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Learning for Sustainability Research into Action Briefings

Briefing 2 The Impact of 'Outdoor Learning' on 'Learning for Sustainability' in schools

Context

One of the defining characteristics of the Scottish concept of 'Learning for Sustainability' (Lfs) is that it brings together 'traditional' approaches (Sustainable Development Education, Global Citizenship) with Outdoor Learning (specifically immersive/sensitising experiences of the natural world). This briefing draws upon research that led to the 'Lfs concept' and other subsequent research and reviews. The inclusion of outdoor learning as a key element with the specific intention of contributing to understanding of sustainability and behavioral change is rare and possibly unique internationally, certainly in an education policy context, and warrants some discussion.

Outdoor learning – concepts and claims

Whilst outdoor learning¹ is well-established and evident in many countries there are many understandings of the concept and many approaches. Outdoor learning in the UK has its roots in challenging outdoor adventure activities focused on encouraging young people to develop personal and social skills, such as teamwork and problem-solving. For over 50 years outdoor educational experiences have been a highly valued feature of Scottish education, delivered primarily but not exclusively through a network of residential centres with a focus on three frequently integrated areas: 'outdoor activities', 'environmental education' and 'personal and social development'. In the past 15 years interest has grown in Scotland in a wide range of aspects of outdoor learning in ways not mirrored in most of the UK or overseas.

The term itself is essentially a reminder that whilst traditional approaches remain valuable, learning directly outside the classroom can be an effective 'every-day' experience in the school grounds or local area. The central pedagogical theme is an experiential and adventurous approach to learning usually involving interdisciplinary, practical, interactive and reflective approaches, with the role of the teacher being to encourage students to take responsibility for their learning.

¹ The term 'outdoor education' is used in many countries, and indeed in Scotland and the UK. The approach in Scotland has been to increasingly use local areas for curricular purposes and so the term 'outdoor learning' is increasingly favoured. It is defined in *Curriculum for Excellence through Outdoor Learning* (LTS, 2010) using locations including school grounds, the local area, day-long experiences and those farther afield including outdoor centres and national parks.

In the context of 'learning for sustainability' the 'One Planet Schools Ministerial Advisory Group'¹ (2012, p. 13) concluded that:

'outdoor learning, direct experience of the landscape and the natural and cultural heritage of Scotland helps all young people and teachers understand the Earth's systems, develop respect and care for our planet, create a personal connection with the environment² and, as recent research has shown³, improves their physical, mental and emotional health and wellbeing'.

Hence, the decision to integrate outdoor learning alongside other aspects of learning for sustainability. This decision is supported by recent research⁴, which suggests that that 'traditional outdoor play pedagogies' alone do not always support 'children's developing environmental attitudes and dispositions towards sustainability', rather what is required is for teachers to commit to embedding education or learning for sustainability within their professional practice because they value the approach and believe in its importance⁵. Therefore it is the potential for such experiences to support the development of two capacities, (1) a personal environmental ethic, and (2) interdisciplinary understanding related to complex issues, that are the focus of the present review.

Outdoor learning and attitudes to sustainability

This is an area that is difficult to research; outdoor learning brings students into locations that are complex, with multiple stimuli, and any specific enabling factors leading to specific attitudinal change may be embedded alongside others⁶. Essentially such studies are investigating factors that are difficult to isolate, impacting on changes that are difficult to record, over timescales that if they are to be meaningful should be life-long! Nonetheless, studies in countries, such as Australia, suggest that pro-environmental behaviour, especially in the early years, holds a causal relationship with connectivity with the natural environment⁷. The authors conclude that repeat visits to local places helped to promote a relationship with the natural environment and in doing so encourage a deep environmental knowledge and understanding of the world that surrounds learners. Other studies⁸ support this notion of deep learning, which requires more than cognitive learning, and suggest that educators should be designing pedagogical experiences that engage 'head, heart, body and spirit' so that learners are working within conscious-raising dimensions, therefore 'are primed for transformation'. Conventional forms of schooling and classroom-based experiences do not always lend themselves to these types of deeply engaging, transformational experiences⁹.

The key review that supported the One Planet Schools Group¹⁰ acknowledged that whilst there were limited studies available, some conclusions could be drawn on the impact of outdoor learning on the development of pro- environmental behaviours. In summary the findings of this review were that:

1. 'Authentic and informal outdoor contexts provide rich opportunities for the *development of peer and pupil-teacher relationships*; such connections are central to young peoples attachment and commitment to school and their academic career, more generally'.
2. "*Place*' within the context of outdoor learning is key to the development of an understanding, at a local level, of issues such as environment, history, culture and sustainability. Again, such knowledge and connection helps to foster positive attachments, commitment and respect for

- local areas, and school can be considered as a central part of the wider community’.
3. ‘Whilst some research offers modest support for increased attainment in terms of specific subject areas ... greater evidence exists to suggest that *outdoor learning affords an integration of curricular content and global skill development*’. The authors noted that ‘this falls in-line with the general philosophy and purpose of Scotland’s Curriculum for Excellence’¹¹ and of course this ‘integration’ of content and skills is fundamental to learning for sustainability.
 4. ‘*Educators must be confident in their decision to teach out of doors*. They must respect the socially situated nature of learning out-of-doors, and the individual learner within that process which includes the past experiences that they may bring to the process’. Further, that they must ‘maintain an appreciation for the unexpected, and unintended connections that individual learners can draw from one such experience’; in other words the complexity and serendipity of such experiences is pedagogically central to the learning, and to work with it rather than attempt to eliminate it.

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¹ One Planet Schools Ministerial Advisory Group (2012). *Learning for Sustainability: The report of the One Planet Schools Working Group*. Edinburgh: Scottish Government.

<http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/LearningforSustainability>

² Christie, B. & Higgins, P. (2012). *The impact of outdoor learning experiences on attitudes to sustainability: A review of literature*. Preston Montford: Field Studies Council.

³ See e.g. Bird, W. (2007) *Natural thinking*. http://www.rspb.org.uk/Images/naturalthinking_tcm9-161856.pdf

⁴ Cutter-Mackenzie, A., Edwards, S., Moore, D. & Boyd, W. (2014). *Young children’s play and environmental education in early childhood education*. Switzerland: Springer.

⁵ Inoue, M., O’Gorman, L., & Davies, J (2016). *Investigating Early Childhood Teachers’ Understandings of and Practices in Education for Sustainability Queensland: A Japan-Australia Research Collaboration*. *Australian Journal of Environmental Education Research* DOI:10.1017/ae.2016.4

⁶ For example see Waite, S., Rutter, O., Fowle., & Edwards-Jones, A. (2015). Drivers aims, challenges and opportunities for assessing outdoor learning: a critical examination of three cases from practice. *Education 3-13*, DOI: 10.1080/03004279.2015.1042987

⁷ Lloyd, A. & Gray, T. (2014). Place-based outdoor learning and environmental sustainability within Australian Primary Schools. *Journal of Sustainability Education*.

http://www.jsedimensions.org/wordpress/content/place-based-outdoor-learning-and-environmental-sustainability-within-australian-primary-school_2014_10/

⁸ Nazir, J. & Pedretti, E. (2016). Educators’ perceptions of bringing students to environmental consciousness through engaging outdoor experiences, *Environmental Education Research*, 22:2, 288-304, DOI: 10.1080/13504622.2014.996208

⁹ Kahn, R. (2008). “From Education for Sustainable Development to Ecopedagogy: Sustaining Capitalism to Sustaining life?” *Green Theory and Praxis: The Journal of Ecopedagogy* 4 (1): 1–14.

¹⁰ Christie, B. & Higgins, P. (2012). *The impact of outdoor learning experiences on attitudes to sustainability: A review of literature*. Preston Montford: Field Studies Council.

¹¹ Scottish Government (2007). *Curriculum for Excellence*. Glasgow: Learning and Teaching Scotland.