

This response was submitted to the [Children, Young People and Education Committee](#) on the [Residential Outdoor Education \(Wales\) Bill](#)

ROE 18

Ymateb gan: Iechyd Cyhoeddus Cymru
Response from: Public Health Wales

Residential Outdoor Education (Wales) Bill Consultation response

How important is residential outdoor education to children and young people's development?

In writing this response we considered the term development through a health and well-being lens; focusing on social, emotional and physical development which itself refers to a broad range of developmental processes.

In answering this question it has been challenging to find evidence that can distinguish between the value of outdoor learning experiences which can be delivered through normal day to day curriculum activity and day activities and the specific additional impact, if any, of a residential experience.

There is some evidence that outdoor education is supportive to children and young people's development in terms of opportunity to participate in a range of physical activity as well as potential broader benefits such as improved self-esteem and self-confidence via problem solving and positive social interaction.

In terms of improved learning outcomes the Education Endowment Fund evidence review concludes that 'the current evidence base on outdoor adventure and academic outcomes is very weak'¹. In particular, the evidence base linking non-cognitive skills, potentially gained through outdoor education and attainment benefit, potentially gained through application of non-cognitive skills within the classroom, is weak. The development of non-cognitive skills would be one of the key mechanisms through which these interventions would potentially benefit health and wellbeing, particularly mental health and wellbeing.

However, from the extant evidence it is not, in our view, possible to isolate the specific contribution of 'residential' outdoor education compared to non-residential outdoor learning to children and young people's development due to a range of factors.

There is a limited amount of research, the studies that exist consider different outcomes, variation in populations studied (for example age range and targeted

¹ [Outdoor adventure learning | EEF \(educationendowmentfoundation.org.uk\)](#)

² Gutman, LM and Schoon, I (2013) The impact of non-cognitive skills on outcomes for young people. Literature Review. Institute for Education, University of London

³ [Fiennes et al \(2015\) The Existing Evidence Base for the Effectiveness of Outdoor Learning. October 2015. Giving Evidence.](#)

specific vulnerable groups with a noted paucity of evidence relating to primary phases of education^{2,3}) and importantly, significant variation in terms of the intervention itself which makes direct comparison difficult.

It is important to consider when, for whom, and in what context are optimal benefits of outdoor residential education achieved. For example DeWitt and Storksdieck (2008)⁴ examine the type of learning outcomes associated with field trips and conclude the relative benefits compared to classroom education is variable depending on programme purpose and delivery. This raises a further critical point that to understand the importance of residential outdoor education to children and young people's development it needs to be considered relative to a range of alternatives including, for example, comparing a one-off opportunity with regular engagement through initiatives such as the Scout movement³. In our view this has not yet been fully considered with limited evidence available to support comparison.

What are the main health benefits to children and young people from experiencing an outdoor education residential?

There is some evidence that outdoor or nature based education, not necessarily residential in nature, may contribute to^{5,6,7, 8, 9, 10}:

- **Enhanced Psychological Well-being:** Time spent in nature has been associated with reduced anxiety and stress, improved attention, and increased psychological well-being
- **Increased Physical Activity:** Outdoor education reduces sedentary behaviour and provides opportunities for increased physical activity
- **Social and Emotional Development:** Outdoor education promotes social

⁴ Jennifer DeWitt & Martin Storksdieck (2008) A Short Review of School Field Trips: Key Findings from the Past and Implications for the Future, *Visitor Studies*, 11:2, 181-197, DOI: [10.1080/10645570802355562](https://doi.org/10.1080/10645570802355562)

⁵ Mall, Christoph & Lauterbach, Gabriele & Spengler, Sarah & Dettweiler, Ulrich & Mess, Filip. (2017). Effects of Regular Classes in Outdoor Education Settings: A Systematic Review on Students' Learning, Social and Health Dimensions. *International Journal of Environmental Research and Public Health*. 14. 10.3390/ijerph14050485.

⁶ Tillmann S, Tobin D, Avison W, *et al.* Mental health benefits of interactions with nature in children and teenagers: a systematic review. *J Epidemiol Community Health* 2018;72:958-966.

⁷ Fang, B.-B., Lu, F. J. H., Gill, D. L., Liu, S. H., Chyi, T., & Chen, B. (2021). A Systematic Review and Meta-Analysis of the Effects of Outdoor Education Programs on Adolescents' Self-Efficacy. *Perceptual and Motor Skills*, 128(5), 1932-1958. <https://doi.org/10.1177/00315125211022709>

⁸ Lærke Mygind, Eva Kjeldsted, Rikke Hartmeyer, Erik Mygind, Mads Bølling, Peter Bentsen, Mental, physical and social health benefits of immersive nature-experience for children and adolescents: A systematic review and quality assessment of the evidence, *Health & Place*, Volume 58,2019, 102136, <https://doi.org/10.1016/j.healthplace.2019.05.014>.

⁹ [Links between natural environments and learning: evidence briefing - EIN017 \(naturalengland.org.uk\)](https://www.naturalengland.org.uk/links-between-natural-environments-and-learning-evidence-briefing-ein017)

¹⁰ Mann J, Gray T, Truong S, Brymer E, Passy R, Ho S, Sahlberg P, Ward K, Bentsen P, Curry C and Cowper R (2022) Getting Out of the Classroom and Into Nature: A Systematic Review of Nature-Specific Outdoor Learning on School Children's Learning and Development. *Front. Public Health* 10:877058. doi: 10.3389/fpubh.2022.877058

skills, teamwork, and prosocial behaviour, and can support the development of a positive body image and confidence in physical competence

Evidence suggests the effect size for school-age populations is small to medium with some evidence that some outcomes are sustained over time. It is important to note that, from the evidence base we are aware of, there is significant overlap between the reporting of outdoor learning/education or connection with nature AND **residential** outdoor learning/education with most evidence considering outdoor education more widely rather than residential as a sub-category. In depth analysis is required to understand the extent to which benefits are likely to be attributable to **school and curriculum based outdoor learning** in general, **nature-connecting opportunities** in or out of school and the specific **residential** element.

The Explanatory Memorandum highlights the ‘well-established’ benefits of outdoor education and points to Welsh Government research that explores outdoor education in its broader sense and suggests the value is magnified through the residential experience. In our view the existing evidence base is not sufficient to confidently attribute additional benefit specifically to the residential element over and above alternatives.

Wider benefits may also be dependent on the quality and appropriate fit of the experience to the needs and interests of the children and young people participating (noting limitations of applying the findings of targeted population studies to all children and young people in Wales). For example, potential nutritional benefit would only be realised via a high quality, consistent nutritional offer whereas physical activity and emotional and mental well-being benefits are likely to be mediated by individual factors associated with the learner (accessibility and wider opportunities for example).

Evidence shows that nature-connectedness tends to be strong amongst young children but declines sharply between the ages of 10-15 years and only recovers later in adulthood¹¹. This points to benefits of increasing opportunities for young people to build connections with nature through outdoor learning opportunities but these can be built into day to day curriculum activity and do not require a residential element. Regular frequent opportunities may be more effective than a single one off event.

What are the main barriers to children and young people attending a residential outdoor education visit?

This has been explored through the consultation and include:

¹¹ Richardson M, Hunt A, Hinds J, Bragg R, Fido D, Petronzi D, Barbett L, Clitherow T, White M. A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights. Sustainability. 2019; 11(12):3250. <https://doi.org/10.3390/su11123250>

Financial Barriers: These will not be limited to costs overcome through a universal free offer and will include, for example, ensuring participants have the appropriate clothing, potentially spending money and potential changes to existing childcare arrangements.

Geographic barriers: including distance from home or school to residential centre compounded by geographical availability of appropriate outdoor residential centres and variable access to reliable transport.

Personal (child) barriers: which will be varied and may include as examples, participation, social or separation anxiety, barriers associated with unfamiliarity of the setting or activities, barriers associated to physical or emotional needs such as specialised diets, medication, accessibility and neurodiversity.

Personal (adult) barriers: which again will be varied and, in addition to parental anxiety and associated financial barriers may include caring responsibilities and barriers associated with geographical distance.

Should children and young people have the opportunity to undertake an outdoor education residential and, if so, should it be free of charge to all?

The evidence base for the benefit of residential outdoor learning, particularly compared to other possible learning experiences and needs, makes it difficult to support the Bill. The financial environment is also an important consideration with many pressures on budgets at all levels within the system. There are many other fundamental areas of learning and learning support that are not currently being met which are likely to be considered a greater priority than this.

Public Health Wales is supportive of outdoor learning experiences and is keen to work with partners to further develop the evidence base for this work. However, our view is that given the geography of Wales these opportunities can be accessed without the need for a residential component.

Public Health Wales also recognises the benefit of residential time away from home at a appropriate developmental stage. However, this could be provided adjacent to a number of opportunities of which outdoor learning is only one.

Public Health Wales does however recognise the importance of poverty on health and wellbeing of children and young people. One of the most visible examples is that those children from more disadvantaged backgrounds have less access to wider experiences and opportunities. It is important that schools consider the impact of discretionary school trips, particularly those with a residential element, in widening inequalities and on the mental and emotional impact for those children and their families who are not able to take up these opportunities.

Consultations on the draft Bill found that after financial constraints, the

biggest barriers to children and young people accessing residential outdoor education is both children’s and parent’s anxiety and uncertainty. What are your views on this, and what can be done to address their concerns?

An individual approach to understanding child or parental anxieties relating to children and young people accessing residential outdoor learning opportunities is likely to be required to improve uptake of the offer. It is also likely that anxiety will have increased for some children and families following the pandemic.

Providing reassurance of the benefits that can be achieved from residential experiences may also help to alleviate parent/carer concerns. Studies have found that attending residential experiences in themselves can help to boost self-efficacy, locus of control, sense of community and of belonging, which influence mental wellbeing¹².

Ensuring that staff leading residential experiences are appropriately skilled and experienced in that arena is also important. An understanding of the needs of the learners is critical along with experience and professional judgement in knowing how to respond to different circumstances that may arise.

How can the needs of all children be met so they can fully participate in residential outdoor education? In particular children with physical disabilities, mental health issues including anxiety, and those children with additional learning needs?

This is a complex question and response will depend on the needs of the individual child and their family. Residential and outdoor learning for pupils with particular needs would need to be planned and delivered with the support of a multi-disciplinary team.

The Explanatory Memorandum states that: “the mental health and well-being benefits of outdoor education residential programmes could reduce the demands on child and adolescent mental health services in the near future and could also reduce demands on the wider NHS and health care services in the longer term”. What are your views on this statement and the likelihood that the opportunity of residential outdoor education for all children results in reduced demands on the NHS?

Mental and physical health problems have complex and multifaceted origins. While

¹² Dudman, J.; Hedges, C. & Loynes, C. (2019). the impact of residential experiences on pupil progress and attainment in year six (10 – 11 year olds) in England: a Learning Away comparative research Study:. Learning Away Consortium.

there may be evidence that outdoor learning can be beneficial in contributing to mental and emotional wellbeing outcomes or physical activity the level of benefit will be small, particularly from a single event. These benefits can also be obtained in a number of different ways.

We would be concerned if there was an expectation that there would be a measurable impact on health and wellbeing outcomes or on demand for NHS services as a result of the proposals in this Bill.