

Impact of Outdoor Learning in the UK: protocol for a systematic map of existing evidence

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Background

Outdoor Learning spans a multitude of activities designed for different purposes with different groups of people. Its growth reflects widely held appreciation of the outdoors and expectations that it is beneficial for learning, development and therapy. What is known from research about outdoor learning has been collated in reviews of existing literature in the areas of: children's experiences with nature;¹ creative learning environments, including outside the classroom;² school and university students learning outside the classroom;³ physical activity;⁴ and forest schools.⁵ These reviews found relatively few rigorous evaluations of impact; they do not cover the whole of outdoor learning and are unlikely to have captured much of the unpublished evaluations conducted by outdoor learning organisations for their own use.

The Blagrove Trust and the Institute for Outdoor Learning have recognised this lack of consolidated evidence to attest to the claims made for the effectiveness of outdoor learning and commissioned this project.

Aims

The aim of the Blagrove Trust and the Institute for Outdoor Learning was to commission work that provides:

1. An overview of the different options available to those considering using outdoor learning to meet an educational, developmental or therapeutic need for children and young people in order to support a more coherent sense of the outdoor learning sector as a whole and the different outcomes that it seeks to achieve;
2. Improved understanding of existing research and evidence based practice in the UK.

Research questions

We translated these aims into the following research questions:

1. What is the nature of the existing research that addresses outdoor learning that aims to meet children and young people's educational, developmental or therapeutic needs?
2. To what extent does the existing research match current practice in the UK?

Methods

Involving the outdoor learning sector

The Blagrove Trust and The Outdoor Learning Institute have convened an Advisory Group for this review with members from across the outdoor learning sector. An initial meeting of this group will discuss the scope of the review, the key issues to be considered when reviewing studies, and where relevant studies might be found. A second meeting will discuss the findings emerging from the analysis and the implications for the outdoor learning sector. A third meeting will refine the draft report prior to publication.

Eligible studies

This work will build on an earlier systematic review in which outdoor learning was defined as ‘learning that accrues or is derived from activities undertaken in outdoor locations beyond the school classroom’.³ The definition will be applied broadly to include learning that is accrued from either systematic teaching, or from enlightening experiences.

We shall include studies in this review that include:

- children and young people, aged 5 – 25 who are participants or volunteer helpers;
- outdoor learning in the education sector, or the health sector; and
- assessments of educational attainment, other learning or development,

Such studies must be:

- systematic reviews of outdoor learning research or
- primary studies including any of the following designs:
 - Detailed descriptions
 - Before and after studies
 - Controlled trials
 - Reporting the delivery or receipt of programmes
 - Surveys of practice
 - Methods studies, particularly of outcome measures
- published 2003 or later

Primary studies will be limited to children and young people normally living in the UK (including studies addressing foreign trips or sailing trips).

Identifying studies

We shall seek studies through two routes: searching bibliographic databases that record predominantly academic studies; and crowdsourcing studies from organisations active in the sector.

The first route involves choosing key words likely to describe relevant studies and combining them in a string to search databases electronically. Two sets of key words will describe (a) children and young people; and (b) outdoor learning. By combining the key words they will identify studies that address outdoor learning with children and young people. We shall search databases that compile research in the areas of education, psychology and other social sciences . More details are in Appendix 1.

The second route involves circulating a request for studies through outdoor learning networks across the UK.

Studies will be checked against the inclusion criteria. Initially, two researchers will check studies and compare their decisions. They will discuss any discrepancies and, if necessary, amend the criteria or definitions of terms. Once they agree on 95% of the studies, they will continue independently. If they are uncertain about any studies they will discuss them before making a final decision.

Records of studies will be managed with software designed for systematic reviewing to maximize efficiency and accuracy when identifying and analyzing studies.⁶

Describing studies

Studies included in the review will be described in the following terms.

Populations:

- **Children and young people**, age 5-25. This includes the general population as well as specific groups such as those: disengaged from learning; not in education, employment or training; volunteer helpers with outdoor learning programmes; with physical or intellectual disabilities; with experience of trauma; or with other special needs.
- **Parents, families, carers, teachers, group leaders or other adults** in the lives of these children and young people.

Interventions:

- **In the education sector**, such as: field studies; expeditions; one-off adventure activities; frequent adventure activities (e.g., scouts, guides, rambles); nature visits; forest/beach schools; bushcraft; outdoor nursery; other outdoor learner-centred activities.
- **In the health sector, therapy** such as: prescribed outdoor activity; group/family adventure based therapy; one-to-one therapy outdoors; other outdoor therapy.

Primary outcomes:

- **Educational attainment**, such as: school assessments (e.g., key stages 1-5/ AS/A level); further education; national or vocational qualifications; undergraduate degree; post graduate degree; other educational attainment.
- **Other learning and development**, such as: curiosity; relationship with nature; self-awareness; self-responsibility; communication or teamwork; health and well-being; healthy lifestyles; employability; youth leadership; community integration; community leadership; or other learning and development.

Secondary outcomes, only considered in the presence of primary outcomes:

- **Health**, such as: healthy behaviour; health (physical or mental); rehabilitation.

Appendix 2 includes a coding scheme to describe the studies consistently.

Appraising the quality of studies

Some outdoor learning research has already been described and quality assessed systematically. We shall summarise such systematic reviews in terms of their scope and quality, the focus of their included studies, and the findings or conclusions reported by the authors. Appendix 3 includes a coding scheme to summarise systematic reviews consistently.

Other included studies will be described in terms of their ability to add to our knowledge of the impact of outdoor learning. We shall distinguish the following designs:

- Surveys of UK practice;
- Descriptions of interventions: with clear goals, logic models, feasibility or acceptability data;
- Evaluations of interventions: before and after studies; controlled trials.

Appendix 4 includes a coding scheme to describe evaluations of interventions. It distinguishes studies in terms of the *Project Oracle* standards of evidence: project model (and evaluation plans); indication of impact; and evidence of impact.⁷ The detail in which studies will be described will depend upon the number included in the final analysis.

Analysing the body of literature

Once studies have been described, the full set will be analysed to show the types of research that have addressed the types of outdoor learning, and where such research has been replicated in similar or different settings. The results will be presented in tables to show the balance of research effort in the outdoor learning sector.

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¹ Gill T (2011) Children and nature a quasi-systematic review of the empirical evidence. Greater London Authority; London.

² Davies D, Jindal-Snape D, Collier C, Digby R, Hay P, Howe A. (2013) Creative learning environments in education—A systematic literature review. *Thinking Skills and Creativity* 8: 80 – 91.

³ Rickinson M, Dillon J, Teamey K, Morris M, Choi M Y, Sanders D, Benefield P (2004) A review of Research on Outdoor Learning March. National Federation of Education Research; Swindon.

⁴ Thompson Coon J, Boddy K, Stein K, Whear R, Barton J, Depledge MH. Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review *Environmental Science and Technology* 2011; 45(5): 1761-1772

⁵ McCree M (2014) Practitioner Experiences of Forest School. PhD thesis, The University of Gloucestershire.

⁶ Thomas J, Brunton J, Graziosi S (2010) *EPPI-Reviewer 4.0: software for research synthesis*. EPPI-Centre Software. London: Social Science Research Unit, Institute of Education, University of London.

⁷ Project Oracle standards of evidence <http://project-oracle.com/support/for-youth-service-providers/validation-against-the-standards/>