

Awe and Wonder- science, mathematics, and the outdoors.

**Part one:**



(Source: wikipedia, n.d)

## **Part 2**

The children from Loapeng Nursery are heading on a learning adventure outside today. The children arrived with their parents at 9:30 am, prepared for the day's adventure. The children, who are a blend of boys and girls and are between the ages of 3 and 4, were all eager to go outside today. With the assistance of my other staff members, we established the ground rules for today's excursion, and risk evaluations were conducted in advance.

We arrived at the children's exploration section around 9:50. Child A exclaimed in surprise and excitement as we made our way to the location where there is a much larger space for children to play and fully enjoy the outdoors, "Look it's Mrs. Ladybug from our storybook, but she is quite smaller," and as I turned to look at her, I noticed that a ladybug had landed on her arm, "Oh wow it is Mrs. Ladybug from our storybook, hmmm, I wonder why she is so small?"



(Source bugherolarge, 2020)

Two more children arrived to see the ladybug and were captivated by this interaction. I continued, "How about we have a closer look at Mrs. ladybug?" using the magnifying glass that had been brought along to enhance the children's outdoor experience. The ladybird on child A's arm was examined by the three children, who each took turns using the magnifying glass. She has orange dots instead of the red ones Mrs. Ladybug

had in our story, child A noted, and child B added that she is not smiling like Mrs. Ladybug. The children questioned, "Miss, why doesn't she smile?" The children were eager to learn more about ladybugs, so I said, "Hmmm, I don't know, but how about we read more about ladybugs from a different book to find out next time." Child A was then shown how to carefully place the ladybird on a plant so that it would be secure.



Source: [magnifyingclass.co.uk](http://magnifyingclass.co.uk), 2021)

When we arrived at the play area for the children, the staff members helped to set up the morning activity, a treasure hunt to help the children unwind and get comfortable with the surroundings. Prior to the journey, we created and printed treasure maps and dispersed the treasure in various locations. They were all eager and hastily raced to each location on the map after receiving a treasure map and a basket to go treasure hunting. I slowed down as I trailed the children behind the staff members. I was watching children find the treasures with smiles on their faces when I noticed child c was still squatting. I did not go over to him right away; instead, I continued to watch him. Eventually, he got up and hurried over to me, saying, "Miss, come look." I then went back to the previous position and squatted next to him. He said with a perplexed expression, "Look miss, it's a lizard, but it's coming from an egg." "Only chickens can hatch from eggs, but look at this lizard; why is that happening?"



Source: gettyimages, 2021)

he asked further to which I replied “Well, there is a group of animals called reptiles that can come from eggs too just like a chicken” “reptiles?” he responded with his head tilted “yes” I responded, I went on further to tell him about snakes, frogs, and other diverse types of reptiles, we went on to talk about the life cycle of a lizard which had him in awe, he was really curious and asked to have books on reptiles for our next class. From this interaction and observation of child c, I could see an understanding of science taking place where he was being curious and searching for answers to understand a phenomenon and understanding the world around him is full of living things which is dependent on each other for survival (Wales Gov,2020).



Source: Dreamstime, 2019)

The children had found all the hidden treasures, their baskets were filled with various kinds of resources. Child b got up and said “miss, look, this flower that I got is different from child d’s flower” to which I responded, “Oh wow, can you tell me how the two flowers are different from each other?” she nodded and picked up her magnifying glass “look, the

shape of my petals is different, and mine has twirly lines while child d's flower has zig-zag lines" "I wonder why that is so" I pondered. The other children all picked up their magnifying glasses and began to study their flowers as well, Child A gasped and said, "my flower only has five petals," another child stated "my flower only got six petals" they were all astounded by their discovery of the differences of the flowers, we allowed them to continue their exploration, they then asked about why the flowers were different to each other to which a staff member responded "hmm, I don't really know the answer but I will research about it and we'll have a session on flowers, okay" the children nodded and went on to more exploration.

This activity led us to observe the children and show us their understanding of mathematics where the children could use the number system to represent and compare relationships between numbers and quantities.

After the activity, the children were refreshed with a beverage to warm them down, it was now noon, and the children were familiar with the area, so we decided to let the remaining of the day be child led. "Boys and girls, you can play in this area for the remaining of the day, but we are not to go past the flower field, alright boys and girls" a member of staff told them, they all replied yes and went to do their own exploration. The staff was around observing as well, "Arggg, come aboard my pirate ship" I heard, I looked over and saw that child D has climbed up a tree, which was now a pirate ship, he two of his friends to surround the tree as they engage in imaginative play.

As today is his first time climbing this tree, he did not go all the way up, but he assessed the risk and safely made it halfway up and was happy and confident with his choice. I looked at the small, sloped area and saw 4 children there, helping each other up the slope, and they began to throw balls which were brought to amplify their outdoor experience. I noticed that the bigger ball was bouncing more upon touching the flat surface from which it was thrown from the slope.

The children realized this as well and tried throwing a smaller ball this time, the smaller ball did not bounce as much as the bigger ball. They went for all the varied sizes of balls and experimented which ball bounced the most. "I think the green ball bounced the most" said child C, the other children agreed as well. The children then discovered they could

jump high if they bent their knees more. Additionally, they tried it out. This time, "I went high when I bent my knees low," said child F. This activity, observed, demonstrates the kids' knowledge of forces and energy, which serve as the basis for comprehending our universe. (wales.gov,2020).



Source: gettyimages, 2019).



Source: todaysmoderneducator,

2019)

**Part 3****RISK BENEFIT ASSESSMENT**

|                             |                  |                     |                                       |
|-----------------------------|------------------|---------------------|---------------------------------------|
| <b>Location / Activity:</b> | Woodland area    | <b>Date:</b>        | 20 <sup>th</sup><br>March<br>2023     |
| <b>Assessor:</b>            | Samiya Alexander | <b>Review date:</b> | 08 <sup>th</sup><br>Februa<br>ry 2022 |

The boxes in the table below will expand as you type into them; pre-entered text is simply for illustration. You should delete irrelevant items and replace with text relevant to your circumstances.

Your overall risk rating – Low, medium, or high – is based on your judgement about whether the BENEFITS of the activity or opportunity outweigh the RISKS.

| <b>Experience exploring outdoor space in photograph</b> | <b>How will young people BENEFIT from this activity?</b>                                                                                  | <b>Hazards and risks</b>                                                                                                                     | <b>Who is at risk?</b> | <b>PRECAUTIONS in place to reduce the risk of injury</b>                                                                                                                                   | <b>Overall risk RATING: L/M/H</b> |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Walking and running on uneven ground                    | <ul style="list-style-type: none"> <li>improves coordination and balance</li> <li>investigating various heights and depths, as</li> </ul> | <ul style="list-style-type: none"> <li>Children and adults could trip and fall which could lead to cuts, bruises, sprained ankles</li> </ul> | Children and adults    | <ul style="list-style-type: none"> <li>Staff should check for any accessible areas that are unsuitable because the risk may be too high for the children's developmental stage.</li> </ul> | Low                               |

|                            |                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                            |                     |                                                                                                                                                                                                                                                                                                                                                                                                              |     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                            | <p>well as texture</p> <ul style="list-style-type: none"> <li>• Develops foot and ankle health</li> <li>• Promote more physical effort</li> <li>• Develops sensory movement</li> </ul>                                                                                                                                        |                                                                                                                                                                                                                                                                                                            |                     | <ul style="list-style-type: none"> <li>• Staff members should have access to a first aid kit and be taught and certified to administer first aid.</li> </ul>                                                                                                                                                                                                                                                 |     |
| Weather: rain, windy, snow | <ul style="list-style-type: none"> <li>• the auditory and tactile perception of various weather situations, such as wind, rain, and snow</li> <li>• learning about the seasons and the environmental changes, such as the crunch of leaves as they descend from the trees</li> <li>• Learning to control new risks</li> </ul> | <ul style="list-style-type: none"> <li>• Injurious branches and sticks may fall during fierce winds.</li> <li>• Branches could be thrown extremely low, potentially harming people by poking their eyes and heads.</li> <li>• On a rainy day, it might make the ground slick, which could cause</li> </ul> | Children and adults | <ul style="list-style-type: none"> <li>• Before arranging any outdoor events, staff must check the weather app.</li> <li>• Staff members should make sure that both children and adults are dressed appropriately for the weather, including wellies, waterproof for rainy weather, jackets, layers, and scarves for chilly conditions, as well as loose, long clothing and slip-resistant shoes.</li> </ul> | Low |

|                  |                                                                                                                                                                                                                                |                                                                                                                                                                                                                                   |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                  | <p>that come with changing environmental conditions , such as using sun protection when it is hot and drinking water</p> <ul style="list-style-type: none"> <li>encourages their overall development</li> </ul>                | <p>sliding and falling.</p> <ul style="list-style-type: none"> <li>related to the chilly climate, hypothermia</li> </ul>                                                                                                          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |
| Gathering sticks | <ul style="list-style-type: none"> <li>Promotes imaginative play e.g., using sticks for swords, wands, spoon</li> <li>Building dens</li> <li>Stick weaving</li> <li>Promotes measurement, height, shape, and weight</li> </ul> | <ul style="list-style-type: none"> <li>Picking up sticks could cause children to injure one another.</li> <li>Children might take up heavier, sharper sticks, which could lead to cuts, splinters, and muscular pulls.</li> </ul> | Children | <ul style="list-style-type: none"> <li>Staff members should have access to a first aid kit and be taught and certified to administer first aid.</li> <li>Staff should make sure there is little to no litter, dangerous items, or animal feces around.</li> <li>Golden rule: Ask the adults for help if the necessary play item is too large for you to manage.</li> <li>Golden rule: Children must wash their hands afterward and not place anything in their mouths.</li> </ul> | Low |

|                   |                                                                                                                                                                                                                                 |                                                                                                                                                                                              |                     |                                                                                                                                                                                                                                         |     |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Gathering flowers | <ul style="list-style-type: none"> <li>Allows the child to differentiate types of flowers</li> <li>Allows the child to see distinct color, sizes, and patterns of the flower</li> <li>Promotes counting and grouping</li> </ul> | <ul style="list-style-type: none"> <li>The blossoms might cause allergies in children and adults</li> <li>Children might pick up erroneous items like litter and shattered glass.</li> </ul> | Children and adults | <ul style="list-style-type: none"> <li>Golden rule: Children must wash their hands afterward and not place anything in their mouths.</li> <li>Staff members should ask the parents about any allergies their child may have.</li> </ul> | Low |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|

| Experience exploring outdoor space in photograph | How will young people BENEFIT from this activity?                                                                                                         | Hazards and risks                                                                                                                                 | Who is at risk? | PRECAUTIONS in place to reduce the risk of injury                                                                                                                                                                                                                                                              | Overall risk RATING: L/M/H |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Exploring living habitats                        | <ul style="list-style-type: none"> <li>It helps the child to form an understanding (hopefully leading to a love) of the natural world, plants,</li> </ul> | <ul style="list-style-type: none"> <li>Children might gather up objects they should not, like animal droppings</li> <li>Children might</li> </ul> | Children        | <ul style="list-style-type: none"> <li>Golden rule: Children must wash their hands afterward and not place anything in their mouths.</li> <li>To help children comprehend their surroundings, staff should describe the creatures that live in a woodland area, such as animals, insects, and bugs.</li> </ul> | Low                        |

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|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|           | <p>and creature s that inhabits it</p> <ul style="list-style-type: none"> <li>• It fosters curiosity, creativity , and indepen dence, and supports the develop ment of critical thinking</li> </ul>                                                                                       | <p>retaliate to bugs and animals</p> <ul style="list-style-type: none"> <li>• Childre n might pick up erroneo us items like litter and shattere d glass.</li> </ul>                                                         |           |                                                                                                                                                                                                                                                                                                                                                    |     |
| Climbin g | <ul style="list-style-type: none"> <li>• Gaining confiden ce in their ability to face challeng es</li> <li>• Learning to cope with fear and stress when working through difficult tasks</li> <li>• Learning intrinsic motivatio n as they choose which obstacle and tasks they</li> </ul> | <ul style="list-style-type: none"> <li>• Childre n could trip and tumble, which could result in bruising , bleedin g, fracture s, and broken bones.</li> <li>• While climbin g, splinter s might poke children .</li> </ul> | Childre n | <ul style="list-style-type: none"> <li>• Staff members should have access to a first aid kit and be taught and certified to administer first aid.</li> <li>• Golden rule: children should take turn when climbing, no pushing and ask for assistance if necessary</li> <li>• Staff should assess the sturdiness of the trees beforehand</li> </ul> | Low |

|             |                                                                                                                                                                                                   |                                                                                                                                               |                     |                                                                                                                                                                                                                                                                                      |     |
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|             | want to take on <ul style="list-style-type: none"> <li>• Developing self-reliance as they work to scale a climb on their own</li> </ul>                                                           |                                                                                                                                               |                     |                                                                                                                                                                                                                                                                                      |     |
| Sloped area | <ul style="list-style-type: none"> <li>• Promote problem solving and risk taking</li> <li>• Developing fine motor skills and co-ordination</li> <li>• Understanding how the body works</li> </ul> | <ul style="list-style-type: none"> <li>• Children and adults could slip and fall which could lead to cuts, bruises, sprained ankle</li> </ul> | Children and adults | <ul style="list-style-type: none"> <li>• Staff members should have access to a first aid kit and be taught and certified to administer first aid.</li> <li>• Staff members should make sure that both children and adults are dressed appropriately e.g., shoes with grip</li> </ul> | Low |
|             |                                                                                                                                                                                                   |                                                                                                                                               |                     |                                                                                                                                                                                                                                                                                      |     |

**Part 4**

The fundamental value of play for children's growth and well-being is supported by a wealth of research. (Pellegrini,2009). Unstructured play opportunities have more recently been linked to children's physical and mental health, including fostering physical exercise, mental wellbeing, and executive function. (Whitebread 2017, Burdette and Whitaker 2005, Barker et al, 2014). Even though children develop and learn in a complex, interconnected web of relationships, experiences, and environments, research frameworks, educational policies, and presumptions about what young children need do not always take this straightforward reality into account (McClure et al, 2017). Children require a well-rounded education that considers their physical, mental, emotional, and social growth. When coupled with sensitive, nurturing adult support, there is a wealth of data that supports outdoor free play in a natural environment offering the best conditions for this to occur. Children can apply their information and skills in a variety of real-world situations when they are outside, which helps to solidify their understanding. (Ryder-Robertson,2013).

Since most brain development occurs during these years, and most quickly, children's comprehension of scientific and mathematical concepts increases during early childhood. (Berk 2002). Children can be encouraged to learn about new mathematical and scientific ideas and to foster their natural curiosity. Early success depends on children's motivation, curiosity, and feelings of comprehension. (Chang, Stipek and Garza 2006; Singer). They actively investigate their surroundings, engage in inquiry, learn new concepts, are stimulated to form ideas, develop thinking skills, sort information into categories, justify actions, solve problems, and come to their conclusions during this early stage. All young children have a right to learn math outside. When playing outside, children engage in a variety of mathematical activities. Children should be able to make more noise, create more mess, move more quickly,

and handle heavier items when they are outside working in the built or natural world. (Skinner and Dancer, 2012).

An investigative approach to learning mathematics that begins with experiences that can be provided, rather than different tools and equipment, will be complemented by outdoor math learning. The child is at the center of the interaction with the environment, so it is important to pay close attention to how each child will adjust, use, and learn in a unique way when they are outside. Early mathematical development and young children's behavior patterns in terms of what they play with and how they play with it frequently are strongly correlated Hughes (2010). For this form of learning to continue, we must consider how the experiences we provide outside can support and improve the quality of the experiences we provide indoors. Comparably, early mathematics has drawn a great deal of attention over the past two decades, and it is now becoming obvious how early exposure to the subject affects children over time.

For instance, preschool math skills predict later academic success more reliably than early reading or attention skills, and preschool math knowledge predicts math achievement even into the high school years. In addition, some studies indicate that math is essential to how children learn to study. To put it another way, learning early math involves more than just learning discrete skills like naming numbers; it also involves reasoning and exploration. (National mathematical advisory panel,2008, National research council,2009, Duncan et al,2007, Duncan et al,2011). However, many early childhood classrooms concentrate on an exceedingly small number of goals, such as encouraging rote memorization of the counting sequence, fundamental addition facts, and shape names, and as a result, have an insignificant effect on the general mathematical competence of the students.

Instead, practitioners can encourage this competence by giving children the chance to explain and discuss their mathematical reasoning. Preschoolers can, for instance, line up acorns on a table to count how many of each size they have (say, eight big acorns and two tiny ones) and then decide whether they have more or fewer of that size overall. This is about loose parts that practitioners can use to encourage play and learning. According to Houser et al. (2016), loose components are adaptable and active,

fitting for the supplies themselves). If they are age-appropriate and accessible, objects can be used as play and discovery instruments. To encourage inquiry, however, the hand and intellect must cooperate. Children who play loose parts are encouraged to interact with their surroundings with an open mind. Children who engage in this kind of play are better able to link learning and enjoyment. They can begin using mathematical reasoning to solve issues with the help of a practitioner, such as figuring out how many more small acorns they would need to display an equal amount of small and large ones (IMO and NRC 2015).

Outdoor play is not an extra, but rather a necessary component of children's lives and everyday environments, according to White (2014). The curriculum should adequately allow for outdoor learning, according to researchers. To build on children's strengths and the ways to develop cognitive, social, emotional, and physical skills, Feeney, Christensen, and Moravcik (2006) and Mayesky (2012) noted that there should be opportunities in the curriculum for practical experiences, a variety of learning activities, exploration, and problem-solving. They contend that the curriculum should include provisions for the development of engaging situations and chances for practical application, a variety of learning activities, and research. The curriculum should promote learning through exploration, invention, experimentation, observation, and sustained engagement in socially significant settings. The national Early Years Learning Framework (EYLF) was established to assist educators in giving young children the chances they need to reach their full potential and succeed in school. It acknowledges the value of the environment in offering a variety of learning possibilities. The framework remarks how these play spaces are open-ended and encourage "spontaneity, risk-taking, exploration, discovery, and connection with nature." (DEEWR, 2009, p. 15).

In outdoor settings, young children instinctively connect scientific and environmental concepts. Their sensitivity, comprehension, and respect for the interconnectedness of all living and non-living things can all be improved by increasing their scientific knowledge. The environmental consciousness that results from this sensitivity can then be connected to environmental sustainability through further study of the social, political,

and cultural facets of a situation. A child ought to be exposed to nature "in all its manifestations, be they in form, energy, substance, sound, or color." (Froebel in Lilley 1967:148). In play areas with boring, safety-surfaced flooring, the worth of outdoor play cannot be realized. Playing outside can encourage children's imagination, curiosity, and ingenuity as well as their physical and mental development. The environment's quality and interactions within it are important, as Froebel contended. Education theorists like Froebel, Dewey, Montessori, Steiner, Rousseau, and Malaguzzi all emphasized the value of experiences in an environment for young children's development and well-being, so the concept of the importance of natural spaces in education is not new. (Elliott Citation2010; Wilson Citation2012).

The Sustainable Development Goals of the United Nations, which offer insights into an appreciation of more global perspectives, are complemented by knowledge of environmental problems, including sustainability (United Nations, n.d.). Using commonplace items found in nature, science play can be readily established in natural settings. Early childhood centers can use loose parts incorporated into resources and a nature table to prepare children for play with natural items. Materials that can be moved around, used for different purposes, and repurposed as loose parts allow for creative interaction with the environment. (Nicholson, 1972). Children pause, look, touch, and smell a variety of loose parts from the outdoor environment, such as leaves, rocks, and feathers, at the nature table, which is typically a static exhibit. Children can learn to appreciate an object's characteristics, such as height, weight, texture, and shape. This sensory activity using organic materials is easily connected to scientific education. Giving children a variety of natural things to use for outdoor play is another flexible strategy. Children's vivid imaginations enable them to view the material in a variety of contexts and for a variety of reasons. Play is created using recycled natural elements. Teachers and educators frequently used a biological notion or process to draw children's interest to science-related concepts in the real world, where the natural phenomenon served as the inspiration for their play. It was discovered that the physical phenomena that children were most interested in, such as balancing, manipulating force and energy, and investigating the physicality of their bodies, were typically connected to

the physical sciences. There are examples of children learning to balance on rocks or twigs, and they would keep trying until they mastered the skill.

By utilizing the ideas of balance, weight distribution, and body positioning, children could instruct their classmates on how to do this. Children were seen finding and meticulously handling small animals (snails, worms, slaters, and millipedes), studying leaf colors, examining the texture and thickness of bark, and noting changes in plant growth, among other biological experiences. Young children are constantly attempting to understand how the universe works. According to Vygotsky (1986), scientific learning is built based on everyday learning, and a child's knowledge construction (working theory) serves as both a mechanism and a mediating link for the development of both types of knowledge. (Hedges, 2012). During inquiry-based activities, children's knowledge-building frequently changes as they try to comprehend and explain connections between their experiences, knowledge, and understandings. (Hedges, 2012). However, Piaget drew general contours of the development of children's play in the first seven years. (Sensorimotor and pre-operational stages). He emphasized that while play is different from learning, it does offer a relaxed setting in which the assimilation of added information can take place readily. Additionally, children can construct knowledge by taking a new concept and fitting it to what they already know.

Children have chances to extend their investigations when educators or teachers act as co-investigators with them or promote further exploration. (Campbell & Jobling, 2010). According to Van Hoorn et al. (2014), when science is acknowledged by the educator/teacher, there may be chances for children to learn about it. It may be simple to identify science in biological and ecological processes, but it can be more challenging with physical sciences.

Without a doubt, teachers play a crucial part in organizing, supporting, and directing children in their exploration of math and science concepts. They can employ a variety of instructional strategies and tactics in a setting that promotes learning through social interactions, such as modeling, giving feedback, and cognitive structuring. (Fu 2010). An effective early childhood educator should be able to support and expand children's learning within the context of the curriculum's holistic nature without succumbing to the

traditional teacher-centered approach, which discourages children from actively participating. (Kallery & Psillos 2001).

However childcare providers have previously discussed parental-related obstacles to increasing outdoor playtime, such as parents' choice for academics' overactive play and parents' failure to dress their children appropriately. This research investigated how parents perceived and were informed about outdoor playtime in childcare settings. The barriers to outdoor play caused by parents may be overestimated by childcare workers. Although they usually support outdoor play for their preschoolers while in center-based care, parents are often unaware of the rules and regulations governing outdoor play. By encouraging communication between parents and early childhood educators about these problems, it might be possible to create more widespread support and strategies for promoting outdoor and active play opportunities for children, which are essential for their growth and health. (Jayasuriya et al. 2016).

These ideas must be incorporated into the teaching and learning process for young children, along with the creation of a learning environment that allows them to acquire basic knowledge, abilities, and values. Darling-Hammond (2000) claims that children arrive at preschool with a variety of ideas they have picked up from informal encounters. In the same vein According to the theory of affordance (Chemero, 2003; Gibson, 1979), based on how a person interacts with the environment, most environments have important qualities that promote learning. An affordance is a resource that the environment makes available to anyone with the capacity to detect and make use of it. (Gibson, 1979). Practical action within the environment serves as the foundation for the person-environmental relationship. New affordances emerge as a person acts, moves, or engages with an area. The ability to use one's traits, such as body size and shape, motor skills, experience, and motivation, to facilitate learning are called affordances.

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