2005-2008](#), Field Studies Council
An evaluation of the 2005-2008 London Challenge Residential Experience offered to all schools in 33 London boroughs. Schools were given the opportunity to take groups of Key Stage 3 students on a fully or partly funded residential course at a designated rural field study centre.
25. Bell, A. Dymont, J. (2006) [Grounds for action: promoting physical activity through school ground greening in Canada](#), Evergreen
Examines the ways that greening initiatives can promote physical activity in schools.
26. Natural England (2009) [Childhood and nature: a survey on changing relationships with nature across generations](#)
27. Bird, W. (2007) [Natural thinking: investigating the links between the natural environment, biodiversity and mental health](#).
This report, commissioned by the RSPB, looks at the evidence linking wildlife-rich areas and green space with mental health. Past generations have intuitively understood this relationship, perhaps better than we do, yet the evidence needed to quantify the health value of the natural environment is still evolving.
28. Newton, J. (2007) [Wellbeing and the natural environment: a brief overview of the evidence](#), DEFRA.
Explores the link between well-being and the natural environment
29. Countryside Recreation Network (2005) [A Countryside for Health and Wellbeing: The Physical and Mental Health Benefits of Green Exercise](#)
Research exploring the how physical activity and nature can affect wellbeing with evidence indicating that nature can contribute to health and reduce stress.
30. RSPB (2010) [Every Child Outdoors](#).
RSPB's new research report into the crucial relationship between children and nature – The report draws together findings from the wide range of existing research into the positive impacts contact with nature has for children, as well as the environment. These include the educational benefits, contributions to physical health and mental wellbeing, as well as development of personal and social skills. It also explores some of the consequences of the reduction of such experiences and the increasingly used term of Nature Deficit Disorder to describe the phenomenon.
31. Sustainable Development Commission (2010), [Improving Young People's Lives: The role of the environment in building resilience, responsibility and employment chances](#)

This report proposes a green thread through policy and practice, where the impact of the environment is considered alongside social and economic factors – the building blocks of sustainable development. To date, this has been the missing element in most policy making for young people, and is only sporadically evident in local delivery. It demonstrates how taking this broader approach can improve outcomes for young people, whilst supporting the Government's aims for a Big Society and being the 'greenest Government ever'.

32. Hougie P. (2010) [Can family outdoor and countryside recreation help reconnect children with the outdoors?](#) Affluent middle childhood perspectives of countryside recreation in the United Kingdom. *Journal of Outdoor Recreation, Education and Leadership*. Vol 2, No 2, pp. 217-244
This study explores whether countryside recreation has a role in reconnecting children with the outdoor environments.

Education & Culture [\[back to top\]](#)

1. Watson, S, Dodd, J. and Jones, C. (2007) [Engage, Learn, Achieve: The impact of Museum visits on the attainment of secondary pupils in the East of England 2006-2007](#), Renaissance East of England/RCMG
Research investigating the impact on attainment of secondary-age pupils completing a piece of assessed work as a result of a museum visit.
2. Hooper-Greenhill, E. (2007) [Museums and Education: Purpose, Pedagogy, Performance](#) London: Routledge.
3. [Changing behaviour](#): In 2009 Engaging Places commissioned a survey of almost 2,000 11-14 year olds throughout England Research aimed to see whether young people thought that learning about the buildings and places around them had an impact on how they and their peers behaved.
4. Hooper-Greenhill, Dodd, J, E., Creaser, C., Sandell, R., Jones, C. and Woodham, A., 2007 [Inspiration, Identity, Learning: The Value of Museums, Second Study](#). An evaluation of the DCMS/DCSF National/Regional Museum Partnership Programme, DCMS/RCMG,
Research to explore the impact of learning for schools and community groups across 12 projects. A large amount of evidence was collated. Contact with 29,701 school pupils and 503 teacher questionnaires were completed. The twelve projects worked towards social inclusion and community cohesion.
5. Hooper-Greenhill, Dodd, J, Philips, M. Gibson, L. & Jones, C. 2006 [What did you Learn at the Museum Today Second Study](#). An evaluation of the outcomes of learning through the implementation of the education program delivery plan across nine regional hubs (2005) MLA/RCMG
A report on the evaluation of the outcome and impact of learning as a result of the Education Programme Delivery Plans in 69 museums. 19% of the school visits in the study came from Super Output Areas (SOAs) classified as being amongst the 10% most deprived in England; 32 % of visits were made by schools located in 20% most deprived SOAs.
6. Hooper- Greenhill, E., Dodd, J., Moussouri, T., Jones, C., Pickford, C., Herman, C., Morrison, Vincent, J. & Toon, R. (2003) [Measuring the Outcomes and Impact of Learning in Museums Archives and Libraries](#). The Learning Impact Research Project End of Project Paper
7. Hooper Greenhill, E. Dodd, J., O'Riain, H., Selfridge, L., Clarke, A., Swift, F. (2002) [Learning Through Culture- The DfES Museum and Galleries Education Programme](#): a guide to good practice. DfES London.

8. Ofsted (2008), [Learning outside the classroom - how far should you go?](#)
At a time when the government is actively promoting learning outside the classroom, this report evaluates the importance of such learning in primary and secondary schools and colleges.
9. Aked, J. Marks, N. Cordon, C. Thompson, S (2008) [Five ways to well-being: the evidence](#), New Economics Foundation.
A report presented to the Foresight Project communication the evidence base for improving people's well-being. "physical activity protects against cognitive decline in later life and against the onset of depressive symptoms and anxiety.
10. The Countryside Agency (2003) [Capturing richness](#)
11. Higgins, P., Nicol, R. and Ross, H. (2006). [Teachers' approaches and attitudes to engaging with the natural heritage through the curriculum](#). Scottish Natural Heritage Commissioned Report No. 161 (ROAME No. F04AB04).
This report, from Scottish Natural Heritage, examines the educational drivers which encourage teaching about the natural heritage outdoors; the factors to which teachers have responded when they made a decision to use the outdoors as a teaching aid; and the barriers which have prevented them from doing so.
12. DeWitt, J. and Hohenstein, J. (2010), [School Trips and Classroom Lessons: An investigation into Teacher-Student Talk in Two Settings](#), Journal of Research in Science Teaching, 47: 454–473. doi: 10.1002/tea.20346
The museum setting affords many experiences not available in a classroom—does it also afford different types of discourse? Transcripts from one secondary and three primary school classes provide evidence of the extent to which teachers' talk conformed to a triadic pattern, with discourse during the pre- and post-visit lessons more closely adhering to this pattern than that during the visit. However, a closer look at teacher–student discourse revealed further complexities, including greater use of open-ended questions during triadic than during non-triadic discourse. Overall, the findings from this research indicate that museum visits may enable pupils to assert more authority temporarily and provide insight into processes by which such experiences may contribute to learning
13. Sharp C. *et.al* (2008) [The longer-term impact of Creative Partnerships on the attainment of young people: Results from 2005 and 2006](#). Commissioned by the Arts Council England.
A study to investigate the longer term impact of the Creative Partnerships programme using attainment data for 2005 and 2006.

Inclusion, alienation, social deprivation, youth crime, social mobility [\[back to top\]](#)

1. Sutton Trust (2010) [The Mobility Manifesto](#), A report on cost-effective ways to achieve greater social mobility through education.
The report assesses the relative cost benefit of a number of the Trust's existing projects. Improving levels of social mobility for future generations in the UK would boost the economy by up to £140 billion a year by 2050 in today's prices – or an additional 4% of Gross Domestic Product (GDP) over and above any other growth. The Manifesto notes that summer camps that mix learning with fun: "have shown substantial improvements in participants' reading scores ... which disproportionately impacts on those from lower socio-economic groups"

2. Nunn, A. Johnson, S. Monron S. Bickerstaffe, T. & Kelsey, S. (2007) [Factors influencing social mobility – a literature review](#). Department for Work and Pensions, Leeds
 ‘Education appears to be on of the most important factors influencing social mobility.’ Improvements in the education system/offer hasn’t improved social mobility. The report suggests this is due to the more well-off being able to capitalise on the educational offer.
3. Mannion G.(2003) [Children's participation in school grounds developments: creating a place for education that promotes children's social inclusion](#), International Journal of Inclusive Education
 You need to be a subscriber to download this paper
4. Sodha, S. Guglielmi, S. (2009) [A stitch in time: tackling educational disengagement](#), DEMOS
 Outdoor education teachers and adventure therapists have argued that a systematic approach to experiential learning through challenge can develop participants trust, social competence and group cohesion. Thereby, facilitating a real engagement with school and family. This study supports this claim, demonstrating significant gains in social competence for 22 Year 8 students participating in the three stage Adventure Based Learning Experience (ABLE) program as compared to the control groups.
5. [Danby Outdoors Able Project \(2006\)](#): The Effect of Adventure Based Learning on social competence, group cohesion and emotional regulation

A research project studying the effect Adventure Based Learning, delivered within a social constructivist framework by an Outdoor Educational Centre, has on the social emotional learning of Key Stage 3 students attending a state comprehensive secondary school in England. This paper found a 14% increase in self-esteem over an 8 week period against a control group with no Adventure Based learning intervention. This paper has been peer-assessed and is an independent finding by an academic.
6. Gaseley L. Dunne M., (2005) [Addressing Working Class Underachievement](#), Commissioned by Multiverse
 Research exploring ways in which working class underachievement is addressed in schools and in Initial Teacher Education.

School Grounds [\[back to top\]](#)

1. [School Grounds of the Future - DfES & LTL](#)
 Evaluation of the 3year programme demonstrating how school grounds can be managed to benefit children's learning and development, and provide an asset for the whole community, through the use of devolved capital.
2. O'Brien, L. Murray R. (2006) [A marvellous opportunity for children to learn: a participatory evaluation of Forest School in England and Wales](#). Forest Research
3. Chillman, B. [Do school grounds have a value as an educational resource in the secondary sector?](#) Sussex University and LTL
 Review of research relevant to secondary school grounds development.
4. Learning through Landscapes (2005), Early Childhood Education Outdoor Play Survey
5. Dyment, J. (2005) [Gaining Ground, The Power and Potential of School Ground Greening in the Toronto District School Board](#)
 Identifies benefits of hands-on outdoor learning on student engagement, achievement, behaviour, health, safety and environmental awareness. It argues for greater institutional support of green school grounds.

6. Sanders D. White, G. Burge, B. Sharp, C. (2005) The transition from Foundation Stage to Key Stage 1. National Foundation for Education Research (on behalf of Sure Start)
Comparison of children's experiences and expectations whilst in the Foundation Stage and Year One. "The amount of time children in Year 1 spend sitting still and listening to the teacher should be reduced. Year 1 teachers should be encouraged to increase opportunities for active and independent learning and learning through play"
7. McKendrick, J. (2005) [School Grounds in Scotland research report](#), The Scottish Poverty Information Unit
The first national survey of state sector school grounds in Scotland sought evidence on the current attitudes toward and use of school grounds to inform national debate on how to target resources more effectively, support new initiatives and establish best practice in Scottish education.
8. Nicol, R. et. al (2007) [Outdoor education in Scotland: a summary of recent research](#)
This report is the culmination of an extensive research programme on outdoor learning in Scotland supported by SNH and LTS to provide the background to allow key government agencies and their partners to stimulate appropriate outdoor learning development.

Other reports, surveys, books and journals [\[back to top\]](#)

1. Gill, T. (2010) [Nothing ventured - balancing risks and benefits in the outdoors](#), English Outdoor Council.
2. Cambridge Primary Review (2008) [Learning and teaching in primary schools: insights from TLRP](#)
3. Alexander, R. et. al. (2009) [The Cambridge Primary Review Research Surveys](#), Routledge
The outcome of the Cambridge Primary Review – England's biggest enquiry into primary education for over forty years. Fully independent of government, it was launched in 2006 to investigate the condition and future of primary education at a time of change and uncertainty and after two decades of almost uninterrupted reform. Ranging over ten broad themes and drawing on a vast array of evidence, the Review published thirty-one interim reports, including twenty- eight surveys of published research, provoking media headlines and public debate, before presenting its final report and recommendations.
4. QCDA (2010) [The aims of the curriculum](#)
5. New Economics Foundation (2009) [National accounts of well-being: bringing real wealth onto the balance sheet](#)
6. New Philanthropy Capital (2009) [Getting back on track](#)
7. DCSF (2005) [Residential opportunities available for young people through schools](#)
This research maps out the nature of residential opportunities available for young people aged 7 to 16 while at school. The survey was drawn from 100 schools from each of the nine government regions in England and Wales, making a total of 900 contributing schools
8. DCSF (2009) [Attitudinal barriers to engaging young people in positive activities: literature and communications review](#)

9. Risk and Regulation Advisory Council (2009) [Response with responsibility: policy-making for public risk in the 21st century](#)
10. Furedi, F. (2002) Culture of fear: risk-taking and the morality of low expectations, Continuum International Publishing Group; 2 Revised edition (May 2002)
Frank Furedi argues that the greater danger in our culture is the tendency to fear achievements representing a more constructive side of humanity.
11. Power S. et al (2009) [‘Out of school learning: variations in provision and participation in secondary schools’ Research Papers in Education](#) 24(4): 439-460
There is overwhelming evidence of the benefits of out-of-school learning. It is likely to be particularly important for disadvantaged students who have fewer material and cultural resources in the home to supplement their classroom work. However, despite the research evidence and political moves to promote out-of-school learning, it would appear that the provision of such activities is increasingly threatened by resource constraints, regulation and risk aversion. The research reported here set out to investigate how schools experience these and other difficulties and how they differentially affect the provision of and participation in out-of-school learning activities.
12. DCSF (2007) [Early years foundation stage: effective practice: outdoor learning](#)
13. House of Commons Children, Schools and Families Committee (2010) [Transforming education outside the classroom](#)