

Academic Piece

Carbon Chain (no date) and Greenpeace (2024) suggest that sustainability is meeting the needs of the present without threatening the ability of future generations to meet their own needs. Sharman (2021) and UCLA (2025) note that this involves striking a balance between environmental protection, economic development, and social equity, which is often referred to as the three pillars of sustainability.

The United Nations (UN) has played an important role in promoting and encouraging sustainability worldwide. Jarvie (2025) suggests that an important contribution was the Brundtland Report, also known as 'Our Common Future', published in 1987 by the United Nations' World Commission on Environment and Development.

Following the Brundtland Report of 1987, which first defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own, Fondation Yves Rocher (2022) adds that summits built on that report and have taken place every ten years, with the 1992 Earth Summit (UNCED) marking a significant step forward in how the world addresses environmental issues. It helped turn the idea of sustainability into tangible actions and plans.

Countries were encouraged to work on protecting nature, growing their economies, and making life fairer for everyone, all at the same time (European Environment Agency, 2017; Wealth, 2018).

Furthermore, in 2015, the United Nations adopted the 2030 Agenda for Sustainable Development, which includes the seventeen Sustainable Development Goals (SDGs). The goals aim to provide an international model for achieving a sustainable future for all by 2030, highlighting the importance for humanity and the planet (United Nations, 2015; United Nations, 2024).

Sustainability is increasingly recognised as a key part of Early Years education, promoting lifelong values and positive environmental behaviours (The Education Hub, 2025). Sustainability in the early years can provide an opportunity to teach the values of responsibility, care, and respect for others and the planet (Nursery Management Show, 2024). This also aligns with the United Nations Sustainable

Development Goals (SDGs), the Well-being of Future Generations (Wales) Act 2015, and the United Nations Convention on the Rights of the Child (UNCRC), which was later incorporated into the new Curriculum for Wales in 2022. Whilst there may be great support for sustainability in written policies, implementing it requires careful consideration to ensure it is fair, makes a real difference, and meets the needs of communities while being developmentally appropriate for the children (Boyd *et al*, 2021; Butler Diaries, 2023).

According to Corbyn (2018), the Well-being of Future Generations (Wales) Act 2015 is a legislative piece introduced by the Senedd. Furthermore, the act was developed in response to growing concerns such as climate change, social inequality, and the increasing need for sustainable development. Wales became the first country in the world to legislate for the well-being of future generations and is the only country in the world, still after 10 years, to have a Wellbeing of Future Generations Act that places a duty on local authorities to consider the long-term impact of their decisions (Future Generations Commissioner for Wales, 2025a).

Similarly, the Wellbeing of Future Generations (Wales) Act (2015) aligns with the Brundtland Report (1987), the Earth Summit (1992), and the United Nations 2030 Agenda for Sustainable Development (2015), sharing the same core principles (Future Generations Commissioner for Wales, 2025b; Davies, 2017). According to the Welsh Government (2025), the Act establishes seven well-being goals, including a healthier, more equal, and globally responsible Wales. Furthermore, it is suggested that these goals should guide policy and practice across all early years environments, taking into account the long-term impact on children. Additionally, the Wellbeing of Future Generations (Wales) Act (2015) has played an important part in shaping the Curriculum for Wales, with sustainability embedded throughout and reflected in the vision for developing ethical, informed citizens of Wales and the World.

Sustainability is intertwined into the Four Purposes of the curriculum for Wales, which encourages learners to become responsible and environmentally conscious. It is also embedded across the six Areas of Learning and Experience (AoLEs). For example, in Humanities, children explore climate change, equality, and the impact humanity can have on the planet (Welsh Government, 2019a). Additionally, Science and Technology

encourage an understanding of renewable energy, ecosystems, and innovation for a sustainable future (Welsh Government,2019b). Health and well-being are supported through sustainable lifestyles, which promote mental, physical, and social health (Welsh Government, 2020). Long (2020) and the Welsh Government (2022) note that incorporating health and wellbeing at the core of the new curriculum can significantly reshape education for children.

The curriculum for Wales adopts a child-centred, hands-on approach to learning, and it also highlights that outdoor learning and exploration play a key role in developing environmental awareness (Welsh Government,2023a). Furthermore, Education through Regional Working (2020) suggests that outdoor learning helps children connect with their local area and develop a sense of ‘Cynefin’ (belonging). Therefore, these hands-on, experiential learning opportunities enable children to explore and respond to environmental and social issues that may be around them or the impact that they may have on the environment. Moreover, by embedding sustainability at every level, the Curriculum for Wales can ensure that children gain the knowledge to care for and shape a fairer, more sustainable Wales, aligning with UNESCO's Education for Sustainable Development (UNESCO, 2021).

Whilst hands-on, child-led learning is a core component of the Curriculum for Wales, which promotes children's autonomy, authentic experiences, and real-world problem-solving, it also embraces UNESCO's Education for Sustainable Development (ESD), encouraging children to engage with environmental and social issues through actions such as, growing food, exploring nature, and reducing waste (Welsh Government,2022; Welsh Government,2023b; UCL,2023). Furthermore, this is supported by John Dewey's (1938) philosophy, which states that children learn best through experience and participation, and additionally suggests that they should be active citizens, ready to contribute positively to society (Philosophies of Life, 2025).

According to Gillogly (2021), John Muir believed that children should spend time outdoors in nature. He felt that nature was something to be explored and connected with. Adding that time spent in nature promotes a positive relationship with nature, encouraging respect and care. Participating in the John Muir Award can support

children in learning about nature and how to care for it, while also supporting Education for Sustainable Development by encouraging children to engage with the outdoor environment and reflect on their responsibilities (The Outdoor Learning Trail,2018). Moreover, this aligns with the Curriculum for Wales in developing ethical, informed citizens of Wales and the world, as well as healthy, confident, and capable learners (John Muir Trust,2022a). Additionally, John Muir Trust (2022b) suggests that the award supports children in engaging with authentic outdoor experiences, thereby promoting learning across the Areas of Learning and Experience (AoLEs).

Many theorists, such as Froebel, have highlighted the importance of outdoor play, exploring nature and hands-on learning. He believed that nature was essential for learning, with the natural environment serving as a key element in understanding life (Froebel Trust,2019). Furthermore, Maria Montessori emphasised a hands-on approach to learning, noting that nature has a calming and educational influence. She believed that direct contact with nature helps children develop a respect for the environment and a sense of responsibility towards it (Maunz, 2022; Montessori Children's House, 2025).

A key aspect of the John Muir Award is learning through Nature, which strongly aligns with the themes and aspirations of Education for Sustainable Development (ESD) and supporting the Life on Land goal from the SDGs, these are interconnected through education (United Nations,2023; UNESCO,2023a). The John Muir Trust (2024) suggests that learning in nature can help children understand how everything in the environment is interconnected and works together, promoting empathy, respect, and responsibility. These are core aspects of ESD's vision for a just and sustainable world.

According to The i-School (2024), nature walks can encourage children to observe animals, insects, habitats, and the planet's beautiful landscapes. This can ignite a natural curiosity and support exploration and scientific enquiry-based learning. Furthermore, Tovey (no date) and Montessori Partnership (2021) suggest these experiences highlight the beliefs of Froebel and Montessori regarding nature as an important learning environment, as well as the value of exploration in fostering critical

thinking and sensory development (Paths of Learning, 2025). The John Muir Award can enhance this through creativity and expression, utilising the 'Share' aspect.

The John Muir Award promotes Education for Sustainable Development (ESD) through outdoor learning experiences. This aligns with Dewey's (1938) experiential learning theory, which supports much of ESD pedagogy. By walking through diverse ecosystems, learners develop a sense of place, thereby deepening their understanding of biodiversity and environmental interconnectedness (Pacho, 2015). Heathfield Knoll School (2024) states that outdoor learning is not without challenges.

One of the challenges is access and inclusivity. Although the Award aims to be flexible and accessible to all, not all schools or early years settings have access to wild spaces or green landscapes, particularly in urban or disadvantaged areas (Wildlife and Countryside, 2024). Furthermore, for those living in more urban areas, additional costs may prevent or reduce access to green spaces. These constraints can limit the opportunities for these meaningful outdoor experiences, potentially excluding children from nature-based activities. The Department for Education (2018) states explicitly that if voluntary contributions for a visit cannot be made or sourced in another way by the school, then the trip must be cancelled. However, both England and Wales aim to develop more accessible and greener spaces for those living in urban and disadvantaged areas (Public Health Wales, 2024; Public Health England, 2020).

Another barrier to implementing nature walks within early years and education is the lack of trained staff for outdoor provision. (Ellis *et al.*, 2024a). This impacts the aims of the Curriculum for Wales, particularly in supporting learners to become ethical, informed citizens and healthy, confident individuals. Furthermore, without trained staff, activities may be poorly planned, irregular, or avoided due to safety concerns and workload pressures French *et al.*, (2023, cited by Ellis *et al.*, 2024b).

Walker *et al.* (2021) and Waite *et al.* (2016, cited by Watts, 2021) state that teachers may lack confidence or the capacity to lead outdoor sessions. This may limit learners' opportunities to explore, question, and connect with the natural world. However, Pacey (2025a) states that practitioners do not need to know what to do, but rather that they

can co-learn with the children, explore through the senses, and enjoy the sights and sounds of nature with them. Furthermore, Pacey (2025b) adds that this can encourage the children to find answers to their own questions. This would encourage critical thinking and reflection, aligning with the Curriculum for Wales, which aims to develop ambitious, capable learners (Welsh Government, 2020).

Early years practitioners can develop and ‘take action’ by combining outdoor learning and environmental stewardship, as seen in the ‘Conserve’ aspect of the John Muir approach, in early years settings (Active Learning Centre, 2023). This could be achieved through activities such as planting, building bird boxes or bug hotels, and litter picking (We Are Adventurers, 2024). According to National Geographic Kids (2024), litter picking can be both fun and educational, teaching children to respect and care for the natural environment. This approach aligns with Education for Sustainable Development (ESD) and SDGs by having respect for nature, promoting active citizenship, and cultivating a sense of responsibility (UNESCO, 2023b). Furthermore, Piaget’s constructivism theory suggests that children learn through concrete experiences (McLeod, 2025). In this example of taking action, children can begin to understand the impact of litter on the environment and why it is necessary to dispose of litter in the bin.

‘Taking action’ has its challenges. For example, litter picking may highlight key issues such as health and safety. Scouts (2025) suggest that preparing for a litter pick involves completing a risk assessment, providing PPE, ensuring adult supervision, teaching hygiene, setting clear safety boundaries, and gaining parental consent to ensure children’s safety. This is particularly important when litter-picking in public areas. Furthermore, organising a litter pick with children can be time-consuming due to the need for careful planning, staff organisation, and risk assessments to ensure the health and safety of both children and staff (Keep Britain Tidy, 2024). Moreover, this may contribute to risk aversion, with practitioners opting for less complex or lower-risk activities, thereby reducing opportunities for taking action on sustainability. In an interview, Dame Judith (cited by The Headteacher, 2017) stated that children were being negatively impacted by an overly cautious culture in schools. According to Sustainability for Education (2024), the Department for Education requires all settings

to have a sustainability lead and co-ordinator by 2025. Additionally, a sustainability team within a setting can collaborate to discuss, plan, and prepare sustainable practices and activities. Main (2022) suggests that having shared responsibilities can reduce the workload. This may reduce risk aversion.

To conclude, Sustainability is a core principle shaping global and national policies, educational frameworks, and early years pedagogy. From the Brundtland Report to the United Nations Sustainable Development Goals and the Well-being of Future Generations (Wales) Act (2015), there is a clear commitment to building a more just, equitable, and environmentally responsible future. The Curriculum for Wales demonstrates how these principles can be meaningfully embedded in early education through its focus on hands-on, child-led, and outdoor learning, thereby developing ambitious, capable learners and ethical, informed citizens.

Tools like the John Muir Award further support this by offering experiential opportunities that align with the Four Purposes and encourage a deep connection with the natural world. However, for sustainability education to be truly impactful, it must be accessible, inclusive, and responsive to the developmental needs of young learners. With the correct support and implementation, early years education in Wales has the potential not only to teach sustainability but also to embody it, empowering children to become ethical, informed, and active global citizens.

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