

Embracing outdoor learning

Scotland's "rich urban and rural environments" present enormous potential for delivering the Curriculum for Excellence in a meaningful way to engage young people in their learning, as outlined in Education Scotland's key document "Curriculum for excellence through outdoor learning" [1].

A wealth of research highlights the benefits of outdoor learning, from supporting young people's attainment, health and wellbeing, wider achievements and personal development [2]. Education Scotland's 2022 evaluation of "Structural barriers to STEM engagement" [3], carried out by Ekosgen, reports that learners "want their learning experience rooted in the real world" with an emphasis on Learning for Sustainability, climate education and outdoor learning. Meanwhile, the 2022 OECD PISA report "Are students ready to take on environmental challenges?" [4] states that while approximately half of students are "environmentally enthusiastic", there is a curriculum-agency gap where being aware of the issues does not necessarily translate into meaningful action. The opening line of this report states, "Never before have the stakes been so high for the role of science education in shaping how people interact with

the environment". Embracing the outdoors as part of our learning and teaching practice is a fantastic way to respond to these findings and embed Learning for Sustainability, an entitlement for all learners and recognised within the GTCS Professional Standards and HGIOS.

Teacher Insight – Laura Campbell

Laura Campbell, a Teacher of Biology/Science, completed her probation year at Brae's High School in Falkirk and, during this time attended SSERC's Science Probationer Residential course as a delegate. Throughout the course, Laura spoke passionately about outdoor learning:

"We talk so much about Play Pedagogy in Primary and Early Years. But it stops in S1. Why? Learners behave differently outdoors – they play again and there is more freedom."



Laura Campbell, Biology teacher.

As a Biology/Science teacher, Laura had delivered many of her own lessons outdoors and shared some of her favourite outdoor learning activities in Biology (Figure 1).

When learning outdoors, Laura noted changes in behaviour and attitudes among learners; they relaxed and those who were often unmotivated and disengaged started to participate more and enjoy the lesson. Learner voice (Figure 2) reinforced the positive correlation between outdoor learning and a sense of wellbeing [2].

Laura conducted a practitioner enquiry, during her probation year, on outdoor learning. She planned and delivered a whole-school outdoor learning day for the S1 cohort, with subject-specialists across the school adapting a "indoor" lesson for the outdoors. Measures were put in place to ensure the event was inclusive and could continue regardless of the weather on the day. Figure 3 summarises the variety of outdoor learning activities offered. >>

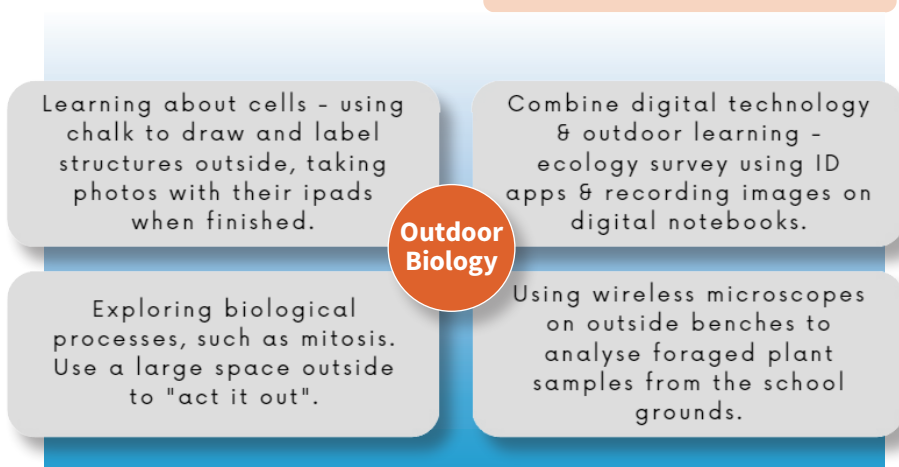


Figure 1 - Laura Campbell shares some of her favourite outdoor learning activities.

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Laura has since taken up a full-time, permanent post at Rossie Young People's Trust, where she delivers the Forest School programme. This Scandinavian approach to learning highlights the importance of young people having regular contact with the outdoors providing opportunities to develop skills and knowledge through experiential learning in a woodland environment.

Six themes emerge from research of the positive impacts of Forest School on young people: confidence, social skills, language and communication, motivation and concentration, and knowledge and understanding [5].

Laura describes Forest School as "a holistic approach to education and aims to be child-led, allowing young people to develop their confidence and self-esteem whilst exploring an alternative environment". Young people can develop their practical skills such as working with tools and woodcraft but also their transferable skills such as communication and



Figure 2 - Learner voice – Outdoor Learning.

teamwork. At Rossie, the team deliver the Forest and Outdoor Learning Award, which allows young people to explore creative and practical activities in the forest, including den building, candle making and pizza making; the young people have even designed and built their own pizza oven (Figure 4 shows some of these learning activities).

The young people at Rossie are currently involved in risk assessing, designing and building a treehouse treehouse with a swing and a rooftop garden.

Laura remarked "What's really nice about Forest School is that young people find it relaxing and enjoyable but there are also so many links >>

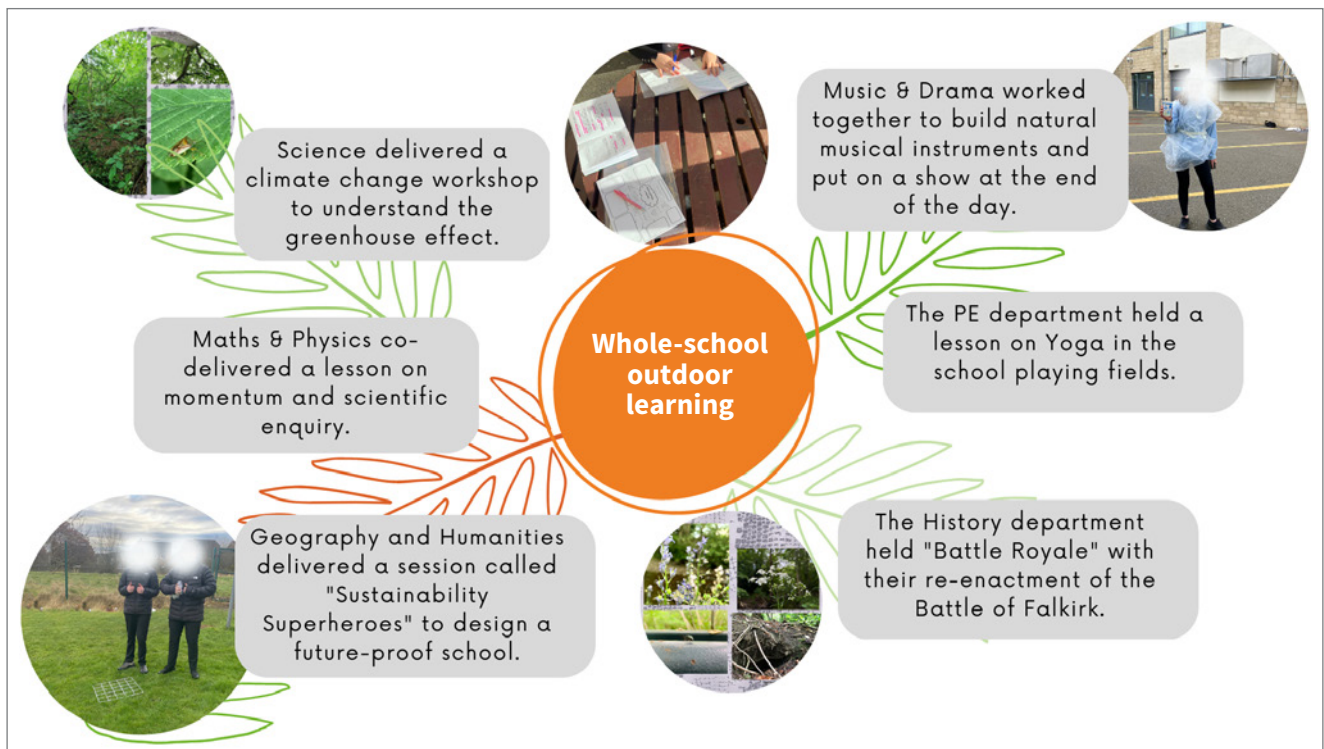


Figure 3 - Sessions delivered outdoors during a Brae's High School Outdoor Learning event in 2022.

Activities & Professional Learning

to the Curriculum for Excellence, particularly to Science.” Rossie are in the process of leading the building of the first secure Forest School site in the UK, which will allow young people in secure accommodation to access a Forest School education.

SSERC Biology Professional Learning

As we move forward as a team at SSERC, we are committed to supporting teachers and technicians with professional learning opportunities that embed outdoor learning and Learning for Sustainability. Our “Techniques for Senior Phase Biology” course in March and the Summer School programme have been reinvigorated to boost these learning activities. In May 2024, we aim to launch our first ecology-focused programme.

SSERC Biology Resources to support Outdoor Learning

A range of materials can be found on the Biology resources page of the SSERC website, including:

- [A health and safety guidance](#) document for fieldwork/ecology.
- [Explore our World](#) – 3 comprehensive practical activities for outside.

Outdoor & Woodland Learning Scotland offers a range of downloadable resources via their [website](#).



Figure 4 - Learning at Rossie Forest School.

References

- [1] Education Scotland (2010), Curriculum for Excellence through Outdoor Learning, Education Scotland, ISBN 978-184399-180-9.
- [2] Education Scotland, Outdoor Learning: Practical guidance, ideas and support for teachers and practitioners in Scotland, Education Scotland.
- [3] Staiano, S., Weaver, R., Whitcomb, R. (2002), The Structural Barriers to STEM Engagement – Final Report for Education Scotland”, Ekosgen. Available at https://education.gov.scot/media/co2dniov/ekosgen-structural-barriers-to-stem-engagement-year-3-report-nov-2022_.pdf.
- [4] OECD (2022), Are Students Ready to Take on Environmental Challenges?, PISA, OECD Publishing, Paris, available at <https://doi.org/10.1787/8abe655c-en>.
- [5] O’Brien, L. (2007), Forest School and its impact on young people: Case studies in Britain, *Urban Forestry & Urban Greening*, 6:4, 249-265.