



## The Benefits of Learning in and about Nature ( OL)



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### Key Research Papers/ publications/reports/reviews/books

#### **Publications/Reports to Look at/Read/Quote**

High Quality Outdoor Learning - Evidence-based Education Outside the Classroom for Children, Teachers and Society 2022 <https://link.springer.com/book/10.1007/978-3-031-04108-2>

Nature Nurtures Children. Summary Report – UCL Institute of Ed and The Wildlife Trusts <https://www.wildlifetrusts.org/sites/default/files/201911/Nature%20nurtures%20children%20Summary%20Report%20FINAL.pdf>

Transforming Outdoor Learning in Schools – Natural Connections Project ( DEFRA/Plymouth Uni 2012-2016) <http://publications.naturalengland.org.uk/publication/6636651036540928>

Scottish Government -The Educational Outcomes of Learning for Sustainability: A Brief Review [https://www.gov.scot/publications/educational-outcomes-learning-sustainability-brief-review-literature/pages/3/#:~:text=With%20regard%20to%20education%20for,%2C%202010%2C%20para%203\).](https://www.gov.scot/publications/educational-outcomes-learning-sustainability-brief-review-literature/pages/3/#:~:text=With%20regard%20to%20education%20for,%2C%202010%2C%20para%203).)

Children and Nature website <https://research.childrenandnature.org/research-library/?h=jNlypkJ>

Education Scotland – Successful approaches to learning outdoors. A report by HM inspectors – Feb 2022 <https://education.gov.scot/media/3amlh2w0/learning-outdoors.pdf>

Nature Nurtures Children Report UCL/The Wildlife Trusts <https://www.wildlifetrusts.org/news/new-report-nature-nurtures-children>

Growing Amongst Trees Project Report 2021 <https://www.treesforcities.org/downloads/files/SCHOOLS-Growing-Among-Trees-full-report.pdf>

Nature Friendly Schools (summary report )– full report due Nov 2022 <https://www.naturefriendlyschools.co.uk/report>

Learning and Teaching Scotland. (2010). *Curriculum for excellence through outdoor learning*. Glasgow. <https://education.gov.scot/Documents/cfe-through-outdoor-learning.pdf>.

DfE Sustainability and Climate Change Strategy April 2022 <https://www.gov.uk/government/publications/sustainability-and-climate-change-strategy>

The Salzburg Statement for greening school grounds and outdoor learning – Sept 2022 [https://eadn-wc04-796033.nxedge.io/wp-content/uploads/Final\\_SalzburgGlobal\\_Statement\\_Global\\_Lessons.pdf](https://eadn-wc04-796033.nxedge.io/wp-content/uploads/Final_SalzburgGlobal_Statement_Global_Lessons.pdf)

University of Derby – Nature Connection Handbook  
<https://findingnature.org.uk/2022/05/03/nature-connection-handbook/>

### **Robust Research Papers**

Getting Out of the Classroom and Into Nature: A Systematic Review of Nature-Specific Outdoor Learning on School Children's Learning and Development  
<https://www.frontiersin.org/articles/10.3389/fpubh.2022.877058/full>

Kuo, M., Jordan, C. (eds.) (2019). *The natural world as a resource for learning and development: From schoolyards to wilderness*.

Richardson, E. A., Pearce, J., Shortt, N. K., & Mitchell, R. (2017). The role of public and private natural space in children's social, emotional and behavioural development in Scotland: A longitudinal study. *Environmental Research*, 158, 729–736. <https://doi.org/10.1016/j.envres.2017.07.038>

Tillmann, S., Tobin, D., Avison, W. & Gilland, J. (2018). Mental health benefits of interactions with nature in children and teenagers: a systematic review. *Journal of epidemiology and community health*. 72, 958- 66.

Higgins, P., Thompson, D. & Rawcliffe, P. (2018). Learning outside the classroom boosts educational attainment. *Scottish Natural Heritage Science Newsletter*, Issue 23, p. 7-9. Perth: Scottish Natural Heritage

Kuo, M., Browning, M. & Penner, M. (2018). Do lessons in nature boost subsequent classroom engagement? Refueling students in flight. *Frontiers in Psychology*. 8, 22- 53.

Kuo M., Barnes M. & Jordan C. (2019). Do experiences with nature promote learning? Converging evidence of a cause-and-effect relationship. *Frontiers in Psychology* (10) 305.

Broom, C. (2017). Exploring the relations between childhood experiences in nature and young adults' environmental attitudes and behaviours. *Australian Journal of environmental education*. 33(1), 34-47.

Becker, C., Lauterbach, G., Spengler, S., Dettweiler, U., & Mess, F. (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*,

Quibell, T., Charlton, J., & Law, J. (2017). Wilderness Schooling: A controlled trial of the impact of an outdoor education programme on attainment outcomes in primary school pupils. *British Educational Research Journal*, 43(3), 572–587. <https://doi.org/10.1002/berj.3273>

Dieser, O., & Bogner, F. X. (2016). Young people's cognitive achievement as fostered by hands-on-centred environmental education. *Environmental Education Research*, 22(7), 943–957.  
<https://doi.org/10.1080/13504622.2015.1054265>

How to Raise the Standards of Outdoor Learning and Its Research Summary of 'The Existing Evidence-Base About the Effectiveness of Outdoor Learning', by Fiennes et al.

Aronsson, J., Waite, S., & Tighe-Clarke, M. (2015). Measuring the impact of outdoor learning on

the physical activity of school age children: The use of accelerometry. *Education and Health*, 33(3), 57–62. <https://sheu.org.uk/sheux/EH/eh333ja.pdf>. Accessed 4 Apr 2021.

Allen, J., & Balfour, R. (2014). *Natural solutions for tackling health inequalities*. University College London Institute of Health Equity.

Behavioral Effects of Outdoor Learning on Primary Students

<https://sophia.stkate.edu/cgi/viewcontent.cgi?article=1296&context=maed>

Curriculum-based outdoor learning for children aged 9-11: A qualitative analysis of pupils' and teachers' views <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0212242>

Time Spent in Nature Is Associated with Increased Pro-Environmental Attitudes and Behaviours <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8305895/>

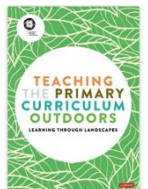
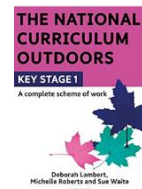
### Useful books/resources ( There are loads!)

Teaching the primary Curriculum Outdoors – Learning through landscapes

<https://itl.org.uk/free-resources/>

<https://www.wildlifewatch.org.uk/Learning>

<https://nationalcurriculumoutdoors.com/national-curriculum-books>



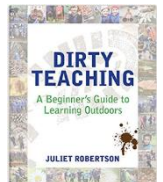
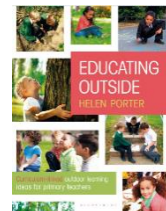
Stolen Focus- Johan Hari

Educating Outdoors – Helen Porter

<https://www.alfrescolearning.co.uk/>

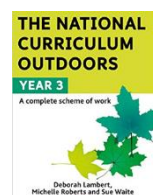
Froebel Trust – re-engaging with nature booklet

[https://www.froebel.org.uk/uploads/documents/FT\\_Re-engaging-With-Nature\\_Pamphlet\\_INTERACTIVE.pdf](https://www.froebel.org.uk/uploads/documents/FT_Re-engaging-With-Nature_Pamphlet_INTERACTIVE.pdf)



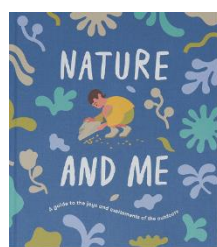
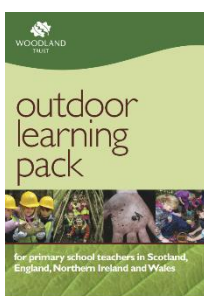
Nature and Me blog /booklet <https://findingnature.org.uk/2021/04/28/nature-and-me/>

<https://www.theharmonyproject.org.uk/>



<https://www.woodlandtrust.org.uk/media/43645/outdoor-learning-resource-pack.pdf>

<https://www.theschooloflife.com/shop/tsol-press-why-should-i-go-outside/>



A Froebelian approach  
**Re-engaging with nature**  
by Helen of Apsall  
and Debby Hunter