



The Existing Evidence-Base about the Effectiveness of Outdoor Learning

Final Report – Executive Summary

October 2015

**Caroline Fiennes,¹ Elizabeth Oliver,² Kelly Dickson,²
Diego Escobar,² Amy Romans,³ Sandy Oliver²**

About The Authors

Giving Evidence is a consultancy and campaign, promoting charitable *giving* based on sound *evidence*. Giving Evidence was founded by Caroline Fiennes, a former award-winning charity CEO, and author of *It Ain't What You Give*.

Through consultancy, Giving Evidence helps donors and charities in many countries to understand their impact and to raise it. Through campaigning, thought-leadership and meta-research, we show what evidence is available and what remains needed, what it says, and where the quality and infrastructure of evidence need improving.

The Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) is part of the Social Science Research Unit (SSRU), UCL Institute of Education, University College London.

The EPPI-Centre was established in 1993 to address the need for a systematic approach to the organisation and review of evidence-based work on social interventions. The work and publications of the Centre engage health and education policy makers, practitioners and service users in discussions about how researchers can make their work more relevant and how to use research findings.

Our mission is to engage in and otherwise promote rigorous, ethical and participative social research as well as to support evidence-informed public policy and practice across a range of domains including education, health and welfare, guided by a concern for human rights, social justice and the development of human potential.

The views expressed in this work are those of the authors and do not necessarily reflect the views of the EPPI-Centre or the funder. All errors and omissions remain those of the authors.

The study was guided by a Steering Group¹ drawn from the outdoor learning sector, and we are grateful to them for their input. It was conducted from April to September 2015.

Contact:

Caroline Fiennes, Director, Giving Evidence

+44 7803 954512, caroline.fiennes@giving-evidence.com

¹ This comprised: Andy Robinson (Chief Executive, the Institute for Outdoor Learning) – Chair; Jo Wells (Director, Blagrave Trust); Lucy Maynard (Head of Research, Brathay); Mike King (Releasing Potential and trustee of the Institute for Outdoor Learning); Justin Dillon (Bristol University and trustee of the Council for Learning Outside the Classroom); Emma Ferris (Head of Impact Evaluation, Outward Bound); Lyndsey Nassim (Head of Sales & Marketing, Scouts)

Introduction

Education programmes vary in their effectiveness. Mindful of this, the Blagrave Trust, whose areas include outdoor learning, wanted to understand what is known about the effectiveness of the various types of outdoor learning programmes. In partnership with the Institute of Outdoor Learning, the Blagrave Trust commissioned Giving Evidence and The Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) at UCL Institute of Education to produce a systematic review of the existing literature about outdoor learning.

By searching the academic literature systematically, and inviting submissions of research ('crowdsourcing') from outdoor learning organisations, we aimed to:

1. Categorise the various outdoor learning (OL) activities being run in the UK, in order to provide a coherent sense of the sector as a whole;
2. Identify the various outcomes which organisations running outdoor learning activities are measuring, i.e., identify the outcomes which providers seem to be seeking to achieve; and
3. Assess the designs of individual evaluations (while aware that study designs vary in their openness to bias and hence inaccuracy) and the standard of evidence generally available for different types of outdoor learning.

This review benefited from a knowledgeable Steering Group with members drawn from provider and research organisations. It employed a systematic search of the academic literature and crowdsourcing of UK studies.

Full Report

The full report is available on the Giving Evidence & Institute for Outdoor Learning websites.

<http://giving-evidence.com/2015/03/30/outdoor-learning/>

<http://www.outdoor-learning.org/Default.aspx?tabid=373> (Guidance Section/Research Reports)

Summary of findings

1. **A sense of the sector as a whole:** There is no comprehensive or regular (repeated) survey of the scale of outdoor learning in the UK. There are some studies of specific outdoor learning activities (e.g., of particular types, or in particular parts of the UK). In these, some authors express concern about barriers to delivering outdoor learning and a reduction in outdoor learning.
2. **The current research base:**
 - Crowdsourcing UK research revealed an enthusiasm for research and sharing of knowledge amongst people who deliver outdoor learning activities. However, some of the material submitted were data or reflections which included named individuals, rather than anonymized research reports. This raises some issues around practitioners' understanding of research ethics.
 - There is a growing body of individual studies and systematic reviews about the development and effectiveness of outdoor learning. We found 15 systematic reviews of the effects of outdoor learning. They provide extensive evidence of the effects of outdoor learning. However, the set is somewhat confusing because many of them overlap in terms of the primary studies they include. Moreover, some systematic reviews include other systematic reviews, or are an update of an earlier review. This overlap therefore repeatedly reports the same evidence without necessarily strengthening it.
 - Distinctions between types of interventions and outcomes employed to categorise studies are not always clear. For instance, 'healthy lifestyles' and 'health and well-being' were part of the 'learning and development' domain, while 'health behaviour' and 'health, physical / mental' were part of the 'health' domain.
 - We found **58 primary UK studies**. Four features of them are striking:
 - a. **They are spread thinly** across many populations (types and age groups), interventions, settings and outcomes, such that few topics have been researched more than a handful of times. This leads to our suggestion that the sector collectively identify and prioritise the important unanswered questions, and then focuses its (presumably limited) research resources on those priority questions.
 - b. **The activities and participants on which studies focus** may not be where the sector would choose that research should focus. For example, the most common study topics are: adventure or residential activity; 11-14 year olds; and the general population. This leaves very few studies on (and hence little insight about) other age groups, popular activity such as Scouts or Ramblers, or people who are not in employment, education or training (NEET), have disabilities or are post-trauma.
 - c. That there seems surprisingly **little linkage between the outcomes measured by the studies and the agenda of 'customers' and funders**. The outcomes measured are mainly around 'character development-type' outcomes (communication skills, teamwork, self-confidence etc. Very few studies addressed interventions with strong

links to core curriculum subjects. There was only one primary study of educational outcomes at Key Stage 1 (5-7 year olds), few of educational outcomes at Key Stages 2, 3 and 4, and none at or beyond Key Stage 5 (sixth form). There is also a mismatch with the interests of employers: 'employability' is only measured in relation to offenders but not young people generally. Looking internationally, only six of the 15 systematic reviews looked at educational attainment, and only one addressed employability.

- d. **Safety is little covered** in the systematic reviews and was not measured as an outcome in any of the primary studies. Safety is obviously a major issue in outdoor learning since it can be dangerous: few social interventions can result in broken limbs or fatalities. Even if safety isn't the primary focus of a study, data could be gathered about safety: this is often how patient safety data and insights are gathered in medical research.
3. **Outcomes assessed:** This evidence, both in the UK and internationally, and in both primary studies and systematic reviews, is very varied in terms of the populations who are offered outdoor learning, the type of outdoor learning and the outcomes assessed. The categorisation that informed this study captured some interventions and outcomes, but others emerged from the literature. Generally, there is considerable consensus in the general aims of interventions, but little consensus on the outcomes for assessing their effects.
 4. **The designs of individual evaluations:**
 - We compared reports of UK studies in terms of attributes on a scale developed by Project Oracle, which looks at the extent of plans for an intervention and the evidence for it (described in the main document). Using this scale was challenging because the Project Oracle scale was designed for organisations to plan and assess their own interventions and evaluations, rather than to assess research reported elsewhere.
 - Many UK studies did not reach Level One of the Project Oracle scale, normally because they did not cite or appear to use a Theory of Change (also known as a logic model: an articulation of the inputs, the intended outcomes, how the inputs are meant to produce those outcomes, and assumptions about context, participants or other conditions). Clear theories of change serve a couple of useful purposes: first, they demonstrate that the practitioners understand their intervention; and second, they are invaluable for other practitioners reading the research in estimating whether they will achieve the same outcomes with those interventions in their contexts. To be clear, a practitioner may have a theory of change but not cite it in their research, but (a) citing it in the research is useful and (b) experience from many other social sectors suggests that practitioners may need support to develop or articulate their theories of change.
 - No UK study, or set of studies, featured the more demanding attributes of Levels Four or Five, around the intervention having been replicated in several places.

Implications for practice and policy

The study did not set out to look at implications of the research for practice and policy. Nonetheless, we found:

- Almost all outdoor learning interventions have a positive effect.
- The effect attenuates over time: the effect as measured immediately after the intervention is stronger than in follow-up measures after a few months. This is common for social interventions. However, one meta-analysis found that effects relating to self-control were high and were normally maintained over time.
- Evidence for the value of longer interventions. The systematic reviews found that overnight and multi-day activities had a stronger effect than shorter ones. While this is perhaps unsurprising, it does pose a challenge for funders / funding since it obviously forces a trade-off with the number of participants.

Recommendations

For providers of outdoor learning

Outdoor learning organisations can refer to systematic reviews of research about outdoor learning when planning their programmes. Careful reading is required to (a) check the rigour of each review and the studies they include (for instance, did the review include a systematic search and critical appraisal of the studies included?); and (b) check the precise types of programmes, populations and outcomes they studied.

For the outdoor learning sector about developing its research

Because the existing research is spread quite thinly, few questions about effectiveness are yet answered reliably. We therefore recommend that the outdoor learning sector collectively prioritise the various unanswered questions in order to focus its research resources on those which are most important.

We recommend that the outdoor learning sector:

1. **Types and volume of activity:** Pull together the various data sources on this to give the current picture, and create a system to regularly capture data on the types and volumes of activity.
2. Improve practitioners' **theories of change**, enabling practitioners' to both create and to use them. Theories of change are explained in Box 4 (see full report): they are invaluable for understanding why an intervention works and hence whether it is likely to work in other contexts, but only few evaluations of UK outdoor learning activity cited them.
3. Convene practitioners, researchers and others to **prioritise research topics**.
4. **Manage the resulting sector-wide research agenda**, through relationships with funders, and possibly by creating partnerships between practitioners and researchers.
5. Ensure that both **interventions and research are described clearly, fully and publicly**.

Outdoor learning organisations need to have systems in place to support ethical practices for monitoring and research, particularly the storage and sharing of data from evaluations.

Greater consensus about the important outcomes of interest would allow research findings from different studies to be pooled more easily, and thereby facilitate accumulating knowledge to inform better the whole field.