

Sustainability – Reflection

Hi, I am Rebecca and my student number is 2209334. I am going to reflect on completion of the John Muir Award.

The John Muir award gave me the opportunity to explore a natural area that has personal meaning to me. I decided that I would base the project on my Bampas garden. The garden is a very meaningful place to me as I spent many hours of my childhood exploring and playing there whilst making memories with my sister, Bampa and Nan who we sadly lost to a Stroke 6 years ago. Since the loss of my Nan, my Bampa has taken on the responsibility of maintaining the beautiful garden that he created together with her. She would often take me and my sister into the greenhouse and talk to us about the plants and flowers that were growing in there, I will never forget the excitement of when she let us take in a watering can to water the plants and the endless arguments about whos turn it was to water each plant. Seeing that they had grown a few weeks later was even more exciting.

We also used to play games like hide and seek with many great hiding places in the garden which was a perfect opportunity to explore the nature. We would have picnics on the lawn which brought the whole family together and I have many fond memories of seeing all the butterflies, bees, birds and dragonflies all whilst enjoying our picnic and both of my grandparents would never fail to tell me the names of all the wildlife and insects that we would see. Another one of our favourite things to do was explore the pond and they would teach us all about the fish, newts, frogspawn, tadpoles and frogs that we would find in there. My sister and I would always have competitions about who could see the most wildlife in the pond and often challenged ourselves to see if we could remember the names of them.

Now that we have grown up and life is so busy when I go to visit my grandfather, I often ask if we can go and sit outside in the garden as it reminds me of all the special times that we shared as a family. I find it is a peaceful and relaxing place to go to if I have had a busy or stressful day and I enjoy listening to the rustling trees, the birdsong and seeing all of the wildlife that is regularly in the garden as it brightens my mood and de-stresses me.

When I decided to base the project on this garden, the strong motivation that I felt to conserve and continue to look after this area was quite overwhelming and I felt emotional. I just knew how proud my nan would be that my Bampa and I were working together on a project that they had always been passionate about – sustaining and protecting the environment. It was a great opportunity for myself to spend more quality time with my grandfather and my uncle as due to working and doing a degree my time is very limited. It also gave us the opportunity to participate in intergenerational learning which provides benefits for everyone involved.

One of the first things that we did was go around and explore all of the plants and flowers in the garden whilst my Bampa taught me interesting facts about each one. I then furthered my research by using online resources to find out more in-depth information about each flower or plant. I learnt that small versions of Australian Tree Ferns are called ‘Shuttlecock ferns’ as they resemble the shape of a Shuttlecock used in Badminton – this is one of my favourite trees as it reminds me of my Nan who loved to play Badminton.

Creating the bird boxes with my uncle was one of the most enjoyable parts of the experience. It was so interesting learning about his hobby and I really enjoyed painting the bird boxes and choosing appropriate trees to put them up on. It was so exciting when we were sitting in the kitchen one afternoon and

witnessed the bluetits using one of the boxes and I was very pleased that I managed to capture a video of this to include in the project. I also found it interesting to find that if the hole on the bird box is too big, the birds will block it up with mud that they have found on the ground.

I also enjoyed researching what birds can eat and preparing the food to put out for the birds. I found it interesting that there were many other things that they could eat other than bird seed. We put out cut up apple and pear, raisins and left over pasta. It was safe to say it didn't take long for it all to be eaten.

Throughout this project I took many pictures and videos and I loved capturing them and being able to share them in my scrapbook. I managed to get a video of a mother, father and baby Herring Gull nesting on a nearby roof. I feel that this project may have unlocked a hobby that I never realised interested me.

It was enjoyable exploring the pond and learning about the many benefits a pond brings to conserving wildlife in the garden. Ponds are the biggest supporters for freshwater life and they can have a positive effect on environmental issues such as flooding and climate change. I also learnt that pond plants help to keep the water clear, attract more wildlife and provide shelter for aquatic wildlife.

I loved planting the flowers and found it satisfying because of researching how much it benefitted the environment. Planting flowers promotes biodiversity, purifies the air, supports wildlife in the garden and helps to battle climate change. It also brought back many happy memories from my childhood of planting flowers with my nan.

I wrote a poem about the garden which I have shared with my young niece and nephew. They absolutely loved it and immediately asked me to read it to them

again. I am hoping that I can teach them some of the knowledge that I have learnt and involve them in experiences like planting flowers and preparing food for the birds in the future.

To conclude, The John Muir Award has been an invaluable experience that I have learnt so much from. I feel that this project has enabled me to connect with nature and taught me the importance of nature-based experiences for young children as taking part in hands on experiences in the outdoors inspires people to care for the environment.

Part 2 – Sustainability in the Early Years

According to Brundtland (1988, cited in Hedefalk, Almqvist and Ostman, 2014) and World Commission on Environment and Development (1987, cited in Prince, 2010) sustainable development is defined as development that meets current needs while preserving future generations' ability to meet their own. Well-being of Future Generations Wales act (2015) and Welsh Government (2024) say that sustainable development is defined in the Well-being of Future Generations Wales act as the process of increasing Wales' environmental, social, economic and cultural well-being by acting in line with the sustainment development principle which strives to achieve the well-being goals. Furthermore, UNICEF (2013, cited in Engdahl, 2015) state that to achieve a sustainable world there would need to be a shift in awareness, practices and values to enable change in the unsustainable patterns of production and consumption currently.

United Nations General Assembly (2015, cited in Allen, Metternicht and Wiedmann, 2018) and Moore (2015) maintain that over a 15 year period until 2030, there are global Sustainable Development Goals (SDGs) which offer an evidence-based framework for planning and programming related to sustainable development at the national, regional, and international levels. Moore (2015) points out that human activity drives environmental change and the SDG's provide opportunities for governments and societies around the world to meet targets and return human activity to 'safe operating spaces'. However, it is also necessary to implement social innovation in order to shape the future human condition. Furthermore, Collste, Pedercini and Cornell (2017) and Stafford-Smith *et al.* (2017) say that it is important that implementation of

the SDGs is created upon science and evidence, utilising contemporary sustainability science methodologies, such as systems analysis, thinking and quantitative modelling. According to Unicef (2020) the Convention on the rights of the child states that governments responsibility is to respect, fulfil and protect children under their jurisdiction, whereas the SDGs aim to alleviate poverty, protect the earth, and promote peace and prosperity by 2030. The two concepts have potential for implementation and mutual advocacy.

Hedefalk, Almqvist and Ostman (2014) and Kopnina (2020) point out that Educational Sustainable Development (ESD) in Early Childhood Education (ECE) can be defined in two ways. The first focuses solely on the environment and the second focuses on three interrelated dimensions which are social, environmental and economic. Eliam and Trop (2010, cited in Barrable, 2019) maintain that ESD aims to promote responsible environmental behaviour (REB), although how to achieve the pedagogical aspects of this are not regularly articulated. Barrable (2019) proposed a framework which aims to centre Environmental Education (EE) in the early years around REB because of its beneficial correlation with nature connectedness. The framework aims to provide children with opportunities for regular contact with nature, to partake in mindfulness, cultivate compassion towards non-human nature and engage with nature's beauty. ESD links to the new curriculum for Wales. Welsh Government (2022) and Donaldson (2015) state that a section of the four purposes says that the curriculum should support students to become ethical, informed citizens of Wales and the world. They should display their motivation to support sustainability of the world.

However, Babiuk (2014) says that a barrier to ESD is that sustainability education is not a core component of any teacher training education programmes. Yavetz *et al.* (2013, cited in Foley, 2020) state that results of a study show that student teachers have lack of knowledge about the environment which emphasizes the importance of sustainability being integrated into initial teacher education. Nevertheless, Kang (2019) and Kabaday (2016) point out that an effective way to improve the competence and knowledge of teachers with regards to ESD is in-service training. When creating in-service training programmes, the knowledge, abilities, and attitudes required to overcome the hurdles to ESD should be taken into account.

According to Chen and Komph (2012, cited in Foley, 2020) another barrier to implementing ESD is that people display resistance to change. Teacher resistance to change is the primary cause of curriculum change's failure or its only partial success. Furthermore, Parry and Metzger (2023) maintain that many teachers believe that teaching the curriculum ensures that children learn all that they need to know about sustainability. However, learning objectives are often narrow, and the acquisition of competences that allow students to participate in collaborative problem solving around sustainability concerns is not prioritised over factual content.

According to John Muir Trust (2019) there is an environmental award scheme called the John Muir Award. It encourages people of all ages and backgrounds to enjoy, connect with and care for wild places. To achieve the award there are 4 steps that need to be taken which are to discover a wild place, explore the place, do something to conserve it and then present and share the experiences. Loynes (2018) maintains that the John Muir Award encourages teachers and practitioners to combine natural connections of early childhood

education with Geography to foster active environmental citizenship in children. Borg and Gericke (2021) state that results of a study show that it is important for children to actively participate in activities that involve caring for the environment for example growing plants as it motivates them to improve the world and become critical thinkers.

Whatsmore, Engdahl (2015) points out that sustainability projects like the John Muir Award and the OMEP World Project can be used to raise pre-school children's awareness of ecology, environmental protection and other things linked to ESD. However, projects like these tend to be participated in more by schools than pre-school settings. Preschoolers have the right to participate in issues concerning life currently and in the future. Kabadayi and Altinsoy (2018) agree and say that children that are given opportunities to participate in projects and receive education on environmental issues at a young age often turn into strict conservationists of the environment and sustain what they instilled in the early years throughout life.

The John Muir project was based on 'hands on learning' and 'learning through experiences in the outdoor environment as experienced by the creator of the project in part one of the assignment. This links to Froebels theory. According to Ødegaard (2021) and Tovey (2017) Froebel viewed 'Kindergarten' as 'a garden for children' to experience the cosmos of the ecological environment and nature cycles. It is also known as 'a garden of children' because it was a place where children could meet their friends to play. In the Kindergarten the children and teachers could both learn from each other which shows the importance of the natural environment. However, Munroe and MacLellan-Mansell (2013, cited in Coe, 2016) and Van Dijk-Wesselius *et al.* (2020) state that some parents and practitioners have concerns with regards to outdoor

learning, they worry that it is unsafe, and the curriculum may not be covered properly if outdoor learning is taking place regularly therefore it may not be promoted. Nevertheless, according to Silverman and Corneau (2017) when adults overprotect children, there is a risk of unintentionally decreasing their ability to overcome obstacles and develop confidence and resilience.

The John Muir award also gives opportunities for children to work with intergenerational people and create partnerships with community members. The creator of the project in part one of the assignment collaborated with her grandfather and uncle to develop her knowledge about sustainability when completing the project. Green and Somerville (2015) and MacDonald (2015) maintain that to broaden their own knowledge of sustainability and their students' understandings of it, many teachers create links with the wider community. This may include making connections with conservation groups, other teachers, parents, community organizations and partnerships with different schools. Peterat and Mayer-Smith (2006, cited in Mitchell *et al.*, 2014) and Lawson *et al.* (2018) believe that there are benefits for all generations involved in intergenerational learning about sustainability, due to fostering learning opportunities and building on motivation to protect the environment. Younger students may influence older generations and older generations may influence younger generations. Whatsmore, Green and Somerville (2015) point out that teachers recognised the advantages of broadening sustainability practice to include a dedicated group of adults who share environmental knowledge, skills, and community traditions.

However, according to Roberts and Downes (2016) community partnerships may be lacking in rural schools when compared to schools in non-rural locations. Sustainability is included in the curriculum to promote social change,

therefore sustainability is the impetus behind community development.

Furthermore, Osoian (2014) agree, results of a study show that older generations that live in rural areas are disappointed with the lack of opportunities that they are given to collaborate with young children.

Silverman and Corneau (2017) believe that taking children on nature walks teaches them to be stewards of nature. It enables them to develop values and skills that support them to make positive environmental choices as they grow up. Louv (2005, cited in Haas and Ashman, 2014) say that children's connection to the world is deepened when they have the opportunity to become familiar with and explore nearby nature. Mann *et al.* (2021) maintains that nature-based learning can enhance children's natural abilities by providing possibilities for experiential, cooperative teamwork, and student-centered learning. It also gives them the opportunity to be creative and explore their curiosity.

Whatsmore, Onyekwelu *et al.* (2023) maintains that children are viewed in the Reggio Emilia approach as curious individuals who want to learn about the world using their surroundings to guide them. Therefore, Reggio teachers provide educational opportunities, often in natural environments that encourage logical thinking, problem solving, self-expression and communication. Edwards, Forman and Gandini (2012, cited in Restall, 2021) and Fabbi and Viunnyk (2023) states that Malaguzzi viewed the environment as the 'third teacher', with the belief that children benefit from opportunities to have a 'hands-on' approach in natural settings which provides children with exposure to skills for lifelong learning from a young age.

Bond (2015) and Schneider *et al.* (2014) point out that children are involved in the learning process in Reggio Emilia programmes due to their rights being respected as they are viewed as citizens of the world. If children are listened to

and their views are considered the likelihood of them promoting sustainability is higher. Furthermore, Unicef (2020) say that the Convention on the Rights of the Child states that each child has the right to a safe, healthy and sustainable future, with the right to be listened to about decisions and issues that will influence their future.

However, according to Waite (2020) a possible barrier to outdoor learning and nature walks may be lack of funding in the childcare setting. To expand children's knowledge external providers may be required at a cost or transport may be needed to visit remote sites. Transitioning from familiar to remote natural surroundings offers unique learning opportunities but comes at a cost which parents and schools may not be able to afford. Furthermore, Ernst (2014) agrees and says that it is difficult for settings that do not have walking access to an outdoor environment which results in transportation being needed at a cost.

To conclude, it is important that children are educated on Sustainability from a young age as this motivates them to become ethical informed citizens, support sustainability and care for the world in which they live. There are many projects that support sustainability such as the John Muir Award and the OMEP project that raise awareness on sustainability by giving children hands on, active learning experiences. However, there are many barriers to teaching Educational Sustainable Development that need to be overcome to ensure that children receive beneficial learning experiences based on sustainable development.

Thank you for listening. Any questions?

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