# The 'Welsh way', outdoor learning within the primary curriculum: a 'fringe add-on or mainstream pedagogical practice'?

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## **ABSTRACT**

The increasingly robust evidence base from across the globe highlights a range of potential benefits for children in engaging with outdoor environments including increased physical development, improved mental health and wellbeing, increased resilience and higher levels of engagement. However, children's access to outdoor environments may be limited by factors such as a lack of available 'safe' spaces, concerns such as 'stranger danger' and a focus on more structured extra-curricular activities during 'out of school' hours. We suggest that schools therefore play a key role in providing opportunities for all children to engage in outdoor environments through outdoor play and learning. This paper provides a reflection of key policy and curriculum changes over the last 25 years in relation to outdoor learning within Wales. It identifies that professional learning is a key factor in ensuring that all primary school educators appreciate the value of outdoor learning. It highlights the need for consistency across primary school settings so that all children within Wales have access to high quality outdoor learning experiences as part of mainstream pedagogical practice. Moreover, it proposes that as we look forward to the next 25 years, accountability should be afforded via the Estyn inspection framework.

**Keywords:** outdoor learning, primary schools, policy, professional learning, pedagogical approach

### Introduction

The purpose of this paper is not to evaluate the effectiveness of outdoor learning within primary schools in Wales, over the last 25 years, per se. Instead, it aims to identify some key points for reflection, which we consider to be of importance as we contemplate the role that outdoor learning can play in children's holistic development over the next 25 years. A recurring theme within this paper is 'variability' including in interpretation, knowledge, application, and quality and how this may impact on the experiences of outdoor learning for individual children. There are clear examples of excellent outdoor learning practices in some schools, but not all, and this may be for a host of reasons that we will try to unpick. The key point is that whilst the evidence suggests that outdoor learning as a pedagogical approach is of benefit to all children, there is the potential that not all children are receiving high quality outdoor learning experiences on a regular basis within primary schools in Wales, particularly within the older primary year groups and this needs to be addressed moving forward. Within this paper, the focus is on mainstream primary schools and as such, the term 'teachers' has been used in a wider context to encompass the role of the teacher and teaching assistants.

### Literature review

Perhaps a key starting point as we reflect on the role of outdoor learning within the primary curriculum in Wales, is to examine why outdoor learning, as a pedagogical approach, is considered of value by drawing upon wider research. It is difficult to define outdoor learning, too broad a definition can become meaningless, whilst too narrow a definition may fail to account for the wide range of activities and locations encompassed within the term. French et al. (2023, p. 7) in their evaluation of the state of outdoor learning in Wales, cite the definition from The Institute for Outdoor Learning report (Anderson, 2021, p. 1) of 'an umbrella term for

actively inclusive facilitated approaches that predominantly use activities and experiences in the outdoors which lead to learning, increased health and wellbeing and environmental awareness'. A criticism of some of the earlier research into the benefits of outdoor learning included the lack of rigour in the design of studies, often relying on perceptions-based data with no control groups and with data analysed by researchers who were already invested in outdoor learning. However, this has changed in recent years with the evidence base consisting of high-quality peer reviewed studies incorporating approaches such as 'wait list' controls and 'blind to condition' measures (Kou, Barnes and Jordan, 2022). It should be noted however, that there has been very little research within Wales over the last decade within this area, perhaps signalling that a review of outdoor learning pedagogy is timely.

In a critical review of the existing international evidence base, Kou, Barnes and Jordan (2022, p.48) confirm that 'experiences with nature do promote children's academic learning and seem to promote children's development as persons and as environmental stewards'. They state that 'Nature-based instruction (NBI) is, on average, more effective than traditional instruction (TI) with incorporating nature adding value to instruction' (e.g., Camasso and Jagannathan, 2018; Ernst and Stanek, 2006 cited in Kou, Barnes and Jordan, 2022). 'Nature' within this context includes experiences of nature across a wide range of contexts ranging from in-wilderness to largely human-made contexts (e.g., a classroom view of a garden). There is also evidence of a 'dose response' relationship, as the dose of outdoors increases, so do the outcomes. They also suggest that 'The nature-learning connection holds up across topics, learners, instructors, pedagogies, places, and measures of learning' (Kou, Barnes and Jordan, 2022, p.50). A striking finding from the review of the evidence base is that nature-based instruction can benefit all children, including disadvantaged (McCree et al., 2018; Sivarajah et al., 2018 cited in Kou. Barnes and Jordan, 22, p. 57), uninterested (Dettweiler et al., 2015; Truong et al., 2016 cited in Kou, Barnes and Jordan, 22, p. 57) and low achieving students (Camasso and Jagannathan, 2018 cited in Kou, Barnes and Jordan, 22, p. 57). There is also evidence to suggest that experiences of nature help children acquire skills and behaviours such as perseverance, self-efficacy, resilience, social skills, leadership skills, and communication skills (Kou, Barnes and Jordan, 2022). To illustrate, McCree, Cutting and Sherwin (2018) undertook a small scale, longitudinal England based study which tracked 11 disadvantaged

children aged 5–7 over 3 years as they participated in forest school activities for one day per week (including school holidays) for three years. The findings suggest positive increases in self-regulation and resilience as well as increased physical and social wellbeing. In addition, there was favourable academic development across subjects compared with their equivalent peers. A key underlying aspect for the effectiveness of this project was identified as the 'emotional space', i.e. the provision of a physical space and the time for children to freely be themselves and express their emotions. In a randomised controlled trial in the US, Wells et al. (2015) examined the effects of a school garden intervention on science knowledge for children aged 6-12 from low-income backgrounds. They found a significant, though modest, positive effect on science knowledge and suggest that time outdoors, experiential learning, and engagement with nature foster the development of the 'whole child'. It is important to note that children differ in their likes and dislikes and some children will respond more positively to outdoor activities than others. Where children find it difficult to conform to an indoor environment, the space and freedom to move and make noise may be liberating, whereas for others, the security of an indoor environment may be preferred, at least initially, until confidence levels can be built. In summary, there are a range of developmental benefits for children in engaging in outdoor learning opportunities which are of a high quality, and ideally, on a regular basis.

## Policy context

The policy landscape in Wales over the past 25 years, has highlighted outdoor learning as an important pedagogical approach, documented in key curriculum changes. For example, the introduction of the Foundation Phase was a pivotal moment in the movement from the more formal, competency-based approach associated with the previous Key Stage 1 National Curriculum (WISERD, 2014). The Foundation Phase was designed to provide a developmental, experiential, play-based approach to teaching and learning and drew upon practices in Scandinavia, Reggio Emilia and New Zealand (Te Whāriki). The policy was progressively 'rolled-out' so that by 2011/12 it included all 3 to 7-year-olds. The approach highlighted the importance of children's wellbeing and advocated a balance of child-initiated and

practitioner-directed (or practitioner initiated) activities within stimulating indoor and outdoor environments which provided opportunities to 'take risks' and 'become confident explorers' (DCELLS, 2008, p. 16). Subsequently, a recommendation from the evaluation of the Foundation Phase (WISERD, 2014, p. 7) was that 'Practitioners should be encouraged to use a variety of 'learning zones', both indoors and outdoors, more frequently. Exemplar materials should be developed for practitioners as a reference on how best to utilise these 'learning zones'.' In October 2014, the Welsh Government published further guidance to schools, Further Steps Outdoors: making the most of your outdoor spaces for schools and early years settings, to develop their outdoor practice and provision in the Foundation Phase (Welsh Government, 2014). This guidance mirrored findings from the research literature and as such, had the potential to provide a solid basis for the development of outdoor provision. Advice included: 'There should be opportunities for children to follow their own interests and lines of enquiry through free play balanced with adult-led activities that support skills development outdoors, every day, whatever the weather' (Welsh Government, 2014, p. 3). The guidance highlighted the importance of giving children the time and space to develop their play, learning and understanding. It identified that, outdoors, 'children are often observed being more absorbed in their own thinking, learning and exploration and so it is important that they are afforded the time to develop their lines of enquiry and skills. How long children spend outdoors will depend on the setting/school, the activities and their levels of engagement but they should be afforded as much time as possible in order to consolidate learning and skills' (Welsh Government, 2014, p. 4). The examples given cover a range of opportunities for adventure, fantasy and imaginative play and for developing skills such as empathy and working with others. It does not promote a 'drag and drop' approach whereby typically indoor based activities are moved outdoors on sunnier days. Perhaps a key message from this document is that children need time to engage with the outdoor environment on a regular basis.

More recently, driven by a desire to raise standards for all and to tackle the attainment gap, the Curriculum for Wales was introduced from 2022. The new curriculum, spanning from ages 3–16 years, enables schools to develop a curriculum that meets the needs of their pupils whilst following the curriculum framework (Welsh Government, 2022). Within the guidance provided on pedagogical approaches (Welsh

Government, 2023a, n.p.) it states that '[b]eing outdoors is particularly important for learners in this period of learning', suggesting that this is important for learners across all age ranges. It states that a range of benefits can be gained from learning outdoors including high levels of well-being, confidence and engagement with opportunities for social, emotional, spiritual and physical development, as well as providing authentic opportunities for learners to develop and consolidate crosscurricular skills. It suggests that the use of the outdoors can help learners to explore, practise and enhance their skills. Perhaps in line with the ethos of the new curriculum, the guidance seems rather broad and is open to interpretation by settings as part of their curriculum planning. As Bilton and Waters (2017) in a comparative study of early years outdoor provision in Wales and England identified, the values underpinning the practice of teachers in both countries were influenced by the related curriculum documentation. This highlights the importance of the policy documents to 'get it right' in terms of providing an appropriate level of detail and communicating it in a suitable way to the teachers who are putting the policy into practice.

#### Curriculum context

The Curriculum for Wales guidance acknowledges that, in order to fully harness the benefits of outdoor learning, it is essential to have enabling adults who understand its significance and value (Welsh Government, 2023a). Without this, outdoor learning may be seen as a 'bolt on', or filler or reward and this may impact on the quality of experience for children and the regularity of outdoor activities. Some teachers may also find it difficult to 'let go' and allow children to take the lead in their learning (Maynard and Chicken, 2010). The Wales Council for Outdoor Learning noted in their response to the 'Draft Curriculum for Wales consultation document' (2019) that the guidance in the new curriculum lacked sufficient detail for inexperienced and less knowledgeable teachers, therefore the existing inconsistencies in the quality of outdoor learning provision could be compounded. They proposed that training should be provided to upskill teachers but noted that there was little time or financial support available for training in this area.

The bottom line is that each teacher will be responsible for planning the opportunities for outdoor learning and as such, have control over both the quality and frequency. There are a few caveats to this, however. Individual teachers need to feel supported by their leadership team and this must be sustained over time, irrespective of other curriculum pressures. As highlighted by Edward-Jones, Waite and Passey (2018) in a study in Southwest England, teachers experienced challenges in balancing outdoor learning with other dominant performance measures, new competing directives and externally driven initiatives. For example,

There was great excitement about four years ago with forest skills, where much training and effort was put in, but then other priorities came along. (Primary, Deputy Head) (Edwards Jones, Waite and Passey, 2018, p. 53)

There was also pressure placed on teachers, in this English study, to prove the value of their pedagogic practice, largely through dependence on written records and to make specific curriculum links (Edwards-Jones, Waite and Passey, 2018). Another caveat, is that teachers need appropriate and safe outdoor spaces and the resources needed to provide high quality learning experiences, including appropriate staffing levels.

# Pedagogic context

The importance of teachers being highly skilled in outdoor learning is also apparent within the findings of French et al. (2023) in a recent Welsh Government-funded study of the state of outdoor learning in Wales. Whilst the sample size was very small (n=9) and may not be representative of the wider school population, the study identified that outdoor learning is seen as insufficient for covering all aspects of the curriculum, and teachers need more assistance if they are to use the pedagogy effectively. Whilst 50 settings were approached to take part in the evaluation, only 9 schools chose to take part in the survey; (n=4) Primary schools, (n=2) Secondary schools, (n=2) Independent schools and (n=1) Special school and only one school completed the survey over a 4-week period, the rest provided one response only. However, based on the findings, the authors conclude that it:

demonstrated the need for teachers and other education stakeholders to be educated about how outdoor learning can be used as a teaching approach to deliver the whole curriculum. Additionally, practitioners need to learn how, when,

and why to use outdoor learning to benefit the development of children and enhance teaching and learning experiences. If teachers and support staff believed in the value of outdoor learning and were supported in their endeavours to accomplish these aims, it is possible that outdoor learning would turn from a fringe add-on to a mainstream pedagogical practice throughout Wales. (French et al., 2023, p. 26)

Teachers therefore need to be skilled at implementing outdoor learning as a pedagogical approach. As such, this requires it to be embedded within professional development. This is echoed in the work of Bozkurt (2021 cited in French et al., 2023) who highlights the importance for all teacher education programmes to include pedagogical expectations for outdoor learning and how this pedagogy can become an integral part of the entire school curriculum. Professional learning will play a key role in equipping teachers with the knowledge and skills that they need to provide high quality outdoor learning opportunities. Over a decade ago, Waite (2010) in a study in the Southwest of England, identified that teachers had very little or no input in their professional learning on the use of the outdoors. It is noted that the newly released Criteria for the accreditation of initial teacher education programmes in Wales: Teaching tomorrow's teachers (Welsh Government, 2023, p. 37) makes one brief mention of outdoor classrooms as an authentic learning environment and one mention of 'outdoors' as a form of learning environment under the heading 'Blended learning experiences' (Welsh Government, 2023, p. 48). The danger here is that unless there is appropriate taught coverage of outdoor learning as a pedagogical approach, then pupils are at risk from a 'lottery' of whether their newly qualified teacher has the knowledge and skills required to provide high quality outdoor learning experiences.

This is reinforced by the Wales Council for Outdoor Learning who noted in their response to the 'Draft Curriculum for Wales (2019) consultation document', that since the outdoor environment is mentioned in the pedagogical principles of the new curriculum, it is important that student teachers are given opportunities to learn about and practice the skills for delivering in the outdoor environment. To encourage consistency across Initial Teacher Education (ITE) providers, it would seem to make sense for this to be incorporated within the taught element by each provider. In addition, professional learning is considered essential to develop the confidence levels and knowledge of those already employed in primary settings. This includes teachers and support staff. The need for all staff to be trained is highlighted within the observations

of outdoor learning as part of the evaluation of the Foundation Phase, back in 2014, (WISERD, 2014, p. 63), where:

Children were more likely to be observed outdoors with an additional practitioner, or alone, as opposed to being in the presence of a teacher. Of the 410 individual child observations recorded outdoors, 51% were with an additional practitioner, whereas only 17% were with a teacher. The remaining 32% were recorded as 'child acting without adult support'.

The authors proposed that this may indicate the specific value teachers place on outdoor learning. Similarly, Maynard, Waters and Clement (2013) found that the outdoor context for Foundation Phase learning was often undervalued, with vague or ill-defined understandings of outdoor learning as a pedagogical approach and a perception that 'real work' took place inside the classroom and was focused on specific learning outcomes and the learning of 'subjects'. Whereas the outdoors was seen only for informal learning and play.

As well as professional development, teachers must also have the willingness to engage with this form of educational development. Whilst the availability of professional learning is considered essential to 'up-skill' teachers, this also requires teachers to engage with such opportunities. Referring back to the Foundation Phase, WISERD (2014) in its evaluation found that only 66% of teachers and, only 37% of school 'Additional Practitioners' had completed all eight Welsh Government Foundation Phase professional learning modules. Whilst this does not directly relate to outdoor learning, it does highlight that staff need the motivation and time to engage with professional learning.

# Impact of teacher's own childhood experiences

Another factor which may impact on the perceived value of outdoor learning may be the practitioner's own outdoor experiences in their youth (Waite, 2010). As a teaching team on an outdoor play and learning module, one of the first activities that we ask undergraduate students to engage with, is to reflect on their first play memories. For over a decade, the overarching response was 'outdoors' with adjectives such as fun, autonomy, freedom, adventure, risk and 'with friends' used to describe their experiences. However, our perceptions are that there has been a

noticeable shift in recent years with an increased focus on 'indoors', 'in my bedroom'. There are a number of possible reasons for this including physical location and a lack of safe outdoor spaces, 'stranger-danger', lack of outdoor opportunities within the curriculum and a lack of perceived value from parents and carers who may favour more structured play activities such as attending sports clubs (Little, Elliott and Wyver, 2017). However, in many cases, our future teachers are our current pupils and if they are not gaining first hand experiences of regular, high quality outdoor learning then this may impact negatively on their perceptions of the importance of this pedagogical approach. Edwards-Jones, Waite and Passy (2018) suggest that senior school leaders have a key role to play in supporting staff with professional learning. Where there is enthusiasm from senior leaders, Waite (2010, p. 114) suggests that 'local sociocultural expectations about the use of the outdoors may serve to override personal disinclination or other external barriers to this powerful pedagogic approach'.

# Future accountability

The current approach seems to compliment those settings which make the most of the outdoor areas available with many examples within inspection reports of schools performing well in these areas and receiving positive feedback. However, there seems to be little steer towards encouraging this pedagogic approach more widely. For there to be accountability for providing high quality outdoor learning opportunities across Wales, we suggest there needs to be the targeted evaluation of outdoor learning provision by Estyn in their inspection framework.

## Conclusion

To conclude, providing regular access to safe, outdoor spaces where teachers facilitate well thought out opportunities for children to learn, consolidate and extend their learning, whilst connecting with nature provides a valuable pedagogical approach. It can enrich curriculum delivery, whilst also providing opportunities to develop important skills such as self-regulation, resilience, and empathy. Whilst free play is considered an important aspect of outdoor pedagogy, as Maynard, Waters

and Clements (2013) suggest, providing children with the opportunity to explore and play in the outdoor environment is not, in itself, enough. This call for learning to be focussed, rather than ad-hoc, is further supported by Gilchrist and Emmerson (2016, cited in French et al., 2023, p. 27) who highlight that 'schools require support to build their knowledge and confidence to deliver curricular learning outdoors in a creative and effective way; thus, recasting outdoor learning as a pedagogy'. This is further supported in the recent evaluation in Wales by French et al. (2023, p. 8), that:

understanding outdoor learning takes time, and this project clearly indicates that further work must be done to understand teachers' perspectives and beliefs about the power of outdoor learning, and to determine how best to educate teachers and schools about its pedagogical power.

To achieve the level of outdoor learning that really benefits children, teachers need to be skilled at implementing outdoor learning as a pedagogy. This requires professional learning and teachers' willingness to embrace this form of educational development (Maynard, Waters and Clements, 2013). In addition, teachers need to feel supported by the school leadership team and have an appropriate outdoor area and resources available to them. We also need to give additional attention to the needs of older children within the primary school. French et al. (2023, p. 11) note that 'as children get older, there are less references to the need for outdoor learning; instead, the concept is portrayed as more of a 'bolt on' to the 'normal' curriculum instead of something that is at its heart. Even with the development of the new Curriculum for Wales, there are very few references to the benefits and need for outdoor learning in the curriculum' (French et al., 2023, p. 11). As we move into the era of the new Curriculum for Wales, we are drawn back to the need for consistency in experience for all pupils, with all pupils in Wales experiencing regular, high quality outdoor learning opportunities, provided by knowledgeable teachers who understand the value that this pedagogical approach can bring. To enable this, as a starting point, we need all student teachers and classroom teachers to receive appropriate professional learning allowing for knowledge and skills development and the sharing of best practice for utilising the outdoors as a purposeful learning area. To raise and sustain the profile of outdoor learning, the Estyn Inspection Framework needs to recognise and value the

importance of outdoor learning and incorporate it within the inspection framework to provide an element of measurement and accountability. These are important first steps in encouraging the embedding of outdoor learning within the curriculum and by doing so, shift its position from a 'fringe benefit' to a mainstream pedagogical practice.

# References

- Anderson, N. (2021). 'Describing Outdoor Learning', The Institute for Outdoor Learning Report, pp. 1–7. Available at https://www.outdoor-learning.org/ standards/outdoor-learning/about-outdoor-learning.html (accessed 2 May 2024).
- Bilton, H., and Waters, J. (2017). Why Take Young Children Outside? A Critical Consideration of the Professed Aims for Outdoor Learning in the Early Years by Teachers from England and Wales, *Social Sciences*, 6 (1), 1–16. DOI:10.3390/ socsci601000.
- DCELLS (2008). The Foundation Phase: Framework for children's learning for 3 to 7-year-olds in Wales. Cardiff: WAG.
- Edwards-Jones, A., Waite, S. and Passy, R. (2018). Falling into LINE: school strategies for overcoming challenges associated with learning in natural environments (LINE), *Education 3–13*, vol. 46, (1), 49–63, DOI: 10.1080/03004279.2016.1176066.
- French, G., Parry, D., Jones, C., McQueen, R., Boulton, P., Horder, S., Rhys-Jones, K., Formby, L., Sheriff, L., Sheen, L. (2023). *Teaching and learning in the outdoors: the current state of outdoor learning in schools in Wales*. Available at: https://hwb.gov.wales/professional-learning (accessed 3 May 2024).
- Kuo, M., Barnes, M. and Jordan, C. (2022). Do experiences with nature promote learning? Converging evidence of a cause and effect relationship. In: Jucker, R. and von Au, J. (eds), *High quality outdoor learning: Evidence-based education outside the classroom for children, teachers and society.* Switzerland: Springer, pp. 47–66.
- Little, H., Elliott, S. and Wyver, S. (eds) (2017). Outdoor learning environments; spaces for exploration, discovery and risk taking in the early years. Abingdon: Routledge.
- Maynard, T. and Chicken, S. (2010). Through a different lens: Exploring Reggio Emilia in a Welsh context. *Early Years: An International Journal of Research and Development*, 30 (1), 29–39. DOI: 10.1080/09575140903443000.
- Maynard, T., Waters, J. and Clement, J. (2013). Moving outdoors: further explorations of 'child initiated' learning in the outdoor environment. *Education* 3–13, 2013, 41 (3), 282–99. DOI: 10.1080/03004279.2011.578750.
- McCree, M., Cutting, R. and Sherwin, D. (2018). The Hare and the Tortoise go to Forest School: taking the scenic route to academic attainment via emotional wellbeing outdoors, *Early Child Development and Care*, 188 (7), 980–96. DOI: 10.1080/03004430.2018.1446430.

- 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), 111–26.
- Wales Council for Outdoor Learning (2019). Draft Curriculum for Wales 2022 guidance: feedback. Available at: e90ee2\_cc5761376fe246b8aaf06836f4658d68. pdf (walescouncilforoutdoorlearning.org) (accessed 7 May 2024).
- Wells, N., Myers, B., Todd, L., Barale, K., Gaolach, B., Ferenz, G., Aitken, M., Henderson C., Tse, C., Pattison, K., Taylor, C., Connerly, L., Carson, J., Gensemer, A., Franz, N. and Falk, E. (2015). The Effects of School Gardens on Children's Science Knowledge: A randomized controlled trial of low-income elementary schools, International Journal of Science Education, 37 (17), 2858-78. DOI: 10.1080/09500693.2015.1112048.
- Welsh Government (2014). Further steps outdoors: making the most of your outdoor spaces for schools and early years settings. Available at https://hwb.gov.wales/ storage/37952a30-6aa6-4a64-be8c-6710dbd25d8c/further-steps-outdoors.pdf (accessed 5 May 2024).
- Welsh Government (2022). Developing a Vision for Curriculum Design. Available at https://hwb.gov.wales/curriculum-for-wales/designing-your-curriculum/ developing-a-vision-for-curriculum-design (accessed 15 April 2024).
- Welsh Government (2023a). Pedagogy. Designing your curriculum. Available at https://hwb.gov.wales/curriculum-for-wales/designing-your-curriculum/ pedagogy/ (accessed 16 April 2024).
- Welsh Government (2023). Criteria for the accreditation of initial teacher education programmes in Wales: Teaching tomorrow's teachers. Available at for-ite-programmesaccredited-to-commence-from-1st-september-2024.pdf (gov.wales) (accessed 27 March 2024).
- WISERD (2014). Evaluating the Foundation Phase: Final Report, Cardiff: Welsh Government. Available at https://www.gov.wales/sites/default/files/statisticsand-research/2019-07/150514-foundation-phase-final-en\_0.pdf (accessed 5 May 2024).