

# Pappus

## EVIDENCE SUMMARY – PLAY LEARNING LIFE CIC

...evidence indicates that **direct exposure to nature is essential for physical and emotional health**. For example, new studies suggest that exposure to nature may reduce the symptoms of Attention Deficit Hyperactivity Disorder (ADHD)

- Louv, R, 2009; Last Child in the Woods

*"The benefits of the outdoor classroom are clearly not confined to students. Teachers noted improved relationships with students, personal development in the teaching and curriculum benefits."*

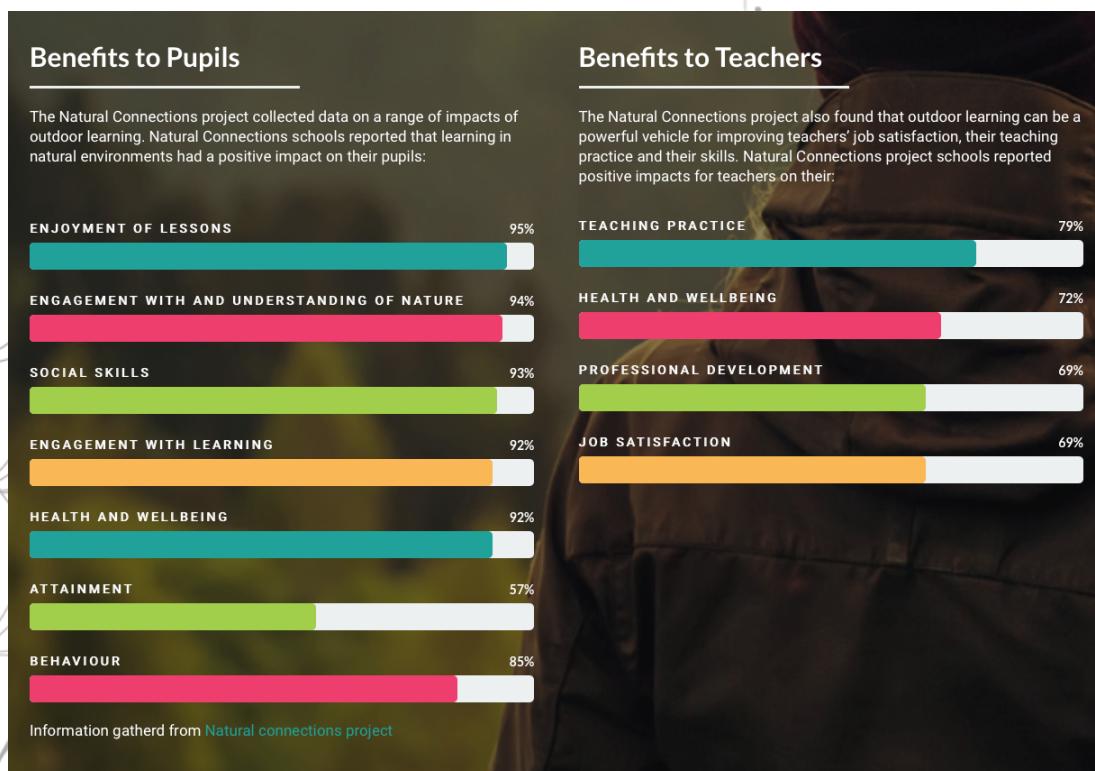
- Dillon et al, 2005; Engaging and Learning with the Outdoors: The Final Report of the Outdoor Classroom in a Rural Context Action Research Project; Reading University / NFER [www.bath.ac.uk/cree/resources/OCR.pdf](http://www.bath.ac.uk/cree/resources/OCR.pdf)

*"Learning outside the classroom can also help to combat under-achievement."*

- Ofsted 2008; Learning Outside the Classroom Report [http://www.leics.gov.uk/learning\\_outside\\_the\\_classroom.pdf](http://www.leics.gov.uk/learning_outside_the_classroom.pdf)

*"... outdoor learning may be particularly beneficial for children who struggle to maintain concentration in more formal classroom settings and actively seek out ways to introduce direct experience into their learning."*

- Waite, S. (2010) Losing Our Way?: declining outdoor opportunities for learning for children aged between 2 and 11; Journal of Adventure Education and Outdoor Learning. 10 (2), 111- 126 <https://pearl.plymouth.ac.uk//handle/10026.1/5476>



<https://youtu.be/HJPuwDsZdRI> Natural Connections Project Film



There are lots of articles and links to documents on the Learning through Landscapes website: [Outdoor learning evidence | Learning through Landscapes \(ltl.org.uk\)](https://www.outdoorlearningevidence.org.uk/)

These videos are both quick and accessible ways of showing why it is so important to get outside:

This is called '5 extra years' about the impact of lack of physical activity in children (from WHO)

<https://www.youtube.com/watch?v=BmOlzRQTabA>

This is the Persil prisoner video <https://www.youtube.com/watch?v=8Q2WnCkBTw0>.

Take a look at this article, where Covid 19 sparked a lightbulb moment for this school:

<https://www.abc.net.au/news/2020-11-05/outdoor-lessons-at-primary-school-quell-student-bad-behaviour/12848326>

**Fights, classroom violence and suspensions have dropped 'dramatically' at this primary school — here's how they did it**

By Anna Hartley

Posted Wed 4 Nov 2020 at 7:47pm



Teachers incorporate things found in nature like rocks, sticks and trees into lessons for music, math and science. (ABC News: Anna Hartley)

### **Student Outcomes and Natural Learning Conference Report; Malone & Waite (2016)**

[https://www.plymouth.ac.uk/uploads/production/document/p/6/6811/Student\\_outcomes\\_and\\_natural\\_schooling\\_pathways\\_to\\_impact\\_2016.pdf](https://www.plymouth.ac.uk/uploads/production/document/p/6/6811/Student_outcomes_and_natural_schooling_pathways_to_impact_2016.pdf)

- This 'evidence to impact' report moves through evidence supporting the many ways children's experiences in natural environments benefits their educational attainment and the development of resilience and confidence as precursors to successful learning through to the policy and practical context for supporting systemic change.
- School students engaged in learning in natural environments have been found to have higher achievement (in comparison to their peers or their own projected attainment) in reading, mathematics, science and social studies; exhibiting enhanced progress in Physical Education and drama, and a greater motivation for studying science. Longer term and 'progressive' experiences appear to result in the greatest benefits and children with below average achievement tended to make progress in learning outcomes to the greatest degree.
- A schools-based learning programme taking place in the natural environment was associated with some improvements in attendance rates. Further studies have found improved behaviour amongst children at a special needs school, sustained over two months, following learning in the natural environment.

### **The Impact of Children's Connection to Nature; RSPB (2015)**

<https://www.rspb.org.uk/globalassets/downloads/documents/positions/education/the-impact-of-childrens-connection-to-nature.pdf>

- A key finding from this report was "...analysis showed that connection to nature, life satisfaction and attendance were all significant predictors of English attainment. There are a multitude of factors associated with a child's English attainment, but it was found that connection to nature is as important to children's achievement in English as life satisfaction and attendance at school."

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The Scottish “Outdoor Learning Hubs attainment challenge 2017”; Harvey, Rankine & Jensen (2017) <https://www.sapoe.org.uk/wp-content/uploads/2018/01/Outdoor-Hub-Learning-Report-Dec-2017-V1.pdf>

- This report found that “Students involved in an outdoor learning project for 2 hours per week over 12 weeks gained an average increase of 6 months for Mental Arithmetic and 2 months for General Maths. They also showed a 20% increase in their attitudes to learning, while the control group decreased by 3% over the same period.”

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Wilderness Schooling as reported in the British Educational Research Journal; Quibell, Charlton & Law (2017) <http://www.wilderness-schooling.co.uk/impact-of-outdoor-education-on-attainment-outcomes-in-Primary-schools/>

- The results of this report indicate that children who participated in the Wilderness School outdoor learning programme increased their attainment in English reading, writing and maths significantly more than children who received conventional classroom tuition, compared to controls. Trajectories of impact indicated attainment continued to increase from baseline in the following weeks after the intervention concluded. These results allow the case to be made for the core curriculum to be conducted outdoors to improve children’s learning.

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Learning Away: evaluation of the benefits of school residential visits; York Consulting / Paul Hamlyn Foundation (2015) <http://learningaway.org.uk/wp-content/uploads/LA-Final-Report-May-2015-1-1.pdf>

- Representative excerpt: “Quantitative data provided by partnerships also highlighted the impact on student achievement. Data was provided which showed that secondary students who attended Learning Away residential improved their performance and achieved higher than their predicted grades (in GCSEs and Highers). Students from one partnership who attended a GCSE maths residential outperformed their peers who did not attend the residential (both groups were C/D borderline students). More than a third of students who attended the residential improved their maths score post residential compared to 14% of their peers and more than two thirds (69%) achieved a C grade in their GCSE compared to none of their peers. Both of these results were statistically significant indicating a conclusive positive impact on achievement.

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Education Endowment Foundation – toolkit of best practices in teaching and learning; website <https://educationendowmentfoundation.org.uk/school-themes/>

Research based Education Endowment Foundation evidenced ‘toolkit’. These practices were considered to be “high or medium” impact, and can be facilitated through outdoor learning. A few examples include:

- Peer tutoring <https://educationendowmentfoundation.org.uk/evidencesummaries/teaching-learning-toolkit/peer-tutoring/>
- Meta cognition and self regulation <https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learningtoolkit/meta-cognition-and-self-regulation/>
- Collaborative learning <https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learningtoolkit/collaborative-learning/>

