

A Learning Journey



Our nursery forest. (Pearson, 2023)

Name : Child Z

Date: 20.09.23

A day in our forest.

1713

We arrived at our large forest full of unique outdoor learning opportunities. I asked the children if they could remember any forest rules. They recited them back stating the boundaries and expectations. Some children who had not previously been to the forest looked apprehensive, therefore I set a challenge for them to collect something yellow, red or green and place it in the correct box at the end of the session. This allows them to explore on their own and become familiar with the forest as well as problem-solving to colour match objects developing their mathematical skills.

Child Z approached the mud and stomped up and down. Whilst creating this movement she listened to the squelch the mud was making in response and laughed. She said "Look how big my footprints are". I responded "I wonder whose footprints would be bigger mine or yours". She estimated mine. I stomped mine next to it and she compared them and concluded that mine was the biggest. She went to find sticks and passed me the biggest stick because my foot was bigger which showed good reasoning knowledge of the world. She asked me to measure it. I placed the stick next to my foot and she responded "It's too short" and passed me another. She said "Your foot is two big sticks". I asked her what she thought hers would be and she estimated one big stick. She went to collect sticks knowing she had no time pressure. She placed the stick down by her foot to measure and smiled when she was correct, developing her self-esteem and confidence. I showed patience in this activity allowing child Z to complete each step in her own time and on her own. This experience enhanced child Z mathematical skills as she used estimation, comparing, problem-solving, measuring and mathematical language throughout.

Child Z could see the utensils in the basket that we use in our mud kitchen and brought them over to the mud she had stomped in. She collected the mud into a measuring jug and began stirring with a wooden spoon. She added little stones and went to get some water. She carried it back over carefully shouting "It is heavy". She poured the water into her mixture, understanding cause and effect when the water fell out of the jug. Child Z poured her mixture out onto the log creating a circle and sang happy birthday to me insinuating that she had made me a birthday cake. I responded with "Thank you, can you cut me a slice please". She used the sticks she had been measuring with as a knife to cut the cake. She passed me a triangle of her 'cake' and handed it out three more slices to her friend and one for herself. This outdoor activity created scientific experiments by mixing together different ingredients to make a mud cake. She then continued to develop her mathematical knowledge measuring her ingredients, creating a circle like cake and dividing it into further shapes but ensuring there was enough for everybody around. She also used imaginative play to create a social learning opportunity.

Using the loose parts provided by the tree Child Z found a bangle bracelet that she instantly put on. She then found a large sheet that she began to lay out. She asked

her friends to play and requested them to hold a corner of the sheet. She showed strong leadership skills instructing her friends where to hold and where to place it. They attempted multiple times to get the sheet to stay on the branch and I did not intervene until they asked for help. After trial and error child Z asked me if I could hook the sheet over the branch for them. Another child handed me a peg to attach to the branch. This was too small and fell back down. Child Z passed me a band and asked me to tie it around. This worked and we all clapped. This developed their emotional well-being as they were proud of themselves. They wanted to find something that would stop the sheet blowing up. Child Z said "We need something heavy". They explored the forest and rolled logs back over to the den. They pushed one log onto the sheet to keep it down. This showed aspects of scientific understanding as she used forces such as pushing, pulling and turning in order to create movement with the log as well as her rotational schema. They stacked the other two logs on top of each other using teamwork skills to assist each other when lifting. Child Z sat on it and called me saying "Look at my chair". This experience developed her physical skills whilst exploring the forest and carrying the objects, she developed her communication and social working as a team as well as her mathematical skills through using different shapes and fitting them together by problem solving in order to create a den. She ended this experience by engaging in imaginative play when creating her chair.



Basket of loose parts. (TTS, no date)

On the her new chair she noticed a bug running to the crack in the log. She jumped of the log and called me over to see. We looked inside the crack and there were multiple insects inside. She said "Let's help them", I soon realised she thought that they were stuck therefore I took this as an opportunity to discuss bugs and their habitats. This conversation branched out into discussing habitats that different living creatures live in. Child Z said they were too small and she couldnt see properly so I suggested they use a magnifying glass. They only managed to find one therefore child Z let her friend use it first. She took off the bracelet she had found and looked through it mimicking a magnifying glass taking part in pretend play. She then had her turn of the magnifying glass and offered her bracelet to her friend to look through. She had a little bug on her hand and said "it must be a spider because it has 8 legs"

". I nodded my head back and smiled. She suggested that we moved the log back into a safe place to protect the living creatures inside. I helped her lift the log and she gently rolled it safe under a tree. This was evident that child Z had learnt new understanding on how to care for living things and their homes which might influence the world when she is older. This experience showed character growth for child Z as in the beginning she seemed nervous when she first spotted the bug however by the end she was considerate of them and wanted to protect them.

A piece of wood was tilted against a tree from another child's previous play. Child Z said "look there's a slide". She ran over pushing different objects down the ramp. Child Z added the basket to the bottom so it would catch the objects. She had to tilt the basket 4 times before it was in the correct place. Trial and error. They grabbed another plank of wood to make another alongside it. Child Z and her friend used their physical skills to lift the plank and tilt it against the tree about the same angle as the other one. Child Z said "Let's race". Child Z pushed a small shell down whereas her friend pushed a bigger stone. They shouted "3, 2, 1, Go...". They both watched as the stone hit the floor but didnt know why the stone won. I decided to use metacognitive talk to try and help without intervening. I said "I wonder why the stone was faster than the shell". I suggested they race again but passed child Z a bigger stone this time. The bigger stone then won and they soon worked out that the heavier objects were faster. This was a visual representation of forces. I asked what would happen if they pushed the stone up the ramp and child Z laughed and said it would fall straight back down. This shows scientific knowledge of gravity that it would pull the object back down when she let go. She tried anyway to show me. I continued to use metacognitive talk to prompt further learning opportunities regarding forces. This experience with the ramps creates opportunities to develop gross motor skills and fine motor skills through building and pushing leading to scientific and mathematical opportunities looking at forces, motions, gravity and friction. She also used her trajectory schema throughout experimenting height, speed and movement.

RISK BENEFIT ASSESSMENT

Location:	Forest	Date:	20.09.23
Assessor:	Elena Pearson	Review date:	20.09.24

Experience exploring outdoor space in photograph	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 exploring and finding things.	Physical development - different sensory items. Gross and fine motor skills bending down/reaching up. Children can learn about new living things. Triggers critical thinking and sparks questions. Scientific development- the understanding and knowledge of the world being kind to the living things. Crushing the flower will kill it, water will save it. Climbing trees allows physical development, growth and problem solving.	Potential allergies to the plants or insect bites. Stinging nettles could cause injury. Low levelled sticks could cause injury. Children might find dangerous materials that could cause harm. Injuries falling, slipping or tripping.	Adults and children.	Ensure an adult has checked over the grounds before letting the children join so harmful rubbish is removed reducing the risk of the child being in contact with it. Involve the children in creating a risk assessment. Gathering what the children already know about living creatures and how to maintain safety around them. Ensure the child is aware of any boundaries. Ensure children are aware they can not put anything in their mouth. Ensure they wash their hands correctly after the experience using the posters and adults for guidance. Ensure first aid staff and kit are available at all times. The specific medical needs of the child are met .	Low

				Inspect the area for any animal waste and dispose of any before allowing the children outside. Ensure adults are nearby when exploring trees to prevent climbing too high and falling. Staff are aware of any allergies. Staff will be vigilant at all times with the correct ratios supervising at all times.	
Outdoor in different weather conditions.	Learning about the natural world and that the environment has different temperatures in different weathers. Becoming aware of self care and knowing what is necessary in different weather. In the sun a hat and sunscreen is necessary. If it is raining a coat and wellies etc.	Fallen trees or equipment resulting in injury or death. Children might be too hot causing hyperthermia. If it is too hot, heat stroke or sunburn. Children become too cold causing hypothermia or catching a cold.	Children and adults.	Monitor the weather ensuring they only go outside when it is safe. Provide a sheltered area for any children who might feel uncomfortable. Ensure parents know what clothing and shoes are appropriate. Provide spare clothes for children who do not have appropriate clothing. Ensure first aid staff and kit are available at all times. The specific	Low

	Allow the child to have more freedom to lead their learning.	Children might feel uncomfortable if they are wet or scared of the weather. Childrens clothes become dirty or broken.		medical needs of the child are met. Staff will be vigilant at all times with the correct ratios supervising at all times.	
Exploring on uneven ground.	Supports children's mobility through experimenting with balance. Encouraging problem-solving skills knowing how to travel across it (mathematics) The confidence the child will gain enhances their self-esteem. The children will develop an understanding of forces and gravity (science) Develop physical movement by gaining strength. Progresses coordination between muscles, the	Potential injury caused by falling over such as cuts, scratches, sprains or any other injury.	Children and adults	A discussion will take place with all the children involved discussing the new experience and how they should begin slowly until they feel more confident and feel familiar with the environment. Ensure the children are prepared in the appropriate clothing for the area. Do a song to help the children remember how to walk safely in a fun way. Ensure first aid staff and kit are available. Drains are painted yellow to highlight where they are. Regularly sweep the floor to ensure there are no obstructions for the child.	Low

	brain and the body.			Staff will be vigilant at all times.	
Collecting materials.	Children can explore new materials supporting their imagination, problem-solving, allowing them to take learning into their own hands, growing their confidence and self esteem. New learning opportunities and develop their critical thinking skills. . Explore mathematics through counting or sorting into groups allowing opportunities to develop mathematical language such as more or less. Transporting schema when collecting and moving around.	Potential sharp materials found injuring the individual. Putting objects in their mouth. Damaging the environment by picking flowers/grabbing insects. Potential injury when moving equipment around.	Children and adults.	Children involved in creating rules for the area including no picking/licking. Ensure the area is checked over before allowing children in to reduce the risk of finding materials that might cause danger. Ensure first aid staff and kit are available at all times. The specific medical needs of the child are met . Staff vigilant at all times with the correct ratios.	Low
Digging, planting and mud kitchen	Mud kitchen equipment will encourage imagination and	Compost in their eyes or mouth.	Children	Children are instructed beforehand the dangers of misusing the tools.	Low

	improve creativity. Measuring, pouring, mixing and experimenting with the mud allows mathematical and scientific development. Provides sensory experiences. Develops their knowledge of the world learning about how to keep the plants alive and how they grow. Provides the child with a sense of responsibility and patience.	Mis-use of tools resulting in cutting or injuring themselves or another.		Encourage children to sweep up after themselves making dustpan brushes accessible. Children are wearing appropriate clothing. Ensure aprons are worn to prevent dirty clothes.	
Loose parts, ramps and safe raw materials.	Develop problem-solving skills. Experiment science on their own looking at natural forces.	Items put in ears, nose or mouth. Items being thrown and injuring individuals.		Staff will be vigilant at all times with the correct ratios. Children are aware of any potential dangers Ensure first aid staff and kit are available at all times.	Low

				Ensure any broken equipment is replaced and cleaned up instantly.	
Walking to the area	Allow the children to gain a great understanding on road safety. Physical movement. Listening skills. More opportunities to explore when walking. Decision-making skills.	Losing a child. Potential road safety hazards.		The children are safe and secure in the school grounds with a keypad that allows entry therefore if a child runs off there will be limited risk of strangers interacting. The field has a safe and secure gate around it that only members of staff can open and close. The children will be closely supervised with the correct ratios, Ensure registration is done and numbers checked throughout the session. An adult will stand in the road when children are crossing with a hi-vis jacket. All staff will wear a hi-vis so it's easy for the children to see.	Low

According to Burnham (2016) the outdoors should be seen and valued as another room. Outdoors allow children to have a wider opportunity to explore and develop holistically. Carson (2019) states the outdoors allows self directed play with no external goal. Tinney (2022) suggests children can use both mathematics and science concepts outdoors through activities as simple as building a den. This will

use skills such as estimations and measurements to create the design whilst taking into consideration the angles and shapes in order to build it successfully. Rose and Roger (2012) insist that this can not take place without the adult role that is referred to as 'the facilitator'. Brunfenbrenners theory suggests that children are highly influenced by their environment and the people they are surrounded by therefore adults have the significant role to be a positive role model, facilitate for the child providing an enabling environment and to always prioritise each child's needs (Rose and Roger, 2012).

Tinney (2022) states that from the holistic benefits of outdoor play, forest schools were created. The forest school approach provides the child with the opportunity to learn all subjects as one through an outdoor environment (Waller *et al*, 2017). Smidt (2016) reveals that Reggio Emilia has been described as the best school in the world allowing the children to explore for themselves in the outdoors and lead their own learning. Adults are engaging with the children when necessary to help them develop. Although many disagree with Reggio Emilia because there are no exams or tests it still works better for the children as it reduces their anxiety and develops their emotional well-being.

Burnham (2016) states that children need an enabling environment to learn, grow and develop through experiences that are unique to the individual child. This supports article 3 that the best interest of the child is always prioritised (UNICEF, no date). Nicol (2017) states the influence Steiner's ideas have on settings. He insisted that adults play a big role in providing the environment that should be designed to visually attract children as well as be practical and nurturing. Nicol (2017) emphasises the adult should provide an environment that enables the children to take part in tasks of living. Tinney (2022) states that learning outdoors provides further play opportunities for children allowing them to be curious through movement such as pushing, pulling or running. This will develop both fine motor skills and gross motor skills. Furthermore Welsh Government (2022) the curriculum for funded non-maintained nursery settings states that being outdoors provides holistic well-being opportunities and creates awe and wonder. The stimulating environment creates rich and authentic experiences that will stimulate the senses and help build resilience and confidence as well as building empathy for the natural world. Burnham

(2016) adults should be a positive role model to the child to keep a safe, tidy and organised environment to learn in. This could be through picking up items on the floor and discussing the danger. Burnham (2016) states that outdoor activities might have to be kept safe overnight indoors therefore the adults have the responsibilities to ensure they are protecting their environment and bringing them back out if necessary. Tovey (2007) stated Froebel's theory that the outdoors is a free area that allows children to explore and experiment. Froebel stated that the outdoors provide children with large space to engage with the wonder and mystery of the natural world. Children can engage with key concepts such as gravity, speed and energy as well as looking after the living creatures. The outdoors allows meaningful opportunities that reach the criteria of the whole curriculum through adventure providing risk and challenge.

Both Nicol (2017) and Burnham (2016) suggest that using 'real' resources are the most beneficial because they reinforce the choice in play. These authentic true experiences provide the child learning opportunities about the world. Tinney (2022) emphasises the importance the adult has on creating an enabling environment with open ended materials such as loose parts that continue the play cycle through adult observations providing elements of risk taking. Nikelsons loose part theory was created in the 1970s suggesting that loose parts are open ended resources that can be used to interpret however the children desire. The real materials help children learn boundaries (Day, 2022). Similarly Gibson's idea of affordance suggests that open ended resources can be interpreted however the child desires. Adults should provide an environment for the children with high affordance (Katz, *et al.* 2014). However according to Day (2022) many early years practitioners do not understand their purpose or even what a loose part is therefore are not providing the opportunity for their children. Adults should be up to date and be knowledgeable of the benefits for the children and should supervise carefully to ensure the children stay safe.

Kelly (2014) implies adults should be patient and allow children to play and learn without being interrupted or interfered. Tovey (2007) highlights Froebel's theory on how the adult should facilitate. He believed adults should observe the children to understand what they like and dislike, support and extend this through support or creating experiences and recognise the child's own ideas into the planning. Also

have high expectations for the child so they are not limited and include links to the curriculum. Flood and Hardy (2013) discussed Vygotsky's theory of scaffolding. This is when an adult scaffolds a child's learning by talking through challenges with the child. Nordlof (2014) develops this stating that adults have the power to help children reach their proximal development. Jones and Evans (2013) suggest using metacognitive talk to the children encourages meaningful thought. This will allow the children to think into their experience further and learn something new. To support this Tovey (2007) states that meaningful talk allows children to reflect their learning and think about their own thinking.

Boaler (2015) reveals the adult can determine the child's attitude for a subject. If they subconsciously use maths through outdoor play they are more likely to enjoy it and create a like towards this subject. Furthermore, according to Burnham (2016) children should have access to mathematical resources in their play as numbers are significant. Having access to these mathematical resources allow them to explore features and quantities of a variety of measures. This can lead to problem solving which provides opportunities for children to talk through their reasons as well as describe their doing. These experiences will allow the child to develop their trajectory schemas. Burnham (2016) states that early years mathematical experiences can be as simple as learning how to apply facts, predict and later change based on results. Welsh Government (2022) the curriculum for non-maintained funded nursery settings states children are naturally inquisitive therefore adults should create an environment that allows children to develop their mathematical concepts, language and skills through multi-sensory play and authentic experiences, Using open ended, natural resources offer endless possibilities for mathematical exploration. Burnham (2016) implies that adults should be using mathematical language in their everyday vocabulary to role model to the children how to use them and they will begin to understand them. The curriculum for funded non-maintained nursery settings supports this stating that adults modelling the mathematical language and skills will help children develop their strategic competence (Welsh Government, 2022). Froebel describes the outdoors as 'growing children' as he was an advocate for freedom of play outdoors (Robertson, 2017). Froebel believed that children learn mathematics through exploration and outdoor experiences in open-ended ways. He

saw mathematics as a role of connecting outdoors with the child's intellectual, emotional and physical needs (Robertson, 2017).

Aitken *et al* (2015) highlights that science is all around us . The outdoors expands the scientific learning opportunity as children are able to gather sensory information from around them and build their own ideas to make sense of the world. Although science can be seen as difficult for young children, exploring can provide the basis for them to build on later in life. Dale Tunnicliffe (2015) describes children as 'intuitive scientists' as they naturally use scientific concepts such as problem solving and experimenting with movement. Schwartz (2014) highlights the significance of children learning basic science such as gravity. They will learn that when they fall over they go down and learn how to balance which will develop their physical skills. Aitken *et al* (2015) suggest that adults can develop their understanding by asking open ended questions to focus their attention which might prompt them to reflect and potentially problem solve. With adult support children will be able to explore, experiment and begin to create and understand the world around them. Aitken *et al*, (2015) and Kelly (2014) both suggest that adults should have positive attitudes towards science to inspire natural curiosity in the children. Modelling behaviour such as using scientific language might prompt the children to start using it and understand it. This will develop their cognitive well-being and social skills through communicating. Hansson, Leden and Thulin (2021) found the significance that learning the nature of science has on young children especially before 6 to build foundations for later on in life. Adults should nurture their play and encourage their problem solving, thinking and learning (Tovey, 2007).

IREC cooperation (2018) states although outdoor play has many benefits it is unpredictable due to weather conditions causing children to become ill. Furthermore outdoors can have lots of germs also resulting in children becoming ill. IREC cooperation (2018) and WandePlay (2019) both state that children are more likely to become injured outdoors such as getting cut or bruised. Waters (2023) when children are outside they can have more freedom which can make the staff's job harder. All staff need to be on board with expectations of the setting. Moreover the setting will have to have a safe and secure gate to avoid strangers coming to the setting and reduce the risk of a child getting out becoming lost. WandePlay (2019)

reveals that providing an outdoor area can be expensive to ensure it is safe, looked after and usable. Extra equipment and the correct clothing can be expensive too. Childcare Renovations (2022) states that outdoor play is not for all children. Some children will not be used to the weather. Parents might not feel happy with their children being outside becoming dirty.

Although there can be challenges preventing successful outdoor play, it is essential children have the opportunity to learn mathematics, science and any other subject through exploring outdoors. The adult is an essential role in children's development and has the significant role of facilitating their learning.

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