

Regaining Paradise – Sustainability in the Early Years

Part 1

Hello, my name is Emily and today I would like to present to you my John Muir experience, and share with you my discoveries. Following this, I will be critically evaluating how experiences, such as those in my John Muir award could support the principles of early childhood education for sustainability.

I chose to do my John Muir experience on Cwm Nant Yr Arllwys farm, which is my family's farm. As I mentioned in my scrapbook, this farm has been in my family for almost 75 years. It is located in Neath.

- The farm is 55 acres made up of a yard, green fields, woodland and our very own reservoir.

Why I chose the farm to do my John Muir Experience.

- Wonderful memories growing up there.
- Exploring
- Developing a deep appreciation for nature.
- Always been a special place to me. Meant I was able to grow up living next door to my late grandparents.
- Fond memories of my childhood.
- Cooking with my grandmother.
- Growing vegetables with my grandfather.
- Feeding the animals.
- Fishing.
- Fond memories gardening with my mother and my grandmother - keen gardener – they would always encourage me to get stuck in and get my hands dirty, which I loved.
- Allowed and encouraged me to explore different aspects of gardening. Something I still enjoy to this day.
- Flowers in the scrapbook are from our garden.
- In spring/summer – bees and butterflies. Stop to appreciate.
- Fascinating for a young child.

I have grown up walking on the farm, the surrounding areas and up the mountain behind the farm. I have done this too many times to even count. However, it was not until I started to do my John Muir award that I actually stopped and really explored in depth just how wonderful the place is and how it has so much to offer to a young child. The experiences I have had on this farm growing up and continue to have to this day are non-comparable.

- Stopped, closed my eyes to hear to birds chirping.
 - Nighttime I can hear an owl.
 - Tried so many times to spot it. It is my little mission to spot an owl one day.
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- Not just growing up here but this whole experience has deepened my appreciation for my environment and all the creatures that inhabit here.
 - Knew we had birds but never stopped to identify the different ones.
 - Learnt more about sustainable practices and how we can be a sustainable farm.
 - My father has taken over the farming. Learnt from him more about how grass is a renewable resource that can be grown and harvested several times a year, which is one of the ways we are a sustainable farm.
 - Weather permitting – Twice a year. Grow the grass to make the hay. Acts as a continuous food source.
 - Growing up here has shaped who I am today.
 - Where my passion for nature and outdoor learning comes from.
 - If I am lucky enough to have children of my own one day – want them to be able to grow up here and have the same experiences I did as a child.

I had quite a fortunate childhood, however, doing the John Muir award made me wonder if children today get the opportunities to engage with nature as much these days as I did. I work in a primary school down by Aberavon beach in Port Talbot. I have been there for 3 years, and I can say first hand that the children have very few opportunities to learn outdoors. More recently we have been doing some gardening

with the children, but it is not regular enough to keep the children engaged and allow them to reap the rewards. I asked the teacher why they do not do it more often; her reply was they found it hard to fit it into their already busy curriculum. We do however now have forest school sessions, although this is once a week for around an hour, which is better than nothing but still not enough in my opinion.

There are so many learning opportunities to be found outdoors, many of which we may not even realise. There is science and math everywhere you look, and this was made more evident to me when exploring during my John Muir award.

In the scrap book where I talked about the geese that nest down by the reservoir each year, I knew that they were there every year as I have seen them many times, however, I did not have much knowledge on them. I was intrigued, and eager to broaden my knowledge on these creatures and why they chose to live on our farm. I did some research and found out several facts about the geese, such as they like to create their nests in well-hidden areas close to the water. After further investigation, which involved me walking through the woodland to reach the other side of the reservoir, which is not so easily accessible, I found where the geese's nest was. That picture is included in the scrapbook, along with the geese's webbed footprints in the mud all around where the nest was located. This did inspire me to want to find out more about the type of geese that inhabit on this farm, and the different species. This experience to me was extremely fascinating, and lovely to witness. It made me imagine how a child would react to seeing such a fascinating sight. I believe that a child having the opportunity to experience something like this could spark their curiosity and help them develop an appreciation for nature and their environment, as well as being a great educational opportunity.

Whilst exploring on the farm I wondered how easy it would be for me to bring children here on a nature walk. While taking them to a private farm would pose several risks, we could instead visit a local park or woodland area that could offer the same opportunities. Or I thought that Margam Park would be an excellent place to take the children in my school on a nature walk. They have several ponds, where geese are present, a farm with different animals, and a woodland area. Several opportunities for children to connect with nature and explore what the natural world has to offer.

For me, this John Muir experience has emphasised just how special the natural world is and how important it is for us to provide opportunities for children to experience it first-hand within our practice. This experience has made me stop and really appreciate the beauty of my environment and appreciate all the other living things who share it with me. It also made me really want to protect the area where I live. I particularly enjoyed making the bird feeders to put in the garden, which allowed me to re-use unwanted materials for something purposeful. This is a fun and engaging activity that I will be doing with the children in my practice to teach them about conservation.

Part 2

Now I will be moving on to explore sustainability and critically evaluate how this could support the principles of early childhood education for sustainability. According to Caradonna (2022) and World Commission on Environment and Development Our Common Future (1987), sustainability refers to meeting the needs of the present, without depleting the natural resources that will allow future generations to meet their own needs. Moore *et al.* (2017) and Ruggerio (2021) agree and consider it important to use resources in a way that helps support social well-being, preserves the environment, and maintains economic viability in the long term.

When considering early years education, Symons (1996) believes that sustainability can easily be incorporated into teaching practices as a way to help children understand the importance of making responsible choices and taking care of the environment. In addition, Davis and Elliot (2024) suggest this can involve activities such as, going on a nature walk, recycling and discussing ways in which to reduce waste, gardening and learning about nature. Furthermore, Clarke and Mcphie (2015) state that children can develop a mindset that values social responsibility and environmental stewardship, by incorporating sustainability into early years education.

Education for Sustainable Development and Global Citizenship (ESDGC) places emphasis on the importance of incorporating sustainability into early years education (Welsh Government, 2012). Bennell (2015) believes that this will encourage practitioners to adopt a pedagogy that promotes social responsibility, environmental awareness and global citizenship in early childhood learning experiences. According to Tinney (2020) activities that incorporate ESDGC principles include hands-on

experiences, such as nature walks like those done in the John Muir award, recycling, conservation activities and storytelling about how to care for the environment. Furthermore, Tinney and Hirst (2017) believe that by incorporating the principles of the ESDGC, this will aid children to develop strong foundations of sustainability values and an understanding of the significance of caring for the environment and the world around them.

Research conducted by Evans *et al.* (2017) found that teachers feel there are too many time constraints in their already busy curriculum to incorporate outdoor learning and education for sustainability for young children. This is a common theme in early years education these days according to McClintic and Petty (2015), as teachers are struggling to find the time to incorporate activities like those in the John Muir award, such as gardening, nature walks and outdoor learning into their busy schedules. Waite (2019) suggests that those activities are often seen as ‘treats’ for children and do not happen regularly or do not happen at all.

However, despite the time constraints Gilbertson *et al.* (2023) believes that incorporating more sustainability and outdoor learning into the curriculum is possible. Moomaw (2024) suggests that teachers will be required to creatively incorporate these elements into existing lesson plans and activities, which will ensure they are making the most out of the time they have. Braun, Cottrell and Dierkes (2017) are in agreement and question why schools are solely focused on assessing math, language and literacy in the traditional format of pen and paper. Why can math not be explored in the patterns or different colours during a nature walk, or language and literacy not be assessed by asking a child what different insects they can spot out in the park (Moomaw, 2024). These cross-curricular activities which are included in the John Muir award, support the themes and aspirations of Education for sustainability (O’Flaherty and Liddy, 2018). Additionally, Tinney (2020) believes that it will require teachers to re-think their current practice and creatively adapt their lessons to include more opportunities for children to engage with nature. Furthermore, the themes in the ESDGC, such as choices and decisions, natural environment and consumption and waste all interlink with the 6 areas of the curriculum for Wales if the lessons and activities are carefully planned (Welsh Government, 2024; Welsh Assembly Government, 2008).

According to United Nations (2023) teaching children more about sustainability in the early years helps to support the sustainable development goals, by inspiring a sense of awareness and environmental responsibility from a young age. Huggins and Evans (2018) and Davis (2010) agree and state that including more hands-on, engaging activities in nature about sustainability for children can help them to understand the importance of looking after our environment and our planet, which are key aspects of the sustainable development goals. In addition, the Future Generations Commissioner for Wales (2015) believes by incorporating sustainability into early years education, this is encouraging children to actively participate in creating a more sustainable world for future generations. Furthermore, by doing so, this aligns with the (*Well-being of Future Generations (Wales) Act 2015*). The aim of this act is to ensure a better quality of living for current and future generations by considering the long-term impact of decisions on environmental, economic, social and cultural well-being (Future Generations Commissioner for Wales, 2015). Therefore, Welsh Government (2022) and the Future Generations Commissioner for Wales (2015) suggest that by integrating education for sustainability from a young age, this will help to nurture a generation of children that are ethical informed citizens of Wales and the world and are mindful of the well-being of future generations and the environment.

According to McNair and Powell (2021), German theorist, Froebel believed in the importance of children having the opportunity to connect with nature from a young age, in order to develop a sense of wonder and respect for the environment. Froebel placed emphasis on the role hands-on experiences and outdoor play has on children's holistic development and their understanding of sustainability (Smith and Powell, 2017). The opportunities to experience nature and explore and discover when doing the John Muir award, are exactly what Froebel encourages (Murray, 2018). Tovey (2016) agrees, suggesting that by taking children on nature walks, litter picking at a local park or beach and teaching them about the importance of recycling, making bird feeders or making a bug hotel, practitioners can take influence from Froebel's principles, in turn helping children to develop a deep appreciation for nature and the importance of sustainability. Furthermore, nature-based activities like this support the aspirations of education for sustainable development (ESD) by

engaging in child-led, hands-on and meaningful experiences (O'Flaherty and Liddy, 2018).

According to Addison and Boyd (2017), experiences offered in the John Muir award include opportunities for hands-on, practical learning in early years education. The principles of this award are focused on connecting children with nature, developing awareness of environmental responsibility, and promoting learning through experience (Cornell, 2022). According to Omidvar *et al.* (2019), the Reggio Emilia approach supports the principles of the John Muir award by emphasizing hands-on, practical learning and exploration in the outdoor environment. In addition, Edwards and Gandini (2018) suggests that this approach views young children as capable, and resourceful learners who are able to explore and understand sustainability concepts through experiences and interactions in nature. Furthermore, Tinney and Merriman (2018) strongly believe that children learn best through direct experiences and active participation with their environment, those that are fundamental principles of the John Muir Award.

According to Hirst (2019) through hands-on learning in nature, children can actively participate in and learn about different sustainability concepts. MacDonald (2015) and Miller (2012) suggest that engaging activities like tending a school garden, or creating eco-friendly crafts using recycled materials, learning about composting and exploring different aspects of nature during outdoor activities help children deepen their understanding of sustainability, which supports the sustainable development goals. However, Kiviranta *et al.* (2024) suggests there are challenges when trying to incorporate more hands-on learning in outdoor environments for young children. When taking children out into nature, being able to maintain a suitable staff-child ratio is crucial for ensuring there is appropriate supervision, and the children are safe (Kiviranta *et al.*, 2024). Waite *et al.* (2019) agrees and suggests this can be challenging, and a reason as to why some school children miss out on these opportunities to learn in nature. In addition, Cheng *et al.* (2023) believes that it can prove challenging trying to balance this ratio whilst also providing meaningful and engaging learning opportunities in nature for children.

Although there may be challenges trying to balance the staff-child ratios, Dymont *et al.* (2014) and MacQuarrie (2022) believe that with well trained teachers, proper and

effective planning ahead of time and clear communication, this can help to address these challenges and create rich learning opportunities for children. Furthermore, Yildirim and Akamca (2017) state that teachers will be required to ensure clear guidelines and protocols are in place to ensure the staff-child ratio is maintained during the outdoor learning sessions. Taking these actions can all contribute to successful learning experiences in nature, while ensuring the safety and well-being of the young children (Dyment *et al.* 2014).

The United Nations Conventions on the Rights of the Child (UNCRC) places emphasis on the importance on teaching young children about sustainability (Save the Children, no date). They highlight that children have the right to learn about environmental education, global citizenship, climate change and social justice (UNICEF, no date). In addition, UK Government (2010) suggests the UNCRC stress the importance of ensuring that children have the correct skills and knowledge to understand issues related to sustainability. The John Muir award and its principles link well with the UNCRC by encouraging hands on learning about nature, outdoor exploration and environmental education about sustainability for children (John Muir Trust, no date; UNICEF, no date). According to Save the Children (no date), these principles resonate with the rights of the child.

However, the John Muir Trust (no date) states that this award is for participants at a later stage of primary school and beyond, such as from year four onwards. Elliot and Davis (2014) disagree with this statement, suggesting that the opportunities associated with the John Muir award are appropriate for all ages. Korkmaz and Guler Yildiz (2017) continue to suggest that children as young as three and four in nursery and reception classes can participate in this award by engaging in outdoor learning activities that are appropriate for their age. In addition, Barrable (2019) believes that teachers can teach children about caring for the environment and sustainability through interactive and hands-on experiences, which is a great way to introduce the wonder of the natural world in young children. Furthermore, helping them to develop a sense of belonging on this planet from an early age (Welsh Government, 2024).

Montessori and her educational approach places emphasis on encouraging respect for the environment, encouraging children to engage in hands-on, nature-based activities that teaches and promotes sustainability (Gynther and Ahlquist, 2022).

According to the John Muir Trust (no date) and Welsh Government (2012) this links well with the principles of the John Muir award and the ESDGC, emphasizing the importance of including education for sustainability into the early year's curricula.

To bring this presentation to a conclusion, this John Muir Award has been such a rewarding experience and one that I will never forget. Working in a primary school and doing a full-time degree does not leave me with much free time, therefore having this time to explore and really connect with nature whilst doing the John Muir award has been special. I am always taking my dog out for a walk around the farm and the surrounding areas; however, I have not stopped to really appreciate the beauty of my surrounding for quite some time. This experience has really made me think differently about the environment and how my actions can impact the world. Now that I am coming to the end of my university degree and hoping to have a future career in early years education as a primary school teacher, I have been considering how my John Muir experience will influence my future practice. I feel my knowledge of education for sustainability has grown and I have learnt the importance of providing meaningful opportunities for young children to learn and engage in nature.

It is evident from the topics discussed in this presentation the impact hands-on, meaningful learning opportunities in nature has on young children (Samuelsson and Park, 2017). Providing these rich experiences for them to explore and discover in the natural world, whilst learning about sustainability and how to care for the environment is vital according to Hadland (2020), as this will help children connect with nature and develop a sense of responsibility towards the planet. Through sharing the John Muir experiences with other practitioners, this could spark their interest to gain the confidence to lead aspects of ESDGC within their own practice, in order to nurture a generation of children who are ethical, informed citizens of Wales and the world (Welsh Government, 2024; John Muir Trust, no date).

Furthermore, ensuring that the next generation are being nurtured into a generation of environmentally aware individuals, who are equipped to contribute to a more sustainable future (Chawla, 2006; Davis, 2015).

Thank you very much for listening.

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