

Review of the research evidence in relation to the role of trees and woods in formal education and learning

There is evidence of a growing interest within government, a range of organisations and amongst the public, in using the natural environment, including trees, woods and forests (TWF), as a context or resource for education and learning (E&L). The approaches used are broad and range from formal academic learning to informal self-guided interpretation of sites. The aim of this review was to explore research relating to E&L outdoors and particularly that which takes place in, or focuses on, TWF. The research identified in this review has primarily focused on more formal provision of outdoor E&L and on children and young people. Less is known about E&L associated specifically with trees and woods; what there is has predominantly focused on Forest Schools. Much of the research has explored personal, social and emotional development rather than specific educational outcomes.



“woodlands can offer an outstanding learning resource...for all kinds of learning, for all kinds of people.”

(Forestry Commission Wales, 2007)

Background

Trees, woods and forests have the potential to provide an important resource and context for E&L. E&L approaches can be used to promote an understanding of the economic, social, cultural and biodiversity value of woodlands and also of the wider countryside as a living, working environment. Woodlands can provide a formal academic learning context for a broad range of subjects, including biological, environmental and historical studies or key subjects such as maths and literacy, alongside practical skills and vocational training. TWF can also be used to provide a focus for classroom-based learning. Woodlands may also provide an environment in which informal personal and social development can take place. Through opportunities such as volunteering, individuals may learn about society or nature and develop key skills such as communication and teamwork.

Objectives

The objectives of this project were to:

- explore the evidence regarding formal E&L in the context of TWF
- outline current policy and practice (of both the Forestry Commission (FC) and of other related organisations)
- illustrate some of the various ways in which TWF are used for E&L purposes

Methods

- A review of research and evaluative literature, both academic and ‘grey’, relating to outdoor and TWF E&L was carried out. A desk-based review aimed to identify relevant policy and practice in relation to TWF E&L in the UK. Specific information was sought, including the current policy context, the range of organisations delivering or facilitating TWF E&L and examples of projects and programmes (UK and international).
- Fourteen interviews were conducted with a range of stakeholders; topics included the range of E&L projects and programmes, the importance of the provision and delivery of such opportunities, and the relevance of using TWF.

Findings

The FC delivers a wide variety of E&L opportunities through a number of approaches, including direct delivery by FC staff; facilitation through grants, partnerships and training; resource provision (e.g. physical forest resource, educational materials); interpretation through led visits or self-led interpretation media; play; campaigns and events; and non-specific E&L projects, e.g. health and volunteering projects that may have a learning outcome.

Evidence from this review suggests that outdoor learning may result in:

- improved personal and interpersonal skills, including communication and teamwork
- the accumulation of social capital, in particular fostering pride, belonging and involvement in the community
- more positive attitudes regarding the natural environment
- the acquisition of academic skills and knowledge

The results of this review highlight a broad range of research gaps regarding E&L outdoors and in particular E&L that takes place in, or focuses on, TWF. For instance, little work has been undertaken to explore the impacts of specific E&L activities in woods on adults, the long-term outcomes of such activities or the role of the specific environment on the observed outcomes. It is possible that the body of evidence is limited because of the following factors:

- i) the sheer diversity of TWF E&L activities, approaches and participants
- ii) the issues surrounding the identification of TWF activities as having E&L aims or outcomes
- iii) the costs, in terms of time and resources, of educational research

Much research on Forest Schools has been undertaken because not only are a wide range of people interested in the approach, the programme is clearly identifiable as having E&L objectives.

Recommendations

Potential opportunities for future research could include a focus on the:

- impacts of different types of TWF education provision
- impacts of TWF education on educational outcomes and attainment
- specific additional benefits of the woodland environment for education
- long-term impacts of education in woods and forests on different groups
- wider impacts of education in woods, e.g. in terms of impacts on health, knowledge of climate change, employment and community impacts
- impacts of various forms of education in woodlands on different populations, particularly adults

Reports and publications

Lovell, R. O'Brien, L and Owen, R. (2010). Review of the research evidence in relation to the role of trees and woods in formal education and learning. Forest Research.

Partners

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For further information contact: Liz.O'Brien@forestry.gov.gsi.uk

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