Presentation

Hello, I'm Eira Mainwaring student number 2216696 and the aim of my presentation is to highlight how we can all play our part in sustainable development and create a society and an environment that can support life both today and in the future.

I decided to explore two of my favourite places for the John Muir award, the first Llyn Llech Owain Country Park a 180-acre park situated in Gorslas, near Cross Hands with nature trails, an adventure area, a forest tracks a lake in the centre surrounded by a peat bog and a discovery tower. There are heathland and broadleaved woodland, a network of footpaths provides for enjoyable walks. There are bird watching stations situated in various areas where you can use the telescopes to see some of the birds and on occasion the peacock, painted lady and orange tip butterflies who have made the park their home. The Discovery Tower stands beside the lake, from the higher level you can enjoy views of the lake and the surrounding area. It houses fun interactive games full of information about the Country Park. The rare habitat is designated a Site of Special Scientific Interest.

I also explored Lliw reservoir situated within an area of stunning mountain scenery north of Swansea in Felindre. It has two reservoirs an upper and lower reservoir surrounded by a mosaic of habitats, a recreational footpath around the reservoir including a 4-mile route suitable for wheelchairs and pushchairs at the lower Lliw reservoir. There is no vehicle access for visitors from the lower to the upper reservoir, only access allowed is to Welsh Water staff, making the area safe to explore and enjoy. It allows for a relaxing walk with beautiful views.

I chose these two areas to explore as I was brought up visiting both regularly as a child. I have continued the tradition with my own children. We have enjoyed many family walks, picnics and have created many happy memories, in the same way as I have, of when I was a child. Both areas are dog friendly therefore we can enjoy walking our two dogs whilst appreciating the beauty of nature around us.

Taking on the John Muir award made me realise how lucky I am that these two beautiful areas provide the freedom, beautiful scenery and the space to explore and on my doorstep. Each visit provides with new experience, we meet friends at Llyn Llech Owain twice a year when they come home to visit from Okehampton as we love it so much. It holds fond memories when they lived here of taking our children for days out of exploring and picnics. Our children are older now but still come with us which is lovely, and this is something I want the children of my nursery to experience.

However, I started thinking some children are not as lucky and access to nature is not always possible. Therefore, if we can introduce nature and how to enjoy and preserve it in nurseries, this will grow with them.

I plan to take the children for walks to our local woodland Park, inviting the parents for an afternoon of exploring. Encouraging families to enjoy the outdoors together while promoting awareness and understanding of natural environments, to learn about nature, fostering a sense of responsibility towards the environment and

promoting sustainable practice such as walking, instead of using a car helping to reduce everybody's carbon footprint.

The last time I visited Llyn Llech Owain I took the time to read some of the plaques scattered around the park and after reading the interesting one about the bees I decided I wanted to learn more and after some research I learnt how important the bee is to the environment how they play an important role in pollinating trees and flowers. They help to provide habitats for wildlife and pollinate the food we need to survive.

To attract more bees, I decided to introduce lavender to our garden as lavender is an excellent plant for the bees when in flower, it also looks and smells wonderful. It is a great source of nectar the bees. I have since been buying honey from local suppliers as it is pure, helps with allergies, has allergens native to the area we live in and helps with my own carbon footprint by staying local and not travelling to buy from a supermarket.

I have also learnt that other flowers such as Foxgloves the common poppy and herbs such as Lemon thyme and basil are bee friendly. Plans are in motion to introduce these to the garden but making sure they are certified organic as organic farms have an average 30% more biodiversity and are heavens for wildlife providing homes for bees, birds and butterflies. Introducing herbs and growing my own fruit and vegetables are also in my plans for the garden this will help with my own sustainable development goals.

The John Muir Award encourages children and people to connect and enjoy wild places it also involves taking practical steps to care for the places, the award encourages sharing the experience through clean-up efforts, habitat restoration and conservation projects. These allow people to share their experiences and promoting environmental awareness which is important in promoting sustainable practices therefore I intend to participate in the next local clean-up effort and hopefully I can persuade others to join.

However, I feel nurseries would benefit from this award too, I have gained a sense of achievement through my involvement in the award, and we all have a part to play in protecting our planet, even if it is a small part. If we can teach early years children about these important issues, introducing what we as practitioners have learnt, we are contributing to their learning opportunities in becoming conscious global citizens with positive independent sustainable development goals.

The ability to continue or sustain a process over an extended period is known as sustainability and according to the Brundtland Report in 1987 sustainability referred to the management of resources such that current requirements are satisfied, without endangering the capacity of future generations' needs. It entails striking a balance between social progress, environmental preservation, and economic expansion.

As stated in the Well-being of Future Generations (Wales) Act 2015 sustainable practices aim to protect the environment from harm, preserve natural resources, and advance both human prosperity and long-term ecological health.

Dunne (2015) stated to achieve a happy coexistence between humans and the environment, the holistic approach must tackle problems including social justice, pollution, resource depletion, and climate change.

Malala Yousafzai an activist for global quality education explains, The United Nations Sustainable Development Goals (SDG) are 17 global goals agreed upon in 2015 by world leaders with the aim to create a better, fairer world by 2030, the aims are ending poverty, addressing the urgency of climate change and ending inequality (The Global Goals 2016; Samuelsson and Park 2017). The Well-being of Future Generations (Wales) Act 2015 is underpinned by the same values and aims for the same outcomes here in Wales.

According to Article 29 of United Nations Convention on the Rights of the Child education should encourage children to respect own parents, own and other cultures and the environment (UNICEF, 2019). Therefore, Dunne (2015) states to achieve such goals, respect must start at home and in early years, learning to live peacefully, respect other people and protect the environment. Children are the future, who can make a difference and nature is a powerful tool for teaching children about sustainability through play (Tinney and Merriman, 2018).

During the United Nations Conference on Environment & Development (Earth Summit) in 1992 it was identified that there was a need for a solution to the challenge of achieving sustainable development and in 1994 Eco-schools were established (Merriman et al., 2014). The Eco-school programme provides a seven-step framework empowering young people to make a difference in school, in the community and beyond, covering global issues such as climate change (Welsh Government, 2023)

Davis (2015) and Dunne (2015) both states promoting sustainable development and enhancing people's ability to address environmental and development concerns require education. Aznar-Diaz *et al.,* (2019) states continual education is also necessary in future generations to generate environmental attitudes that is essential in the fight against climate change and reducing pollution.

Boyd (2018) and Davis (2015) both highlighted that early year's practitioners must be knowledgeable about sustainable development to educate and integrate it into the curriculum and to recognise early years has an important place in transforming young children's lives. Moreover Boyd (2018) states practitioners must be willing to try new resources that can support a sustainable ethos such as Education for Sustainable Development and Global Citizenship (ESDGC) and committed to teach it in a cross-curriculum and not to treat it as a separate subject (Huggins and Evans 2017).

The Curriculum for funded non-maintained nursery settings shares the same principles as ESDGC and promotes 'Cynefin' a sense of belonging this can be achieved through outdoor play with hands on approach this is underpinned by Dewey's theory where reality must be experienced, and children need to interact with the environment to adapt and learn (Mooney, 2013). According to Bottrill (2022, p. 25) the most important thing for development is play. Experiences need to be child-

led allowing freedom to explore the natural areas nurseries has to offer (Barrable. 2019; Welsh Government, 2022).

However, Nicholls and Thorne (2017) highlights practitioners sometimes feel pressured due to the requirement of the curricula, policies, the lack of time or support that it available is not adequate and Ginsburg and Audley (2020) states it is impossible at times to engage in a more ethically driven sustainability practice due to parental barriers such as misconceptions or lack of knowledge.

ECA Learning Hub (2013) acknowledges it can take time to achieve a flourishing natural sustainable outdoor environment in nurseries, however small steps such as the children being curious and the opportunity to learn through playing in the earth, water and natural materials can make a big difference. This is underpinned by Froebel's theory who saw children as curious and learnt from exploring, playing and asking questions to understand the world (Davies, 2015; Bradbury and Swailes, 2022).

Watts (2022) states Froebelian holistic pedagogy through child, adult and the natural environment are mutually beneficial, and children are becoming increasingly reliant on adults in accessing outdoor play. However, some factors influence this such as time, pressures and a culture of fear. This has created a society where children no longer stray far from home and only happens when accompanied by an adult. Passmore *et al.,* (2020) highlights adults who connect with nature is also influential on the opportunities available to children and the whole family. Chawla (2015) associates this influence with physical and psychological health benefits.

Unfortunately, it is not always possible to achieve the freedom of an outside play area in nurseries, budgets can be an issue, therefore making use of materials that is available (ECA Learning Hub, 2013). Nurseries may start with planting some flowers and vegetables in containers available, this allows the children to play with the earth and watch the plant grow This can provide the platform to understanding where food comes from and the lifecycle of a plant (McNichol *et al.,* 2011; CAFOD, 2014). This also opens conversation where other food and drinks comes from such as fairtrade tea, coffee and bananas making interlinks with the world and demonstrating an ethical commitment in supporting farmers and workers to receive a fair price, safer working conditions abroad (Fairtrade Foundation, 2024).

Designing a curriculum which supports the ideas of ESDGC encourages conversations, by including all kinds of weather this bring different experiences such as measuring rainwater, where the rain comes from, how to save the water to reuse by installing water tanks, noting the different temperatures can foster discussions and understand about the Carbon cycle and global warming (Nascimento, 2019).

Reaching out to the community and making community connections could be an option, this is underpinned by the Montessori approach where children are influenced by adults and communities, this may help with advice, for materials and resource donations allowing people to help to develop a sustainable outdoor play area (Dunne, 2015).

Other sustainability actions may include building a compost bin for food waste and to introduce recycling bins for different materials. Involving the children in the process of reusing and recycling allows awareness of the world around them (Davis, 2015; Dunne, 2015).

Countries, along with individuals need to achieve environmental goals. The European Union's Single-use plastics Directive mandates states members should achieve a 70% collection rate by 2023 and 77% by 2025, however findings from Eunomia's study suggest some countries such as Spain was unlikely to meet the target and recommendations were made, such as the Deposit Return System, where consumers pay a deposit when purchasing a drink and is refunded when the container is returned to the retailer. Spain previously reported 71% however the study reported the actual figure as 36% was collection rates of plastics.

This has been introduced in other countries and has significantly improved recycling rates and reduced litter (ESG News, 2024). The scheme has been delayed until October 2027 for the UK, as the plan has faced backlash from the drinks sector because of uncertainty about the implementation of the scheme. The Department for the Environment, Food and Rural Affairs (Defra) has announced that the delay is due to the need to achieve interoperability of the scheme, that all 4 nations agree, and it operates seamlessly as possible. Urgent discussions and action are needed as plastic are travelling into the seas and are affecting sea life and birds around the coasts (Rooney, 2018). However, a balance must be reached for retailers and consumers without the support the scheme will not work.

Any decisions and improvements made to reduce waste has to start somewhere. It is an ongoing process that needs reviewing continuously and teaching the importance of recycling and reusing to children during play from an early age is paramount (Iliopoulou, 2017).

In conclusion, sustainability is essential in early years education although small, but is vital as it equips the next generation with the knowledge skills, and values necessary to address the environmental challenges of the future. Addressing barriers involves awareness, making sustainable options more accessible and affordable. Intergrading sustainability into education fosters critical thinking, environmental stewardship, and social responsibility.

By understanding the interconnectedness of ecological, economic and social systems, children become empowered to make informed decisions and take actions that promote a healthier planet. Ultimately, sustainability in early years and in education nurtures conscientious global citizens, creating communities with high levels of environmental consciousness into the future and who are capable of leading and innovating towards a more sustainable and equitable world.