Part 1 -

(Ysgol Gymraeg Tirdeunaw, 2024)

Part 2 – Outdoor Activity Diary

This outdoor space is located in my work setting as part of their 'Forest School'. There are 20 children in the classroom, with myself and another practitioner. On certain days of the week over the course of a two-week period, we all went out to the outdoor area and separated the children into two groups of 10.

<u>Week 1. Monday – Counting & Nature Walk</u>

On Monday morning, myself and a practitioner took the children to the outdoor area. Our aim was to observe the surroundings with the children and allow them to voice what they could see, feel, smell and hear. Majority of the children excitedly explained that they could see flowers and bugs. While others told us in more details of what the colours of the flowers and leaves were. We took 4 baskets with us and gave 2 to each group of 10. I asked the children to collect different objects that they could find, and gave them some examples like leaves, flowers and stones.

We gave them 10 minutes to explore and to find as much as they possibly can. I took one group while the other practitioner observed the other group. When we called the children back, we used the items that they had collected to do some counting exercises. We asked the children to group them into separate categories such as stones, flowers and leaves. We then asked the children to count each category and write above them on the concrete with chalk how many there are. I then did a simple activity involving

addition and subtraction with the objects in order to practise mathematics. We then moved onto discussing all of the differences between the objects that they had collected. The children explained that some textures were rough to touch, some were smooth, and they had pointed out that they all were differently shaped. We then discussed where these objects had come from and if any of them are living or non-living things. I then asked the children if they could create a pattern out of the objects, a few children struggled with creating a continuous pattern while the other children helped guide them to success.

Week 1. Tuesday – Water Play & Measuring

On Tuesday, we wanted to introduce the element of water to the children. If you zoom in towards the right of the picture above and towards the back of the picture, there are some crates that are propped up against the green fence. We setup a water play station that included different sized cups and funnels. We encouraged the children to pour the water from one container to another while trying to measure the amounts they have put in. On this day, our mathematics activity was to teach the concept of capacity. We had a measuring jug, and they could pick 2 containers of their choice. We then asked them to fill up both containers and predict which one held the most water. Once they had picked, we then measured them one by one in the measuring jug and allowed the children to read the number that the water went to. We also explained the concept of 'full', 'half-full', and 'empty' by pouring the necessary amount of water into each container.

The next activity, we had asked the children to each collect an item that is small enough to fit into a bowl of water, which allowed us to explore the concept of floating and sinking. The children brough back a variety of items such as sticks, stones, grass and flowers. In pairs, the children came upto the bowl of water and dropped the items in at the same time. They were excited to see who's item would sink or float. Which then brought us into the discussion of how much their items roughly weigh. The children then independently sat and compared their items in each hand, intrigued to see which item felt heavier. An additional task we did today was to see how many cups of water it took to fill the bowl that we had previously used. By a show of hands, the children estimated how many cups they thought it would take. Taking turns, they all had a chance to count as they poured to compare their estimates with the final result. While some guessed not enough water and some just a bit too much, this activity helped introduce problem – solving.

Week 1. Wednesday – Gardening & Plant Growth

Today we wanted to encourage the children's interest in flowers. We walked with them outside while asking them to tell us their favourite colour flower and if they could find one of that particular colour. Once collected, we then asked them to put all of their flowers into categories of colour and to o count how many of each colour there were. The then asked them to put each flowers into height order, smallest to tallest which helps introduce measurement. Following on questions which were raised of "how do plants grow?" and "do bugs eat flowers?" – we introduced the basic life cycle of plants. This task brought in the scientific elements as we discussed what plants need in order to grow, such as sunlight, water and soil. We then gave them a small pot each with their names on, a seed and some water. They all planted their seed in some soil and watered them. While some children were expecting their flower to grow rapidly, others quickly repeated the cycle of life and were happy to see it grow over the coming weeks. We then explained that over the next few weeks we would be measuring the growth of the flower. Either with a ruler or counting blocks. This will help introduce measurement day to day while using a simple chart where the children can track the growth of their plant and show them how sunlight and water affects their plants development.

Week 2. Monday – Outdoor obstacle course

In the centre of the picture above, there are logs and stumps placed in a circle and to the right there are tyres that have been placed into the ground.

Today, we wanted to introduce the concept of time. It was a sunny, dry day therefor no wet surfaces that may bring risk. We explained that we will be using the circle of logs and timing ourselves (with our help). We also explained that there was no running allowed. The children took turns in monitoring the stopwatch, starting it when the other children are ready and stopping it when the course was completed. I help guide the children over the beams and logs while holding their hands, while the other practitioner helped them with the stopwatch. Each time was noted down by the child who held the stopwatch next to the persons name. At the end of this task, we compared the times and allowed the children to stand in order of slowest to fastest.

We then used the tiers that are in the ground as part of our science element. We introduced the concept of balance and coordination by asking them to time how long they can balance on the tyres. We again gave them all a turn to use the stopwatch and mark down the time while later discussing how balance can affect the outcome of their time. Some children expressed how easy they found the task, while others admitted that they found it a bit harder, which then brought us onto the discussion of how we could make it easier to balance.

<u>Week 2. Wednesday – Bug counting and sorting</u>

Towards the front of the picture, there is a bug hotel that the children helped create. I added the bricks myself and then discussed with the children what they think might help intrigue bugs and insects. As all of the children were eager to contribute, I asked them all to find some items that we could put into the bug hotel. I brought some cut up bamboo sticks and put them around the outdoor area to see if they would pick these items up. A variety of twigs, leaves, flowers were collected along with the bamboo sticks. I asked the children to put them all into categories so we can count how many of each item we had. We then went onto measuring and comparing the lengths of the twigs and bamboo. We then started counting the items that were collected while placing them into the bug hotel.

We then went onto discussing how their contribution to this hotel will become a safe habitat for their insects. I then asked the children what they think the bugs will need to survive. The children quickly explained that they need food and shelter and came to realise that is what they have provided for them today. A quick, fun task I asked the children to do was pick their favourite bug or insect and imagine they were moving into this 'bug hotel'. I asked them to imagine would type of room they would choose and encouraged them to design the different rooms within, that would be practical yet cosy. The children thoroughly enjoyed this task.

Part 3 - RISK BENEFIT ASSESSMENT

Activity	How will young people BENEFIT from this activity?	Hazards and associated risks	Who is at risk?	PRECAUTIONS in place to reduce the risk of injury	Overall risk after precautions RATING: L/M/H
Children walking on logs or balance beams	This activity will aim to improve balance, coordination and gross motor skills. It introduces children into controlled risk, allowing them to manage challenges and build resilience	-Slips, falls and trips. Children may fall off the log or beam potentially causing bruising, cuts or more severe injuries - weather conditions wet logs/ beams may become slippery, increasing a risk of falling	The children taking part	-ensuring that the logs/ beams are on stable and flat ground - close supervision to be able to assist the children in maintaining balance -encourage appropriate footwear while on the logs/beams - ensure children take turns and walk slowly, no running - avoid this activity during wet or icy weather - check the surface for moisture of potential ice and wipe down if necessary	Medium
Falling from raised structures	Outdoor learning helps to encourage turn taking and class collaboration to work as a team while they explore the outdoor space together	Causing injuries from falling off logs/ beams or any raised structures (e.g the platform towards the back of the picture)	All participating children	-ensuring all logs are secure on even surfaces and lowered to the ground -encouraging the children to walk slowly while maintaining balance -close supervision to help ensure the children are following guidance and to be a helping hand -the use of soft ground (e.g grass)	Medium
Obstacles in open play area	The open-ended set up with natural elements allows children to use their imagination during play. This will help enhance cognitive and emotional engagement	The misuse of logs, beams, crates with children may cause tripping hazards or collisions. Children may misuse these objects as platforms to jump off or climb onto causing a hazard	All participating children/staff	-supervision is key to avoid overcrowded areas that may cause risk - ensure all children are made aware of potential risks, hazards and pathways - ensure all logs/ crates or beams are arranged in clear, defines areas	High

Exploration of the bug hotel	This activity will aim to improve all children's interaction with nature. It will help foster an appreciation for the environment and help encourage curiosity regarding ecosystems. Exploring the bug hotel helps to introduce concepts of science and nature which helps prompt observational skills	-insects like spiders or bees inside or around the bug hotel may bite or sting	The children taking part/staff	-ensure that the children are spoken to on how to handle insects and to observe them without being disturbed -ensure staff are observing the children closely during the bug hotel exploration -help ensure all children maintain a safe distance between themselves and the insects		High
Weather Conditions	-Guiding children to adapt to all weather conditions (rain, snow, sun, wind) helps children to develop gross and fine motor skills. Outdoor play encourages children to be more active. While experiencing different weather can help stimulate all of the senses. -Regular exposure to outside elements can strengthen their immune system	-prolonged exposure to the sun can cause sunburn and discomfort to the children -prolonged exposure to cold weather can cause discomfort to children and in severe cases hypothermia	All participating children/staff	-ensure all children has appropriate clothing for the outdoor activity – e.g waterproof overalls for cold and wet weather and sun hats for warm to hot weather -during hot weather provide shaded areas in the outdoor space while encouraging hydration frequently -if outdoor learning is in the winter months, plan shorter sessions to avoid discomfort		Medium
Sharp objects/ splinters	The open-ended set up with natural elements allows children to use their imagination during play. This will help enhance cognitive and emotional engagement	The misuse of logs, beams, crates with children may cause cuts from wooden materials such as logs, beams and sticks. Crates may have sharp edges if broken	All participating children/staff	-supervision is key to avoid overcrowded areas that may cause risk -ensure all wooden materials are checked and sharp edges are sanded down -ensure all debris is cleared from the area e.g -sharp sticks or rocks - encourage the careful handling of all natural elements		Medium

Part 4 –

The element of outdoor learning for children in the Early Years setting plays a vital role in their development (Kiviranta, et al. 2023). Bento and Dias (2017) explain that we have progressed into a more technological world but have lost the habits and experiences that can impact our quality of life. There are a diverse rang of benefits that cover not only physical and cognitive aspects (Gov.Wales, n.d) but encourage the growth of their emotional wellbeing (The early years network, 2023). Any activities that are conducted in an outside environment can help improve their gross motor skills as they have ample space to engage in physical activities (Agostini, Minelli & Mandolesi, 2018). Activities such as running, skipping and jumping. Franco, Shanahan & Fuller (2017) explain that the exposure to fresh air and nature around them can help enhance their sensory experience and allows them to have an understanding of their outdoor environment. Early childhood, from birth to age eight is a period of fast brain development and nature-based play helps stimulate their cognitive development (Craig, et al. 2024). It allows them to explore and experiment in new surroundings while having the ability to problem solve. Prins, et al. (2022) furthers this point by explaining that this can help enhance their curiosity while helping to encourage their critical thinking skills. While playing in a a nature-based environment, children may find themselves in unexpected scenarios for example, due to a change in the weather, or the observation of insects/ animals. However, MacKeznie & Carolan (2019) explain that children who are presented with unpredicted scenarios through outdoor learning can help them develop adaptability. The ability to nurture their scientific thinking alongside their observational skills develop from the use of natural materials (Koksal, 2022) alongside the observation of the animals and plants in their surroundings. Conversely, Kiviranta, et al. (2023) explains that children may find unpredicted situations throughout outdoor play challenging. Kiviranta, et al. (2023) furthers this point by explaining that a simple change like weather or little interactions with wildlife may provoke anxiety or fear. White (2014) champions this by explaining that children may find it difficult to respond and adapt quickly as this is a skill that they are currently developing. In this age range, a child's understanding of safety and risk is limited (Tovey, 2017). While Bilton (2010) states that outdoor learning activities often require teamwork and collaboration and some children may find it difficult to communicate effectively which may lead to frustration. Outdoor learning provides opportunity for children to explore, to discover and to connect within their natural world (Harris, 2021). While the adults role is to observe, guide and support where necessary. The adults tole is to ensure the outdoor learning space is safe to explore by assessing potential hazards, supervision in activities and intervention where necessary to help prevent accidents (NSPCC, 2019). As some children often don't have access to outdoor activities, being outdoors may present new challenges. An adults supervision and interaction provides emotional security to the child that then allows them to feel comfortable taking risks and to step outside of their comfort zones (Austin, et al. 2023). Adults have the ability to encourage curiosity and help them to think critically about their outdoor experiences by asking open-ended questions. Adults who express enthusiasm and show respect to nature help instil values of environmental stewardship and responsibility in the children, while being a guide through outdoor activities and helping them to gain confidence while ensuring safety (Rosa & Collado, 2019).

Fredrich Froebel an advocate for learning through nature and outdoor experiences (Smedley & Hoskins, 2018) helped emphasize the importance of play and the interaction with natural environments which helped promote holistic development. Froebel believed that learning through nature was an ideal environment to help nurture curiosity (Tovey, n.d), creativity and an understanding of the world (Sakr & Kaur, 2024). Adults working with children contribute to this by encouraging them to play outdoors, where they have freedom to observe the world's natural processes such as growth, decay and weather patterns, this helps foster a hands-on understanding of the world around them. Froebel saw nature as a teacher as the natural environment offers countless lessons in problem-solving and discovery (Flemig & McNair, n.d). Children's interaction with plants, animals and water help enhance their understanding of life's cycles and patterns (Montgomery, et al. 2022). Adults who use the element of outdoor learning in an

unstructured, open-ended manner allow the children to engage within their natural environment (Sandseter, Storli & Sando, 2020). Froebel's approach aligns with modern education practices such as the Curriculum for Wales (2022) where they value enquiry-based learning which are fundamental in subjects such as science and mathematics. This curriculum emphasizes experiential education that encourages exploration and curiosity.

Adults have the ability to help guide children's natural curiosity by creating opportunities for exploration and have the ability to nurture their curiosity by encouraging questions and observation. This approach between adult and child aligns with Froebel's beliefs in fostering self-directed learning. By engaging with the natural world, children are able to expand their understanding of scientific and mathematical concepts (Sheldrake & Reiss, 2021). While outdoor learning offers numerous benefits for children emotionally and physically (Kiviranta, et al. 2023)however the nature of these environments can present challenges. Seasonal changes and weather conditions may hinder an outdoor learning environment (Patchen, et al. 2022). While trying to meet specific curriculum targets may be challenging to meet with outdoor learning, adults play a vital role in guiding these activities to help children develop a deeper understanding of the natural environment. The natural environment offers rich opportunities for experimental learning (Kiewra & Veselack, 2016), however it requires adults to be flexible, resourceful and prepared for unpredicted situations. Overcoming these challenges can be rewarding for both the child and the adult which helps to promote holistic development.

The use of observation in outdoor learning is crucial. Adult observation helps to enable the adult to understand needs and interests of the child while understanding their development (PACEY, 2016). Following Froebel's theory, the adult's role is to observe the child while supporting their learning, without interrupting their natural exploration. Froebel states that children have their own internal rhythm (Watts, 2021) and outdoor learning encourages children to explore and learn through natural environments. Adult observation is important as it helps identify a child's interest and needs while helping the adult to provide environments and supplies to help support those interests (Louie, 2022). Maria Montessori emphasized this by explaining that observation as a scientific method to delve deeper into their developmental needs and to produce environments that help support the child's growth (Moudry, 2019). Montessori's method ensures no interference from the observing adult, respecting the child's capacity for self- directed learning (Marshall, 2017) and ensuring a prepared environment outdoors is supporting the child's independence and development. Reggio Emilia's ''pedagogy of listening'' places emphasis on observation documentation and reflection (Massimelli, Mineo & Tucci, 2022). When children are outdoors, they express curiosity through inquiry and dialogue (Hardwood, Huang & Somma, 2022). Through observation, adults can identify children's interests and use them to guide further enquiry. The use of documentation in Reggio Emilia's theory is paramount. The documentation of notes, photographs and videos provide a visible representation of the child's learning process which not only helps the adult but encourages the child to extend their thinking by revisiting ideas (Schroeder-Yu, 2008). While all three approaches have unique aspects, they all have a common theme in the importance of adult observation in outdoor learning. All three approaches express the importance of adults acting as facilitators rather than directors of learning, prioritising space to explore and self-experiment.

In Reggio Emilia's approach, the use of outdoor learning plays a significant role in fostering children's curiosity and inquiry (Senent, Kelley & Abo-Zena, 2021). Reggio Emilia states that adults are not just supervisors of the children but co-explorers. Rather than directing an activity, it is important that the adult flows with the children's ideas and explorations while actively engaging in questions (McNally & Slutsky, 2016). This aligns with Froebel's child-led approach while emphasizing the importance of not only being a supervisor but to be curious alongside the children. Creating rich outdoor environments with the use of loose parts such as, rocks, sticks and leaves help invite exploration to the child's play. The use of these materials helps to encourage their creativity and problem-solving while connecting them to the natural

world around them. Adults support this by creating an environment that is stimulating and inviting. By sparking a child's curiosity through guiding group discussions, adults help foster social learning and problem-solving (Honomichl & Chen, 2012). The adult's role is crucial for guiding a child's curiosity and gaining a connection between the child and the natural world (Bjerknes, Wilhelmsen & Foyn-Bruun, 2023). By setting tasks of taking care for plants or simply gaining an understanding of ecological systems, adults help children to develop responsibility ad respect for the environment. In the Reggio Emilia approach, adults who work with children play a major role in outdoor exploration (McNally & Slutsky, 2016) while extending their natural curiosity (Hunter, et al. 2019). Adults encourage children to gain a deeper connection to nature by creating rich outdoor environments which in turn promote social interaction and critical thinking skills (Harris, 2021). The partnership between the adult and child in the aspect of outdoor learning fosters Reggio Emilia's commitment to nurturing the child's curiosity and love for learning.