

Module: ECEY6005

Regaining Paradise? Sustainability in the Early Years

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AI Declaration -

I acknowledge the use of Google Scholar [<https://scholar.google.com/>] between period:

(15/06/2026- (14/07/2026) to help search for relevant academic journals and literature which are not always available via the university online library.

The following prompt themes were used:

- Sustainability in the Early Years
- Environmental education in the Early Years
- Educator attitudes to sustainability pedagogy in the Early Years
- Froebelian pedagogy

I confirm that I have not presented any other AI generated text as my own work. I confirm that I have copies of my drafts, notes, and other resources I used before, and after the use of AI tools which I may be asked to provide as evidence.

**All photographs, video content and artwork used in my digital scrapbook are my own unless stated*

Link to Digital Scrapbook:

ECEY6006- Sustainability Scrapbook.mp4

Scrapbook Reference List

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Link to recorded presentation:

[ECEY6005 - Sustainability in the Early Years Recorded Presentation.mp4](#)

Presentation Script**Part One: Reflection**

Hello, my name is Emily and thank you for taking the time to access my presentation today.

This presentation forms part of the final module of my undergraduate degree, *Sustainability in the Early Years*. As part of this module, I completed a practical sustainability project contributing towards the John Muir Award. In this first section, I will reflect on the learning experiences I gained while working towards the award and how they shaped my understanding of sustainability.

I chose to focus on a green space that played a significant role in my own early childhood: The Sandies Park and Harlequins Playing Field in Cardiff. Growing up in a capital city, I was fortunate to have access to this field and park area behind my family home. It became a place of adventure, learning, and connection with nature.

Revisiting this space as an adult allowed me to see it through a different lens. I found myself thinking about how younger Emily might have approached the John Muir Award, perhaps less interested in the history of the area or the litter, and more absorbed in imaginative play and fishing! Yet the investigation, observation, and conservation activities I completed reminded me how important it is to protect these spaces so they can continue to support both people and wildlife, especially within built-up cities.

In the *Discover* section of my scrapbook, I explored the history and location of the area and reflected on why it holds such importance for me. Revisiting the field also rekindled childhood memories, including campaigning with friends when plans were made to fence it off, an effort that even made the local newspaper! Younger Emily was a Girl Scout, actively involved in outdoor activities and conservation awards. Completing the John Muir Award made me question why these actions are no longer a priority in such a busy adult lifestyle. What changes as we grow older? And how realistic is it for people living fast-paced, technology-driven lives to take time not only to enjoy nature but also to protect it?

During my exploration, I focused on three main areas: the impressive variety of trees, the diverse plants and minibeasts, and the brook, my favourite childhood spot, where I spent hours with my bucket, bamboo- cane net and wellington boots!

Trees

Exploring the trees helped me appreciate the beauty and maturity of the specimens in the area. Their accessible trunks encouraged close observation, and I experimented with bark rubbing as an activity that could support children in exploring natural materials. Slowing down to notice small details highlighted the value of slow pedagogy, where meaningful observation and curiosity are prioritised over rushing to complete activities. It also made me reflect on how busy early years environments can sometimes overlook opportunities for sustained engagement with nature.

Noticing signs of storm damage prompted further reflection. Although storms such as Storm Darragh, Eunice, and Amy are often discussed, seeing their effects first-hand was striking. It made climate change feel much more immediate, not a distant issue, but something visible in local spaces and communities.

Plants, Minibeasts, and Creativity

While exploring the plants, shrubs, and grasses, I encountered a variety of minibeasts. I took some mindful time to paint my observations, something I rarely make time for but hope to continue. Identifying caterpillars required additional research, reminding me that educators do not need to have all the answers. Children and adults learn alongside one another, and this experience increased my confidence in researching unfamiliar topics. It also made me think about how children would enjoy discovering small creatures and how activities such as creating a bug hotel could support biodiversity. I shared this idea with a colleague at my early years setting.

The Brook

The brook holds many cherished childhood memories, but it has recently been affected by a serious pollution incident. In June 2026, chemicals contaminated the water, killing many fish and making the area unsafe for wildlife and the community. I discuss this event in my scrapbook. Despite the damage, I observed encouraging signs of recovery that included various fish, aquatic insects, and moorhens returning, which filled me with hope while also reinforcing my sadness and frustration about the incident.

Conservation Actions

The *Conserve* element of the John Muir Award encouraged me to consider practical ways of caring for the area. With support from university peers, I created an apple bird feeder,

demonstrating how conservation can be simple, enjoyable, and accessible for both children and adults.

I also decided to go litter picking. Although the area initially seemed relatively clean, closer inspection revealed litter buried under grass, tangled in bushes, and trapped under river rocks. This is an activity I plan to continue, especially when walking the dogs with my parents, along with the *dog poo* bags!

Researching local environmental groups introduced me to community litter-picking events and the Cardiff Rivers Group, which carries out conservation work in local waterways. These are opportunities I hope to support in the future.

Sharing Learning

Throughout the award, I shared my findings in many ways: discussions with university staff and peers, conversations with local people, sharing insights with friends and family, and exploring learning activities with colleagues. These small actions highlighted how everyday choices and conversations can promote sustainability and appreciation of the natural world.

Reflection Summary

Overall, the most valuable aspect of completing the John Muir Award was reconnecting with a place that shaped my childhood whilst viewing it through a new lens as an adult and educator. The experience deepened my understanding of sustainability by showing how environmental issues, biodiversity, conservation, and community action are interconnected. It reminded me that meaningful change often begins with small actions and that everyone has a role in protecting natural spaces. Moving forward, I hope to continue supporting local conservation efforts and encourage children to develop curiosity, responsibility, and connection with nature.

Part Two: Academic Section

I will now move on to the academic part of my presentation where I will aim to critically evaluate the role of sustainability in early years education and examine how nature-based experiences, such as those completed through the John Muir Award, can support Education for Sustainable Development (ESD). I will also explore how these experiences can help develop environmental awareness, stewardship, and lifelong sustainable values in young children.

Sustainability

So, what is sustainability?

Sustainability is often linked to protecting the environment; however, current understandings view it as a much broader concept (Borg and Samuelsson, 2022; Engdahl and Furu, 2022). It is commonly understood through three interconnected dimensions: environmental sustainability, social sustainability, and economic sustainability. Together, these dimensions focus on meeting the needs of people today without compromising the ability of future generations to meet their own needs (Brundtland, 1987; Borg and Samuelsson, 2022).

Sustainability is also increasingly connected to social justice, children's rights, wellbeing, and global citizenship, recognising the close links between environmental and social issues (Dean and Elliott, 2022; Engdahl and Furu, 2022).

In recent years, in Wales and beyond, there has been growing recognition that young children have an important role in creating a more sustainable future (Welsh Government, 2024). Early childhood is a key stage of development during which attitudes, values, and behaviours begin to form (Collins and Garrity, 2023; Elliott *et al.*, 2020), making it a particularly important period for fostering dispositions that support sustainable ways of living (Watt, and Frydenberg, 2025). As a result, early years settings are increasingly recognised as important spaces for fostering children's connections with nature, promoting wellbeing, and developing the knowledge, skills, and dispositions associated with active citizenship and sustainable futures (Watt and Frydenberg, 2025; Collins and Garrity, 2023).

Throughout this presentation, I will explore key policies and theoretical perspectives, evaluate the benefits of nature-based learning, and consider both the opportunities and challenges of sustainability education in the early years.

Sustainability and Policy Context

One of the most influential definitions of sustainability comes from the Brundtland Report, *Our Common Future*, which describes sustainable development as meeting present needs without limiting the ability of future generations to meet their own needs (Brundtland, 1987). This definition remains central within early childhood education for sustainability because it highlights the responsibility of current generations to create conditions that enable children and future generations to thrive (Elliott *et al.*, 2020).

The 1992 Earth Summit strengthened global commitments to sustainability by encouraging the integration of environmental and social considerations into policy and education (United Nations Conference on Environment and Development, 1992). This commitment was later reinforced through the United Nations Sustainable Development Goals, which recognise education as a key driver of sustainable development (United Nations, 2015). Specifically, target 4.7 highlights the role of Education for Sustainable Development and Global Citizenship Education in equipping learners with the knowledge, skills, values, and attitudes needed to support a sustainable future (United Nations, 2015).

Here in Wales, sustainability is supported through the Well-being of Future Generations (Wales) Act 2015, which requires public bodies to consider the long-term impact of their decisions (Welsh Government, 2015). This is particularly relevant to education because it highlights responsibility towards future generations and encourages a holistic approach to wellbeing and sustainability.

Within early childhood education, these developments have contributed to the growth of Early Childhood Education for Sustainability (ECEfS). According to Davis and Elliott, ECEfS is an approach that empowers young children to participate in creating socially, environmentally and economically sustainable futures through meaningful, participatory and action-oriented learning experiences (Davis and Elliott, 2014). Rather than simply teaching children about environmental issues, ECEfS encourages children to become active participants through exploration, decision-making, problem-solving and engagement with their communities (Borg and Samuelsson, 2022; O'Sullivan, 2025). This reflects a growing recognition that young children are capable contributors to sustainable change (Engdahl and Furu, 2022).

However, some critics, including Sen, argue that the Brundtland definition places greater emphasis on meeting human needs than on recognising the value of nature itself (Sen, 2013). More recent writers emphasise the close relationship between people and the natural world, recognising that both depend on one another to thrive (Engdahl and Furu, 2022; O'Sullivan, 2025). This way of thinking has shaped modern approaches to ECEfS. According to Borg and Samuelsson, ECEfS helps children understand the links between environmental, social, and economic sustainability while encouraging them to become active contributors to sustainable change (Borg and Samuelsson, 2022).

Sustainability in the Welsh Early Years Context

Sustainability is embedded throughout the Welsh education system. The Curriculum for Wales aims to develop ambitious, capable learners; enterprising, creative contributors; ethical, informed citizens; and healthy, confident individuals (Welsh Government, 2022). These four purposes encourage children to understand how their actions affect both local and global communities.

Within the Curriculum for Non-Maintained Settings, concepts such as *Cynefin*, belonging to, and relationships with, place and community are central (Welsh Government, 2022a). Young children are encouraged to build meaningful connections with people, places, and the natural environment. This focus on belonging and connection strongly resonated with my own experience of completing the John Muir Award. Revisiting a place that had been significant throughout my childhood strengthened my sense of place and reinforced the importance of helping children build meaningful connections with their local environment.

These ideas link closely with Education for Sustainable Development and Global Citizenship (ESDGC). Tinney describes ESDGC as a values-based approach that helps children understand the links between environmental, social, and economic issues while developing the skills needed to contribute positively to society and the environment (Tinney, 2020). ESDGC promotes environmental awareness, social responsibility, cultural understanding, and active participation.

Similarly, Reunamo and Suomela argue that Education for Sustainable Development goes beyond environmental education by including ecological, social, and economic aspects, helping children develop understanding, participation, and social responsibility from an early age (Reunamo and Suomela, 2013). Supporting this, Croke *et al.*, suggest that achieving sustainable development

requires recognising children's rights and ensuring children are meaningfully involved in decisions that affect their lives and futures (Croke *et al.*, 2021). Therefore, sustainability education should not only be about recycling or caring for the environment. It should also help children care about other people, share their ideas, think independently, and understand how to be responsible members of society.

Although the Welsh curriculum provides strong opportunities for sustainability learning, implementation can vary between settings. Research and policy reports suggest that challenges such as funding, staff training, and varying levels of expertise can influence how effectively outdoor and sustainability-focused learning is embedded in practice (Welsh Government, 2023; Tinney, 2023). These variations can affect the quality and consistency of children's experiences. However, opportunities for nature-based sustainability learning are not experienced equally by all children. Those living in urban areas, disadvantaged communities, or settings with limited outdoor provision may have fewer opportunities to engage regularly with natural environments, potentially creating inequalities in access to sustainability education (Ridgewell, 2024).

Why Sustainability Matters in Early Childhood

Sustainability is especially important in early childhood because this is when children begin to develop their understanding of the world and their place within it (Kahriman-Pamuk and Samuelsson, 2024). Samuelsson and Park argue that lifelong learning begins at birth and that early experiences provide the foundation for children's future attitudes, values, and behaviours. They suggest that investing in high-quality early childhood education benefits not only children as individuals but also contributes to a more sustainable society (Samuelsson and Park, 2017).

The United Nations Convention on the Rights of the Child highlights children's rights to participation, health, education, and a sustainable future. From this perspective, sustainability becomes a children's rights issue because environmental damage and social inequality directly affect children's lives, wellbeing, and future opportunities (United Nations International Children's Emergency Fund, 2022).

Sustainability also supports children's overall wellbeing and development. Through engagement with natural and social environments, children can develop physical and emotional wellbeing, social skills, and environmental awareness (Watt and Frydenberg, 2025; O'Sullivan, 2025).

Research links nature-based experiences with improved wellbeing, resilience, and emotional regulation (Ernst and Stelley, 2024; Aykut and Ertürk Kara, 2025). During my John Muir Award, spending time observing wildlife, exploring the brook, and revisiting familiar childhood spaces reinforced many of these benefits, encouraging mindfulness and a deeper appreciation of the natural world.

Children are often viewed as future citizens who need protection. However, Samuelsson and Park argue that children should also be recognised as sustainability agents whose ideas and perspectives can contribute meaningfully to learning and decision-making. They emphasise pedagogies that enable children to take initiative, think, reflect, and actively participate in sustainability-related learning (Samuelsson and Park, 2017). Similarly, Tinney argues that children should be viewed as capable participants whose curiosity, exploration, and voices are valued within learning environments.

Drawing on the Curriculum for Wales, she highlights the importance of child-led and participatory approaches, including when engaging with environmental and social issues (Tinney, 2023). Davis and Elliott also suggest that young children are capable contributors to sustainability and should be regarded as active participants in learning rather than passive recipients of knowledge (Davis and Elliott, 2014). Within ECEfS, children are viewed as competent citizens who can influence and contribute to more sustainable futures through meaningful participation and action. However, despite the emphasis on children's agency within ECEfS, tensions can arise between child-led learning and educator-directed sustainability goals. Practitioners must balance following children's interests with introducing important sustainability concepts, which can create challenges when children's priorities do not align with planned environmental objectives (Dean and Elliott, 2022).

While children are increasingly recognised as active participants and agents of change within sustainability education (Borg and Samuelsson, 2022; Konerman *et al.*, 2021), the role of adults remains pivotal in facilitating meaningful learning opportunities. Research suggests that adult guidance is necessary for sustainability learning to move beyond participation alone (Ernst *et al.*, 2021), while practitioners' knowledge, skills and understanding of sustainability influence how effectively such learning experiences are implemented (Bascope *et al.*, 2019; Audley, 2020; Meland, 2022). However, evidence suggests that a lack of knowledge, preparation, and confidence can hinder practitioners' ability to implement Education for Sustainable Development effectively, emphasising the need for ongoing professional learning and support (Collins and Garrity, 2023).

Therefore, sustainability education is not simply about preparing children for adulthood. It is also about recognising children's agency and supporting their active participation in creating a more sustainable future now. Supporting this view, Croke *et al.* argue that children should not be viewed only as future beneficiaries of sustainability but as rights holders and active agents who can contribute to sustainable change in the present (Croke *et al.*, 2021).

Theoretical Perspectives

Several early years theorists provide valuable foundations for sustainability education, and I will now discuss three of these.

Froebel

Froebel believed that nature is central to children's learning and development, arguing that children learn most effectively through direct experiences of the natural world (Bruce, 2021). These ideas remain relevant in contemporary practice, as such experiences can help children develop an appreciation of nature and respect for living things (Howe, 2022). My exploration of trees, minibests and the brook during the John Muir Award reflected Froebelian principles, as learning emerged through direct engagement with the natural environment rather than through predominantly classroom-based activities. Supporting this perspective, Watts suggests that Froebelian pedagogy provides a valuable framework for sustainability education by fostering connectedness, interdependence and a sense of responsibility towards both people and the environment (Watts, 2022).

Malaguzzi (Reggio Emilia)

Malaguzzi's Reggio Emilia approach views children as capable and competent learners (MacBlain, 2018; Reggio Children, 2022). The environment is described as the "third teacher," highlighting the importance of thoughtfully designed spaces that encourage exploration, inquiry, and participation (Daniel, 2022). This approach supports sustainability by encouraging children to investigate environmental and social issues within their surroundings. My investigation of biodiversity, pollution in the brook, and conservation opportunities reflected this approach by encouraging inquiry, observation, and active engagement.

Bronfenbrenner

Bronfenbrenner's ecological systems theory highlights how children's development is shaped by interconnected systems, including families, communities, policies, and wider society (Aubrey and Riley, 2016). Recent research by Fisher and Lombardi reinforces this view, highlighting how children's experiences are influenced by the complex relationships between their immediate environments and broader social contexts (Fisher and Lombardi, 2025). This helps explain how sustainability involves relationships between children, families, communities, and broader social systems. Revisiting a place important to me as a child highlighted these connections, as my understanding of the area was shaped by the natural environment, family memories, community use of the space, and contemporary issues such as pollution and climate change.

Although these theories support many principles of Education for Sustainable Development, they were developed before modern sustainability debates and may not fully address issues such as climate change. Therefore, they provide valuable foundations but may need adapting to meet contemporary challenges.

My John Muir Award Experiences and Education for Sustainable Development

My experiences through the John Muir Award provide a practical example of sustainability education in action. This aligns with Ranta's view who agrees that education for sustainable development should foreground children's agency and adopt a child rights-based participatory approach, positioning children as active contributors whose views and actions shape sustainability learning (Ranta, 2023). Through exploration, observation, reflection, and conservation activities, the award encourages participants to engage actively with sustainability issues and take meaningful action within their local environment.

Three key sustainability principles were particularly evident, these were:

Developing a Sense of Place

Developing a sense of place through reconnecting with a valued childhood environment, which Brindal agrees helps children build meaningful relationships with their local surroundings and strengthen their connection to nature (Brindal, 2023).

Learning Through Direct Engagement with Nature

Learning through direct engagement with nature enables young children to develop environmental understanding through firsthand experiences, exploration, and inquiry (González and Schenetti, 2022; Dankiw *et al.*, 2023). Learning through direct interaction with nature was central to my John Muir Award experience. By engaging with local environments, observing wildlife, and reflecting on changes to the area over time, I developed a greater understanding of the natural world and its interconnected systems. Such experiential learning opportunities are widely recognised as important within Education for Sustainable Development, as they promote curiosity, engagement, and environmental awareness.

Taking Action Through Conservation Activities

Taking action through conservation activities reflects the principle of environmental stewardship, with research demonstrating that young children can make meaningful contributions to nature conservation and local environmental initiatives when provided with appropriate opportunities to participate (Contreras and Krasny, 2022). Creating a bird feeder, participating in litter picking, and researching conservation groups as part of the award enabled me to move beyond simply learning about sustainability and take practical steps to support environmental stewardship.

Samuelsson and Park argue that sustainability learning is most effective when children take part in meaningful experiences (Samuelsson and Park, 2017). My John Muir Award reflected this approach because hands-on exploration made learning relevant and connected to real-life situations. This supports wider evidence that experiential learning through direct engagement with nature can enhance children's engagement and understanding of the environment while fostering nature connectedness and pro-environmental attitudes and behaviours associated with sustainability (Salmi *et al.*, 2024; Mockovcáková and Barrable, 2024).

Research suggests that direct contact with nature improves environmental awareness, wellbeing, and emotional attachment to places. Barrable argues that early childhood environmental education should focus on developing nature connectedness because emotional relationships with nature are strongly linked to stewardship (Barrable, 2019). Revisiting a place important during my childhood and observing wildlife supported this idea. These experiences reflect Wilson's biophilia theory, whereby connecting with nature may encourage future environmental stewardship and protection (Gunnarsson and Hedblom, 2023).

However, some researchers caution that sustainability activities can become tokenistic when they focus solely on isolated actions, such as recycling or litter picking, without encouraging critical thinking about the wider environmental, social, and economic issues involved (Gal, 2023). Effective Education for Sustainable Development therefore requires a more holistic approach that helps learners understand the interconnected nature of sustainability rather than viewing it simply as a series of environmental tasks.

Supporting this perspective, Vodopivec and Šindić argue that Early Childhood Education for Sustainability should integrate ecological, social, and economic dimensions of sustainability, enabling children to develop a broader and more meaningful understanding of sustainable development rather than engaging only in isolated environmental activities (Vodopivec and Šindić, 2024).

The John Muir Award differs from such approaches because it combines practical action with investigation, reflection, and ongoing engagement with local environments. This helps participants develop a deeper understanding of sustainability rather than viewing it simply as a series of environmental tasks. However, it is important to recognise that no single programme can fully address sustainability challenges. While the John Muir Award can make a positive contribution to nature connectedness, Masters argues that no single programme can guarantee lasting change, as children's relationships with nature are shaped by wider influences such as family support, peer attitudes, community norms, and ongoing opportunities for engagement with the natural world (Masters, 2025).

Critically reflecting on my experience, completing the John Muir Award broadened my understanding of sustainability. Before undertaking the award, I largely viewed sustainability as environmental protection. However, engaging with nature-based activities and sustainability literature helped me recognise that sustainability also includes social responsibility, children's rights, citizenship, community participation, and responsibility towards future generations. These experiences highlighted the interconnected nature of sustainability and encouraged me to think more critically about how it can be meaningfully embedded within early years practice.

Conclusion

Reflecting on my John Muir Award experiences alongside the wider sustainability literature has deepened my understanding of what sustainability truly means within early childhood education. What began as a personal reconnection with a childhood space evolved into a meaningful exploration of environmental stewardship, children's rights, wellbeing, and community participation. The award demonstrated how powerful nature-based experiences can be in developing curiosity, responsibility, and a sense of place, not only for children, but for adults and practitioners as well.

The academic perspectives explored throughout this presentation highlight that sustainability is multidimensional. It is environmental, social, and economic; it is rooted in justice, rights, and citizenship; and it is shaped by the relationships between children, families, communities, and wider society. Theories from Froebel, Malaguzzi, and Bronfenbrenner provide valuable foundations for understanding these relationships, while contemporary research emphasises children's agency and the importance of experiential, participatory learning.

My John Muir Award experiences brought these ideas to life. Through observation, inquiry, creativity, and conservation action, I developed a richer appreciation of how sustainability can be embedded meaningfully within early years practice. These experiences reinforced that sustainability education is not simply about teaching children to care for the environment, it is about empowering them to understand their place in the world, to participate in decisions that affect their lives, and to develop values that support a more sustainable future.

As a developing practitioner, this journey has encouraged me to reflect critically on my own role in supporting sustainability. It has reminded me that small actions matter, that meaningful learning happens through connection and curiosity, and that practitioners play a vital part in creating environments where children can explore, question, and act.

Closing Statement

Completing the John Muir Award has not only strengthened my personal connection to nature but has also shaped my professional commitment to sustainability in early childhood education. It has shown me that sustainable futures begin with everyday choices, the conversations we have, the environments we create, and the opportunities we offer children to engage with the world around

them. If we want children to grow into informed, compassionate, and responsible citizens, we must give them the chance to experience nature, to ask questions, to take action, and to see themselves as capable contributors to their communities. My hope moving forward is to continue supporting local conservation efforts and to inspire the children I work with to develop the same sense of curiosity, care, and connection that this experience has reignited in me.

Thank you for listening.

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