Part 2 – Reflection and evaluation

Introduction

Good afternoon, my name is Ashley, student ID:0951729 and my journey into understanding and engaging with sustainability began with the creation of a Sway document focused on the lack of green space in Castle Gardens, Swansea. This experience significantly deepened my comprehension of sustainability issues and heightened my practical involvement in environmental discourse.

Creating the Sway document was an eye-opener. Initially, I knew green spaces were beneficial, but the research required for this project revealed the multitude of ways in which they are essential. Green spaces like Castle Gardens not only provide aesthetic value but are crucial for biodiversity, human health, and climate regulation.

One key aspect I explored was the potential for biodiversity enhancement in Castle Gardens. I discovered that introducing more plants and green areas would create habitats for various insects and small animals, contributing to a healthier ecosystem. For instance, bug houses can serve as vital sanctuaries for pollinators such as bees and butterflies, whose populations are declining due to habitat loss. Understanding this interdependence between green spaces and biodiversity made me realize that even small urban areas can have a significant impact. This knowledge fuelled my passion for advocating more green spaces and helped me see the broader implications of local environmental actions.

The practical aspect of this project involved writing a letter to the local council and the installation of bug hourses. This was not just a theoretical exercise; it was a direct action aimed at bringing about real change. I advocated for the installation of more recycling bins in Castle Gardens, a step that would encourage sustainable waste management practices among visitors. Crafting this letter required me to think critically about how to present my arguments effectively. I had to research the benefits of recycling bins, including their role in reducing litter and promoting recycling habits. This task enhanced my communication skills and taught me how to frame sustainability issues in a way that appeals to policymakers.

Through this project, I came to appreciate the importance of local actions in the global sustainability discourse. Every small step, whether it's planting a tree or advocating for recycling bins, contributes to a larger movement towards environmental stewardship. This realization has inspired me to continue engaging with sustainability issues in my community.

Moreover, this experience has equipped me with valuable skills such as research, advocacy, and effective communication. I've learned to analyse environmental problems critically and propose practical solutions. These skills are not only applicable to sustainability but are also valuable in various aspects of life and career.

Conclusion

In summary, creating the Sway document and engaging with the sustainability issues in Castle Gardens has been a transformative experience. It has broadened my understanding of the intricate relationship between urban spaces and biodiversity and has empowered me to take practical steps towards environmental advocacy. This project has laid a strong foundation for my continued involvement in sustainability initiatives, and I am committed to contributing to a greener, more sustainable future.

Part 2

Introduction

Early childhood education for sustainability (ECEfS) is a pedagogical approach aimed at harbouring sustainable practices and environmental consciousness among young children, Davis, J. (2015). This educational philosophy emphasizes hands on learning, nature-based activities, and a deep connection with the natural world, drawing from theories and practices established by educational pioneers such as Friedrich Froebel and John Dewey. The John Muir Award, with its focus on outdoor learning and environmental stewardship, aligns closely with these principles. This critical evaluation explores how undertaking experiences such as those in the John Muir Award can support the philosophy and principles of ECEfS, backed by detailed sources and evidence from contemporary literature.

Friedrich Froebel, often considered the founder of the early childhood activities, emphasized the importance of play and hands-on learning in natural settings, Liebschner (2018). Froebel believed that children learn best through direct interaction with their environment, which fosters creativity, problem-solving, and social skills, Lilley (2015) and Bruce (2020). John Dewey (2015) A believer of practical experience education, advocated for learning through doing, arguing that education should be grounded in real-life experiences to make learning meaningful and relevant, Campbell (2016) and Tanner (2018).

Both these foundational theories show the principles of ECEfS, promoting a learning approach that is active, exploratory, and connected to the natural world. John Muir Trust (2022) The John Muir Award's emphasis on outdoor experiences and environmental engagement mirrors these educational philosophies. For instance, the award encourages participants to explore wild places, conserve nature, and share their experiences, creating a sense of responsibility and protectiveness towards the environment, Christie, Higgins, & McLaughlin (2016) Davis and Elliott (2014). According to some detractors, structured educational programmes, including those focusing on sustainability, may impose adult agendas on children, limiting their natural curiosity and spontaneous interactions with the environment, Rautio (2013), Waller (2016) and Bennett (2018). However, structured programs like the John Muir

Award can be designed to balance guided activities with opportunities for free exploration, thus supporting children's autonomy while instilling sustainable values.

Hands-on learning is an essential element of early childhood education for sustainability (ECEfS), allowing children to engage directly with materials and their environment. This approach creates a deeper understanding and retention of concepts. Activities associated with the John Muir Award, such as wildlife observation, habitat restoration, and environmental art, provide practical experiences that embody this pedagogical method. Research indicates that hands-on learning in natural settings significantly enhances cognitive development, physical health, and emotional well-being in young children (Ernst & Theimer, 2011; Kellert, 2015; Louv, 2019). Ernst and Theimer (2011) found that environmental education programs which incorporate direct interaction with nature significantly improve children's connectedness to nature. Kellert (2015) emphasizes that designing educational experiences that allow children to engage with the natural world fosters essential developmental benefits. Additionally, Louv (2019) highlights the importance of combating "nature-deficit disorder" through such immersive, hands-on experiences, highlighting the positive impacts on children's overall well-being. Furthermore, learning in real-world situations, as promoted by Dewey, connects theoretical knowledge with practical application. The John Muir Award's focus on real environmental issues, such as conservation and biodiversity, enables children to understand the relevance of sustainability in their lives and communities (Mannion & Lynch, 2016; Stevenson *et al*., 2014; Wals, 2015). This approach not only enhances learning outcomes but also encourages a lifelong commitment to environmental stewardship.

Critics argue that the effectiveness of hands-on learning in nature can be limited by factors such as insufficient teacher training, lack of resources, and safety concerns (O’Brien & Murray, 2017; Gill, 2014; Knight, 2016). However, with adequate support and professional development, educators can effectively integrate outdoor experiential learning into their curricula, addressing these challenges (Elliott & Davis, 2009; Knight, 2016; Roberts, 2016).

Learning in nature, as advocated by Froebel and Dewey, creates a deep connection between children and the natural world, promoting environmental awareness and

sustainable behaviours. The John Muir Award's emphasis on outdoor exploration and conservation activities encourages children to develop a sense of place and connection with the non-human world. Studies show that children who spend time in nature are more likely to develop pro-environmental attitudes and behaviours. Chawla (2020) found that direct experiences with nature during childhood significantly contribute to the development of environmental concern and active participation in environmental protection in adulthood. Similarly, Sobel (2017) highlights that regular interaction with natural environments will create empathy towards living organisms and a sense of responsibility for environmental stewardship. White and Stoecklin (2018) also support this view, demonstrating that children who engage in outdoor play and learning are more inclined to exhibit sustainable behaviours and advocate for environmental causes as they grow older.

Reconnecting with the non-human world is crucial in ECEfS, as it creates empathy, respect, and a sense of responsibility towards all living beings. The John Muir Award's activities, such as studying local ecosystems and participating in conservation projects, provide opportunities for children to experience the interconnectedness of life and understand their role in preserving it (Elliott & Young, 2016; Wilson, 2019; Chawla, 2015).

Some scholars argue that focusing on nature-based education may overlook urban environments and the diverse experiences of children living in. Kopnina (2013) suggests that traditional nature-based education often fails to address the unique challenges and opportunities present in urban settings, potentially alienating urban children from these educational experiences. Green (2018) adds that urban children may have different interactions with nature, often through constructed or fragmented green spaces, which necessitates a tailored approach to nature-based education. Barratt Hacking *et al*. (2016) highlight the importance of considering the varied socio-cultural backgrounds of urban children, suggesting that a one-size-fits-all approach to nature education is insufficient.

However, ECEfS can be adapted to urban contexts by incorporating green spaces, community gardens, and local environmental projects, ensuring that all children can benefit from nature-based learning regardless of their location. Green (2018) discusses the potential of urban green spaces, such as parks and community

gardens, to serve as valuable educational resources. Wals (2015) emphasizes the role of local environmental projects in connecting urban children with their immediate environment, in turn creating a sense of place and community involvement. Cutter-Mackenzie and Edwards (2013) suggest that integrating these urban nature experiences into the curriculum can make sustainability education more relevant and accessible to urban children, ultimately promoting environmental literacy and engagement.

Developing a sense of place is a key element of ECEfS, as it helps children build emotional and cognitive connections with their surroundings. The John Muir Award's emphasis on exploring and caring for local environments fosters this sense of place, encouraging children to take pride in and responsibility for their communities. Research suggests that a strong sense of place is associated with greater environmental awareness and activism (Scannell & Gifford, 2017; Kudryavtsev, Stedman, & Krasny, 2012; Ardoin, Clark, & Kelsey, 2014).

Moreover, the John Muir Award supports the development of an environmental identity, where children see themselves as part of the natural world and as active participants in its care. This identity formation is critical to long-term sustainable behaviours and attitudes. By engaging in activities that highlight the beauty and fragility of nature, children develop a personal connection to environmental issues, motivating them to advocate for and protect the environment (Clayton & Myers, 2015; Stevenson, Brody, Dillon, & Wals, 2013; Nisbet, Zelenski, & Murphy, 2011).

Critics may argue that the concept of environmental identity can be overly idealistic and difficult to measure (Kollmuss & Agyeman, 2002; Clayton, 2012; Hungerford & Volk, 2015). However, qualitative studies and personal narratives from participants in programs like the John Muir Award provide evidence of the profound impact these experiences can have on children's environmental values and behaviours.

The principles of early childhood education for sustainability (ECEfS) align with national and international educational policies that emphasize sustainability and environmental education. For example, the United Nations' Sustainable Development Goals (SDGs) highlight the importance of quality education (Goal 4) and climate action (Goal 13), which are directly supported by programs like the John

Muir Award (United Nations, 2015; UNESCO, 2017; Sterling, 2014). United Nations (2015) outlines the critical role of education in achieving sustainable development, particularly through SDG 4, which aims to ensure inclusive and equitable quality education, and SDG 13, which focuses on taking urgent action to combat climate change. UNESCO (2017) further supports this by emphasizing the need for education systems to incorporate sustainability to prepare future generations for environmental challenges.

Incorporating the John Muir Award into early childhood curricula can enhance the implementation of these policies by providing structured yet flexible frameworks for sustainability education. The award's activities can be integrated into various subject areas, from science and geography to art and literature, creating interdisciplinary learning experiences that are engaging and meaningful for young children (Pramling Samuelsson & Kaga, 2018; Davis, 2015; Edwards & Cutter-Mackenzie, 2013). Pramling Samuelsson and Kaga (2018) suggest that interdisciplinary approaches in early childhood education foster holistic development and a deeper understanding of sustainability issues. Davis (2015) discusses the importance of embedding sustainability across the curriculum to create meaningful learning experiences that resonate with young children’s daily lives. Edwards and Cutter-Mackenzie (2013) highlight the benefits of integrating environmental education into early learning frameworks, which can foster children's curiosity and engagement with sustainability topics.

Some educators and policymakers may view the integration of sustainability education into early childhood curricula as an added burden, considering the already extensive demands on teachers and resources (Elliott & Davis, 2009; Roberts, 2016; Cutter-Mackenzie & Edwards, 2013). Elliott and Davis (2009) point out that teachers often feel overwhelmed by the increasing demands of curriculum requirements and the need for additional training in sustainability education. Roberts (2016) discusses the challenges of limited resources and support for teachers to effectively incorporate sustainability into their teaching practices. However, the John Muir Award provides a well-structured program that can support teachers in delivering sustainability education, making it more accessible and manageable. Cutter-Mackenzie and Edwards (2013) argue that structured programs like the John Muir

Award offer practical solutions for integrating sustainability into early childhood education by providing clear guidelines and resources for educators.

Conclusion

The experiences and principles of the John Muir Award align closely with the philosophy and principles of early childhood education for sustainability. By drawing on the educational theories of Froebel and Dewey, the award's emphasis on hands-on learning, real-world experiences, and nature-based education supports the development of environmental awareness, a sense of place, and an environmental identity in young children. Despite potential challenges and counterclaims, the integration of the John Muir Award into early childhood education offers a valuable framework for creating sustainable practices and attitudes, preparing future generations to engage with and protect the natural world.

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