

Regaining Paradise: Sustainability in the Early Years Script

Good afternoon, everyone, my name is Leah Waters and I'd like to welcome you all to my presentation. Today I am going to be discussing topics such as, my personal experience with participating in the John Muir Award, Sustainable Development and Global Citizenship, and potential barriers to implementing this into everyday practice.

To begin, I would like to reflect on my experience partaking in the John Muir award.

As we can see here, I decided to create a physical project using an eco-friendly scrapbook that was already in my possession. Many of the resources that I used within the scrapbook, such as gardening magazines, craft paper, and wooden letters were sourced from charity shops in my local area. Hopefully as we scroll through the pages, you will be able to see a trend within my scrapbook as I personally took inspiration from the vibrant colours of nature to fuel my creativity.

Firstly, starting with my Discover section. For this entire project, I chose to explore the Gnock Country Park, which, as displayed on the map my partner and I created, is located in Neath, South Wales.

With over 200 acres of woodland, the Gnock is widely known for its beautiful landscape, scenic walking trails, and tranquil ponds. I chose this particular location as it has great sentimental value to myself and my family. Growing up in the urban town of Port Talbot, I was continuously exposed to noise, light, and air pollution from the local town and steel works facility. From a young age, my family and I would take day trips to the Gnock, escaping the hustle and bustle of busy town life. There, we would share many laughs, go on nature walks, and have picnics as a family.

I ensured to include a page based on the Gnock's historic background, first dating back to the eighteenth century. Today, the Gnock Country Park is managed by Neath Port Talbot County Council, and is open to the public as an ornamental nature park.

Throughout the Gnock, there are a plethora of sub-habitat types, falling under woodland and freshwater ecosystems. All habitats host an array of local wildlife species,

providing food, water, and shelter. Whilst researching woodland habitats, I was able to learn that woodlands are incredibly important for sustainability as they absorb carbon dioxide, in turn improving air quality and mitigating climate change via carbon capture.

We will now be moving on to my explore section of my scrapbook. During my time collecting evidence for my scrapbook, I was able to photograph numerous species of wildlife and their habitats. After further research I was able to identify several of the sighted species via verified identification charts. Identifying insects, birds, and rodents such as the Painted Lady Butterfly, the Grey Squirrel, and the Red-Chested Robin, allowed me to gain further insight and novel knowledge about each individual species, their needs, and their preferred habitat. For example, I discovered that the Grey Squirrel is in fact an invasive species to the UK, having been imported from North America in the late 19th century. This species outcompetes our native Red Squirrels, in addition to harbouring invasive diseases such as Squirrelpox virus, thus disrupting our local woodland ecosystems.

For the conservation aspect of my scrapbook, I decided to do two different projects, the first being a small Bug Hotel and the second being Apple bird feeders. I chose to craft a bug hotel as Neath Port Talbot Council had recently installed a large bug hotel in one of the most visited areas of the park. This did not make a lot of sense to me, as insects do not usually reside in areas of high levels of physical disturbance. Therefore, I made it my mission to place an eco-friendly bug hotel in a more secluded area of the park. Unfortunately, due to strict regulations, I was unable to leave my bug hotel at my desired destination, so instead, I put it to good use in our flat building's communal garden. As for the resources that I used to craft the critter hotel; I used a re-cycled cardboard cat food box and many empty toilet rolls, all of which I accumulated over time. Before building the bug hotel, I applied non-toxic paints to the empty toilet rolls. I chose to do this as I wanted to make the hotel more interesting for passing children, allowing them to participate in the exploration of conservation.

For my second project, I created Apple Bird Feeders. The resources that I used consisted of apples, organic peanut butter, bird seed, and string. This was an activity that took place during a university lecture, allowing those of us involved to share ideas and discuss environmental solutions.

As seen here, I included a step-by-step tutorial on how to construct these bird feeders, allowing any future readers to re-create and share in the experience of sustainable practices.

For the share aspect of my scrapbook, I wanted to include some of my favourite experiences relating to sustainability. My partner and I have actively been participating in the world of sustainability for many years. Growing our own fruit and vegetables together has been an enlightening learning experience. As seen here, these are some of our home-grown tomato and cucumber plants.

From identifying species, to writing poetry, I have thoroughly enjoyed my John Muir journey.

Before this experience, I feel that I took this beautiful location for granted, I would go and admire how wonderful the ponds were, but I never took into consideration the potential negative impacts that outside factors may have on this location. I also underestimated the amount of time it would take me to complete the scrapbook. Therefore, if I were to do anything differently, it would be to start compiling the scrapbook earlier than I initially did.

Thank you all for listening to my reflection, I will now be moving on to my critical evaluation.

As supported by Tinney and Hirst (2017), a vital part of sustainable practices and philosophy is the idea that education in the early years creates future generations who recognise the importance of sustainability for the planet's future health.

The concept of Education for Sustainable Development and Global Citizenship (ESDGC) aims to educate individuals on the complex interconnectedness of global problems that affect all of humanity, such as social injustice, climate change, and economic disparity (Welsh Government, 2012). By equipping individuals with the knowledge and skills to approach and tackle these challenges, the ESDGC promotes the evolution of a more equitable and sustainable planet (Tinney, 2020a).

John Muir was a Scottish-American environmental conservationist, who was immensely passionate about the intrinsic value of the wilderness and its landscapes (Muir, 2023). He is admired for his activism, leading to the foundation of protected nature areas such as Yosemite and Sequoia National Parks (John Muir Trust, No

date:a). However, despite this generally positive image, John Muir is considered to be a controversial individual due to his participation in the social injustice of colonisation of indigenous peoples (McNally, 2024, and Kashwan, *et al.*, 2021). He repeatably demonstrated disdain towards local native American communities, exhibiting, what in the modern day would be regarded as, white supremacist views (Beck, 2021, and Byer, 2021). The prohibition of Indigenous land management practices, at the behest of the American Government, such as controlled burning (National Park Service, 2024). This led to the unforeseen consequence of more intense wildfires, due to the build-up of overgrown vegetation (Mariani, et al., 2022).

Nevertheless, The John Muir award found on the John Muir trust website (no date:b) is nothing but a benefit to both adults and children. It encourages all children to connect with the natural environment that surrounds them, whilst also supporting the concept of Bronfenbrenner's Ecological Systems Theory (1979). This highlights the impact the environment has on children's holistic development. For example, poor air quality within one's environment may lead to potential respiratory issues, hindering one's quality of life.

The share aspect of the created scrapbook particularly allows practitioners to create memorable experiences with children through explorative and practical activities. This directly aligns with article 29 of the UN Convention on the rights of the Child (2019), which highlights that education must develop children's respect and knowledge of both human and environmental rights. Additionally, this supports the successful cultivation and development of children's positive attitudes towards global citizenship, instilling dutiful mindsets towards shared sustainability (Rimanoczy, 2020).

Currently in the year of 2025, Wales is considered to be one of the most sustainably progressive countries in comparison to the rest of the UK. Ranking second in recycling, on a global scale Wales is increasingly becoming a more sustainable country each and every year (Welsh Government, 2024). However, there are still many hurdles in which one must overcome to achieve true sustainability, such as, ending the reliance on fossil fuels for energy generation (Buck, 2021).

Where political legislation in the pursuit of monetary gain occurs, societal and environmental issues often follow suit (Positive Money, 2016 and Kraft, 2021). Linking

to social injustice and economic depravity, marginal cost pricing, in addition to the privatisation of Great British Energy, economic policy implemented by Margaret Thatcher's Conservative government in 1989, decreed wholesale energy prices to match the costs of the most expensive energy-generation method (Valentin and Steinfert, 2024). Many years later, this continues to have a large impact on the public's energy costs, amplifying economic deprivation for working class families, despite the fact that cheaper, greener energy generation alternatives now exist (Unison, 2023). However, in opposition to monetary fuelled political parties, parties on the political left, such as Plaid Cymru (2025) and the Green party (2024) advocate for the nationalisation of British energy and ending reliance on fossil fuels. This has a combined effect of cheaper energy costs for the public and greener energy practices, reducing our overall climate emissions. As best said by Chico Mendes "Environmentalism without class struggle is gardening" (Krishnan, 2022), without sweeping political changes to our society, ending financially-motivated harmful practices, environmental sustainability and conservation is considered to be ineffective (Katzenmeyer, 2016, and Aronoff, 2021). Implementing cheaper energy costs, in addition to greener energy generation methods, would be a step towards achieving the United Nations 17 Sustainable Development Goals (2016) goal 7, enabling access to affordable and sustainable energy for all.

In Wales, intertwining sustainability practices with early years education is considered to be a necessity for creating accountable global citizens in the future (Davis and Elliott, 2023). It is a statutory requirement that all schools in Wales must integrate the GSDGC approach and can easily be identified within the Curriculum for Wales' (2022) four purposes, specifically the ethical, informed citizens purpose. Through the development of accountability, empathy, and recognition, the aim of the purpose is to education children to make positive contributions to society and the world around them. International curricula, such as New Zealand's Te Whariki (2017), emphasises the importance of education on sustainable development. Their concepts such as Kaitiakitanga, (Kai-tia-ki-tanga) a spiritual requirement for guardianship and duty to preserve and protect the land and sea, truly demonstrates their commitment to sustainable practice. Similarly to this, the Welsh concept of Cynefin (which can mean a sense of belongingness or deep connection to one's environment), is a core aspect of

the Welsh Curriculum (2022), it is highlighted that this is not a subject to be taught, but a feeling that is embedded within the curriculum. This term allows children to understand and connect with their own and others' cultural ties to the land, further enhancing their self-confidence and sense of communal identity and is thought to be a vital component in fostering Welsh sustainability into the far future (Chapman, *et al.*, 2023).

As supported by Boyd, *et al.* (2021), education for sustainable development (ESD) can be best taught through first-hand learning experiences. First hand learning experiences are considered to be hands-on interactions and activities that allow individuals to learn practically rather than traditional academic learning (Schwichow, *et al.*, 2016). This is demonstrated greatly through the John Muir award experience. Dewey's theory (2009) further supports the concept that true learning occurs only through practical experiences. However, there can be many challenges when addressing and implementing ESDGC approaches and first-hand learning experiences into everyday practice. As supported by Parry and Metzger (2023) due to the comprehensive nature of topics such as Social Injustice, Climate Change, and Sustainability, many individuals feel that children are just too young to be exposed to these global issues. However, Cates (2002) and Choppen (2019) suggest that by allowing children an appropriate level of exposure to these sensitive topics, their emotional, social, and cognitive development can benefit greatly. Linking to this, educators and practitioners require professional development training in order to deliver ESDGC effectively. A lack of training or negative outlooks on these issues can substantially impact the way in which it is taught. Therefore, according to Welsh Government (2008) and Tinney (2020b), it is considered to be the setting leader's responsibility to ensure staff receive the appropriate training, provision, and support, in turn providing the best quality education for children. In doing so, this aligns with the UN's 17 Sustainable Development goals (2016), goal number 4, which highlights the mandatory nature of providing inclusive, quality learning environments for children. Legislation such as the Well-being of Future Generations (Wales) Act 2015 has been implemented to provide guidance and support the nation of Wales. Both legislation and key principles of ESDGC have vastly similar goals. Both aim to educate individuals on becoming informed global citizens whilst highlighting the importance of sustainability and equity in Wales.

As supported by Evans (2019), consumption is the act of using or expending resources to meet societal needs, whereas waste represents the inefficiencies of resource creation and management. Waste may manifest in various ways such as, food waste, single-use packaging and potentially unnecessary global transport chains (excessive transportation) such as the transportation of out-of-season fruits into British supermarkets. Although consumption and waste are an important aspect of ESDGC, the Curriculum for Wales (2022) only briefly addresses this topic. Due to intense focus on standardised curricula and lack of staff within educational environments, environmental learning is often not considered to be a priority (Aikens, et al., 2016). However, as Debrah, et al., (2021) suggests educating children on cross curricula themes such as consumption and waste enables them to better understand and recognise the impact of their own and others' actions, further facilitating environmental awareness. Moreover, there are a plethora of fun activities based around consumption and waste for children to engage with, for example, linking back to the Bug Hotel that I created, I was able to reduce the amount of waste produced by my household through the upcycling of resources such as empty toilet rolls. Not only was I able to lengthen the lifespan of these resources, I was also able to repurpose them, having a positive impact on my local environment.

I am now going to be ending this presentation with a conclusion.

To conclude, my time spent participating in the John Muir award has been a journey of discovery and exploration which I would highly recommend to others. Not only does it cultivate a positive outlook on sustainable actions, but it also inspires children to engage with their local environments. I was unaware of who John Muir was before this project. I wholeheartedly reject his xenophobic opinions of the Indigenous peoples of America, however, these opinions must be viewed through the historic lens of the 19th century, which unfortunately were common place throughout society. Despite this, one must acknowledge his positive contributions and activism towards environmental protection, without which national parks may not exist.

The concept of ESDGC introduces and affirms a sense of shared responsibility of the planet's health into each and every child, highlighting the importance of individual positive action and sustainable practice. It is particularly interesting to see the similarities between New Zealand and Wales' outlook on protecting one's

environment, this stems from the historic cultural view of guardian ship over the land. Additionally, although many individuals are afraid children are too young to be welcomed into global issue discussion, literature shows that building an awareness of these shared problems from a young age is beneficial for cognitive, emotional, and social development, in addition to cultivating the next generation of sustainable global citizens. However, Despite Wales' positive achievements regarding ESDGC, recycling rates, and reduction of waste, there is still much work that needs to be done to achieve true sustainability. Politically, Wales must enact sweeping reforms in environmental protection, departing from a capitalistic mindset that places the extraction of profit above the needs of the people and the health of our environment.

Thank you for listening, I hope you've enjoyed. Are there any questions?

Script Reference List

- Aronoff, K. (2021) *Overheated: How Capitalism Broke the Planet--and how We Fight Back*. UK: Hachette.
- Aikens, K., McKenzie, M. and Vaughter, P. (2016) 'Environmental and sustainability education policy research: a systematic review of methodological and thematic trends', *Environmental Education Research*, 22(3), pp. 333–359. DOI: [10.1080/13504622.2015.1135418](https://doi.org/10.1080/13504622.2015.1135418)
- Boyd, D., King, J., Neame, J., Scollan, A. and McLeod, N. (2021) *An Early Childhood Education for Sustainability resource that embeds the Sustainable Development Goals and STEM into pedagogical practice*. Liverpool, United Kingdom: Liverpool University Press.
- Byers, B.A. (2021) 'Criticizing Muir and misunderstanding the foundation of American nature conservation.', *The Ecological Citizen*, 5, pp.65-73. Available at: <https://www.ecologicalcitizen.net/pdfs/Vol%205%20No%201.pdf#page=65> (Accessed: 13th May 2025).
- Buck, H.J. (2021) *Ending fossil fuels: Why net zero is not enough*. London, United Kingdom: Verso Books.
- Beck, L. and Dustin, D. (2021) 'Interpreting John Muir's legacy', *International Journal of Wilderness*, 27. Available at: <https://ijw.org/interpreting-john-muir-legacy/>
- Cates, K.A. (2002) Teaching for a better world: Global issues and language education. *Human rights education in Asian schools*, 5(1), pp.41-52. Available at: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=02a467bec9e8137392be6d090551dcb6408dd87b> (Accessed: 11th May 2025).
- Chapman, S., Ellis, R., Beauchamp, G., Sheriff, L., Stacey, D., Waters-Davies, J., Lewis, A., Jones, C., Griffiths, M., Chapman, S. and Wallis, R. (2023) "My picture is not in Wales': pupils' perceptions of cynefin (Belonging) in primary school curriculum development in Wales.', *Education 3-13*, 51(8), pp.1214-1228. DOI: [10.1080/03004279.2023.2229861](https://doi.org/10.1080/03004279.2023.2229861)

Choppen, C. (2019) *Why Children Need to Understand Global Issues*. Available at: <https://tmp.ibt.org.uk/opinion/why-children-need-to-understand-global-issues/> (Accessed: 12th May 2025).

Davis, J. and Elliott, S. (2023) *Young children and the environment: Early education for sustainability*. Cambridge, United Kingdom: Cambridge University Press.

Debrah, J.K., Vidal, D.G. and Dinis, M.A.P. (2021) 'Raising awareness on solid waste management through formal education for sustainability: A developing countries evidence review.', *Recycling*, 6(1), p.6. DOI: [10.3390/recycling6010006](https://doi.org/10.3390/recycling6010006)

Dewey, J. (2009). *Democracy and education: An introduction to the philosophy of education*. New York: WLC Books.

Evans, D.M. (2019) 'What is consumption, where has it been going, and does it still matter?.', *The Sociological Review*, 67(3), pp.499-517. DOI: [10.1177/0038026118764028](https://doi.org/10.1177/0038026118764028)

Green Party (2024) *Powering Up Fairer, Greener Energy*. Available at: <https://greenparty.org.uk/about/our-manifesto/powering-up-fairer-greener-energy/> (Accessed: 10th May 2025).

John Muir Trust (No date) *About John Muir*. Available at: <https://www.johnmuirtrust.org/about-us/about-john-muir> (Accessed: 13th May 2025).

John Muir Trust (No date) *Getting Started*. Available at: <https://www.johnmuirtrust.org/award/getting-started> (Accessed: 13th May 2025).

Krishnan, M. (2022) *Addressing Climate Change: Environmental Justice through Economic and Social Justice*. Available at: <https://www.aicctu.org/workers-resistance/v1/workers-resistance-october-2022/addressing-climate-change-environmental-justice-through-economic-and-social-justice> (Accessed: 13th May 2025).

Kashwan, P. et al. (2021) 'From racialized neocolonial global conservation to an inclusive and regenerative conservation', *Environment: science and policy for*

sustainable development, 63(4), pp.4-19. Available at:
<https://www.tandfonline.com/doi/pdf/10.1080/00139157.2021.1924574>
(Accessed: 13th May 2025).

Kraft, M.E. (2021) *Environmental policy and politics*. New York, USA: Routledge.

Katzenmeyer, K.L. (2016) *Fighting Climate Change in a Capitalistic Narrative: Powering Down The Fossil Fuel Industry*. Available at:
https://research.library.fordham.edu/cgi/viewcontent.cgi?article=1033&context=environ_2015 (Accessed: 13th May 2025).

Mariani, M., Connor, S.E., Theuerkauf, M., Herbert, A., Kuneš, P., Bowman, D., Fletcher, M.S., Head, L., Kershaw, A.P., Haberle, S.G. and Stevenson, J. (2022) 'Disruption of cultural burning promotes shrub encroachment and unprecedented wildfires.', *Frontiers in Ecology and the Environment*, 20(5), pp.292-300. DOI: [10.1002/fee.2395](https://doi.org/10.1002/fee.2395)

McNally, R.A. (2024) *Cast Out of Eden: The Untold Story of John Muir, Indigenous Peoples, and the American Wilderness*. Nebraska, USA: University of Nebraska Press.

Muir, J. (2023) My first summer in the Sierra. In *British Politics and the Environment in the Long Nineteenth Century* (pp. 291-296). Routledge. Available at:
<https://www.taylorfrancis.com/chapters/edit/10.4324/9781003194651-47/first-summer-sierra-john-muir> (Accessed: 13th May 2025).

Ministry of Education (2017) Te Whariki: Early Childhood Curriculum. Available at:
<https://birthto5matters.org.uk/wp-content/uploads/2021/03/PDF-8-Te-Whariki-Early-Childhood-Curriculum-ENG-Web.pdf> (Accessed: 13th 2025).

National Park Service (2024) Indigenous Fire Practices Shape Our Land. Available at: <https://www.nps.gov/subjects/fire/indigenous-fire-practices-shape-our-land.htm> (Accessed: 13th May 2025).

Plaid Cymru (2025) *Developing our own Energy*. Available at:
https://www.partyof.wales/datblygu_ynni_developing_energy (Accessed: 10th May 2025).

- Parry, S. and Metzger, E. (2023) 'Barriers to learning for sustainability: a teacher perspective.', *Sustainable Earth Reviews*, 6(1), p.2. DOI: 10.1186/s42055-022-00050-3
- Rimanoczy, I. (2020) *The sustainability mindset principles: A guide to developing a mindset for a better world*. London, United Kingdom: Routledge.
- Schwichow, M., Zimmerman, C., Croker, S. and Härtig, H. (2016) 'What students learn from hands-on activities.', *Journal of research in science teaching*, 53(7), pp.980-1002. DOI: [10.1002/tea.21320](https://doi.org/10.1002/tea.21320)
- Tinney, G. (2020) *Early Years Education, Education for Sustainable Development and Global Citizenship and the Principles of Harmony*. Ceredigion, Wales: Sophia Centre Press.
- Tinney, G. and Hirst, N. (2017) Early childhood education for sustainability within Wales. In *Understanding Sustainability in Early Childhood Education* (pp. 116-150). Routledge.
- Unison (2023) *Gridlocked: How UK Energy Policy Fails Working Families*. Available at: <https://www.unison.org.uk/content/uploads/2023/08/UNISON-Gridlocked-Report.pdf> (Accessed: 13th May 2025).
- UNICEF (2019) *A summary of the UN Convention on the Rights of the Child*. Available at: https://www.unicef.org.uk/wp-content/uploads/2019/10/UNCRC_summary-1_1.pdf (Accessed: 13th May 2025).
- United Nations (2016) *17 Sustainable Development Goals*. Available at: <https://sdgs.un.org/goals> (Accessed: 13th May 2025).
- Valentin, L, and Steinfort, L. (2024) *The living legacy of privatisation in the United Kingdom: Energy transition country struggle*. Available at: <https://www.tni.org/en/article/the-living-legacy-of-privatisation-in-the-united-kingdom> (Accessed: 13th May 2025).
- Welsh Government (2024) *Da iawn Cymru! Wales named as second best recycling nation in the world*. Available at: <https://www.gov.wales/da-iawn-cymru-wales-named-second-best-recycling-nation-world> (Accessed: 10th May 2025).

Welsh Government (2022) *The Curriculum for Wales*. Available at:
<https://hwb.gov.wales/curriculum-for-wales> (Accessed: 11th May 2025).

Welsh Government (2015) *Well-being of Future Generations (Wales) Act 2015*.
Available at: <https://www.gov.wales/well-being-future-generations-act-essentials-html> (Accessed: 13th May 2025).

Welsh Government (2012) *Education for Sustainable Development and Global Citizenship: A common understanding for the adult and community learning sector*. Available at:
<https://www.gov.wales/sites/default/files/publications/2018-02/education-for-sustainable-development-and-global-citizenship-a-common-understanding-for-the-adult-and-community-learning-sector.pdf> (Accessed: 13th May 2025).

Welsh Government (2008) *Education for Sustainable Development and Global Citizenship: A Common Understanding for Schools*. Available at:
<https://hwb.gov.wales/api/storage/eaf467e6-30fe-45c9-93ef-cb30f31f1c90/common-understanding-for-school.pdf> (Accessed: 12th May 2025).