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Play in K

Outdoor Play



The Outdoor Classroom

Cross-Curricular Play-Based Lessons for the Young Learner

What is the Big Deal about Outdoor Play in K?

Studies show that outdoor play is beneficial for child development for gross motor, cognitive, emotional and social competencies. Fresh air and sunshine positively affects student mental health and physical health. In general, outdoor play has been shown to increase observation skills, self-regulation, risk-taking and overall well-being for adults and children alike. Please see the attached article for further information on the evidence-based research supporting outdoor play as beneficial for young learners.



Fall Ideas:

Nature Walk (Collecting/Sorting Natural Materials)



- Ensure each child has a bag or container to collect their outdoor materials. Explain to each child they should gather only what they can find on the ground that is nature-based and what will fit in their bag.
- The children will gather outside in the playground or a nearby park and then bring their collected materials to the school pavement or an appropriate outdoor area.
- The children will sit in pairs and show their treasures to a buddy.
- The children will sort their own collection on the pavement in the sunshine.
- As they sort, discuss how to sort the items as a whole group. Some categories will be obvious, like rocks, sticks, pinecones but others, like leaves, grass, weeds, will be less apparent. Begin a conversation about why some objects may be included in a category and others could not.
- The children might spend 10-15 minutes collecting their natural materials. The discussion, categorizing, identifying living and non-living, negotiating the terms for sorting, observing the differences between the objects and celebrating their treasures should take about 20 minutes.
- Conclude by gathering the natural items for ongoing use and discovery of the raw materials into the classroom and continue the discussion on sorting with the items collected over the next few days.

QEP Key Foci:

Explore sensory perceptions, use gross and fine motor skills, engage in a variety of experiences, create connections with others, interact verbally, expand own vocabulary, and explore activities related to mathematics and science.

Natural Faces

- Have each child bring a bag and head out to collect natural items. Including older grade students, such as reading buddies is beneficial for this activity, but not mandatory.
- The objective is to create a face using the items collected. With this in mind, the children will set out to collect their natural items, searching for raw materials for eyes, hair, nose, etc. This will last about 10 -15 minutes.
- Once the children have gathered their items, have them meet on the school pavement and make the groups spread out for enough space for the activity
- Give each pair (if using reading buddies) a piece of chalk to draw a large circle for a head shape. If reading buddies are not in attendance, hand the child a piece of chalk after you have modelled the size and shape of a head.
- Instruct the child or their pairs to use their natural objects to complete the face.
- Sorting may take 10-15 minutes. Building the face should take about 10 minutes. Have the children take a gallery walk to enjoy each other's faces and if permitted, take pictures of the pairs with their faces for portfolios or class website.



QEP Key Foci:

Plan actions to be taken and carry out planned action, use gross and fine motor skills, create connections with others, interact verbally, explore activities related to arts, and demonstrates understanding.

Winter Ideas:

Snowflakes



- On a warm winter day, help your students to observe that snow is falling.
- Dress warmly and give each child a clipboard with a piece of black construction paper, a magnifying glass, and a white pencil crayon.
- Encourage each child collect the falling snowflakes on their paper and encourage the children to draw the snowflake on their paper.
- Using magnifying glasses, help the student to discover that the snowflakes have different shapes (though all are circular).
- Explore the surrounding snow to see what can be found and instruct the children to try and find different types of snow.

- Talk about the differences between compacted snow, fluffy new snow, and the hard crust that is beneath surface snow.
- Head back indoors to research for more information about snowflakes (books, on-line, etc.) as a class.
- Make coffee-filter snowflakes and bring in a bucket of snow to continue inquiry during free play or throughout the week.

QEP Key Foci:

Plan actions to be taken and carry out planned action, use gross and fine motor skills, explore activities related to science, and demonstrate understanding



Snow Art:

- Fill water bottles with water and food colouring.
- Go outside and encourage the children to use various colours
- Take pictures of the art or have an honorary judge award p etc.

QEP Key Foci:

Use gross and fine motor skills, participate in group activities, explores activities related to arts, explore own personal autonomy

Scavenger Hunt:

- Develop a page with various things which could be found in a school yard on a winter day. Some of these things may include trees, birds, leaves (maybe on a tree), animal tracks, icicles, clouds ect. Pair up the students and give them a clipboard. Send each pair to find as many items as possible using the scavenger list. An alternative to this may be “What do I see/hear/smell/feel in winter?” (See attachment).

QEP Key Foci:

Use gross and fine motor skills, create connections with others, explores activities related to science, participate in group activities

Spring Ideas:

Puddle Measuring:

- When the snow begins to melt and great puddles begin to form in the schoolyard, head to study the puddles.



- Encourage the students to look for signs of living things (bugs, worms, etc.).
- Discuss how puddles are formed and why they form in some places but not others.
- Have the students observe if the pavement around the puddle is damp but not wet. Gather ideas from the students to explain why puddles get bigger or smaller.
- On another day, look at the same puddles and observe what was similar and what was different from the previous observation day.
- Lead the students to think about how to prove puddles were sometimes bigger and/or smaller. Help the children to brainstorm how to measure the puddles.
- Gather outdoor and indoor materials to measure the puddles, such as rulers, sticks, and even chalk.
- Place a row of rocks through the puddle and leave them in place for the observation period. Each day, check to see if the puddles shrink or grow with the row of rocks as the measurement.
- Have the children record their findings over the next few days using drawings, labels and measurement data.
- Discuss terms such as evaporation and condensation, the rain cycle and seasonal patterns which may affect the puddles throughout the observation period.
- Lesson extensions could include puddle art, puddle jumping, or comparing puddles made indoors by melting snow.

QEP Key Foci:

Explore activities related to science and mathematics, collaborate with others, plan actions to be taken, carry out planned action and explain action taken, express self orally in different ways, expand own vocabulary, interact with written language

Journey Stick:

- Go with the children on a nature walk.
- Have each child collect a stick they enjoy.
- Encourage each child to collect 3-5 natural objects they also like.
- With the help of older students, such as reading buddies, instruct the students to attach the items to the stick, using different colours of yarn.
- Have the children draw a picture of their sticks.
- Encourage the grade 6 students to help the children write a story, a poem, or a description of the items on the stick.
- Have the reading pairs share their poems and creations with the class or in small groups.



QEP Key Foci:

Use gross and fine motor skills, create connections with others, explores activities related to science, arts, interact with written language, participate in group activities

Summer Ideas:

Clouds:

- Take the children outside on a cloudy day and read a book about clouds on a quiet area with dry grass.
- As you read the book, invite the children to look up into the sky and watch the clouds float by.
- Have the children spread out away from other students and request each to observe the clouds for about 5 minutes.
- Gather all the students together and talk about what they observed.
- Discuss the shapes of the clouds and compare the shapes to the clouds in the book.
- Ask how the kids saw the same cloud differently. Talk about perspective and how each student's viewpoint could be right, even if they didn't agree.
- Discuss how the clouds move faster on some days and slower on others. Ask questions about clouds which gather together in clumps. Talk about where the clouds came from. How did they get up in the sky?
- Encourage the children to draw their favourite cloud on a clipboard.
- Extensions of the lesson may include making clouds with shaving cream or making edible clouds such as whipped cream or custard clouds, or making clouds out of cotton balls, torn paper, or natural materials like milkweed fluff.



QEP Key Foci:

- Explore different ways of relaxing, explores activities related to science, participate in group activities, use imagination, interact with written language

Gardening:



- If you have a community garden, germinate vegetable seeds such as peas, bean and carrots, or zucchini squash, pumpkins and tomatoes.
- Have the students plant the transplants into the garden in the spring and occasionally weed the garden beds {with supervision to avoid vegetable plants from being weeded!}.
- In late June or fall, harvest some of the vegetables and taste the fruit of the student's labour.

QEP Key Foci:

- Use gross and fine motor skills, explores activities related to science, participate in group activities, explore the world of food, plan action to be taken, carry out planned action and explain action taken, collaborate with others

Throughout the Year:

Sit Spots:

- Invite the children to find a quiet spot outside, away from any classmates.
- Request the student to sit quietly for 5- 6 minutes.
- Have the students close their eyes and listen, smell, or even look around to see what they notice.
- Invite the children to record their observations.



QEP Key Foci:

Explore sensory perceptions, participate in group activities, engage in a variety of experiences

Critter Hula Hoop:

- Give each child a hula-hoop to put on the ground.
- Ask the students to observe only what they see in that hula-hoop.
- Ask the students to identify what is living, non-living, moving and stationary.
- Have the students draw pictures to record their findings and/or write words and label their drawings.

QEP Key Foci:

Explore activities related to science, draw upon own capacity for attention

Scavenger Hunts:

- Create (or find on Pinterest or Teachers Pay Teachers) scavenger hunts for each season. Keep whatever they collect for your loose-parts center.

QEP Key Foci:

- Explore activities related to science, draw upon own capacity for attention, participate in group activities

Nature Rubbings:

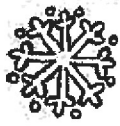
- Bring out large paper and crayons and show the children how to place their crayons flat.
- Encourage the student to take rubbings of trees, leaves, the pavement, the school walls, etc.
- Talk about textures (smooth, bumpy, rough, etc.).
- Create art using the rubbings.

QEP Key Foci:

- Explore activities related to science and art, and use fine motor skills and gross motor skills

Name _____ Date _____

Five Senses of Winter



I see



I hear



I smell



I taste



I touch



Rostrum

The importance of outdoor play for young children's healthy development



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ABSTRACT

Changes in current societies are affecting childhood experiences. Time for outdoor play is diminishing, contributing to more sedentary lifestyles, disconnected from the natural world. Recognizing the importance of outdoor play for young children's healthy growth, a project focused on the exploration of the outdoor environment was developed with a group of young children in an early childhood education setting in Portugal. The project aimed to transform educational practices, moving from frequent indoor activities to a regular use of the outdoor environment. In this paper, we present the main dimensions related to outdoor play that emerged during the project (contact with natural elements, importance of risk, socialization opportunities) and highlight the role of professionals and families in creating quality outdoor play opportunities.

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Introduction

The importance of play for children's healthy development is grounded in a strong body of research.¹⁻³ As a natural and compelling activity, play promotes cognitive, physical, social, and emotional well-being, offering the necessary conditions for children to thrive and learn. Through play, the child can experiment, solve problems, think creatively, cooperate with others, etc., gaining a deeper knowledge about his/herself and the world. From an early age, the possibility to experience several opportunities for unstructured play, in which the child can decide what to do, with whom and how, promotes positive self-esteem, autonomy, and confidence.

Acknowledging the influence of time and space in play experiences, in this article we address the special contribution of the outdoor environment to fulfil children's needs for free play, reporting into an outdoor educational project developed with a group of 14 children, between 15 and 36 months old, in a Portuguese early childhood setting. The work presented aims to identify important dimensions of outdoor play that contribute to effective learning and healthy development, and highlight the role of professionals

and families in the provision of such experiences in early childhood education settings.

Outdoor play in current society and education settings

The specific features and stimulus of the outdoor environment provide for different play opportunities that can hardly be replicated inside.⁴ The outdoors can be described as an open and constantly changing environment, where it is possible to experience freedom, gross and boisterous movements, and contact with natural elements.⁵ While playing outside, children benefit from being exposed to sunlight, natural elements, and open air, which contributes to bones development, stronger immune system and physical activity.^{6,7} The need to be physically active from an early age is particularly relevant if we consider the concerning growth of children's obesity and overweight. According to the World Health Organization,^{8,9} Portugal is the second European country with the highest values of overweight among children with 11 years old (32%), being preceded by Greece (33%) and preceded by Ireland (30%). Also, play in green outdoor environments promotes higher levels of attention and well-being.¹⁰⁻¹²

However, the growing evidences about the importance of outdoor play does not seem to have an impact in the type of experiences that children have access to. Contrary to what would be expected, opportunities for outdoor play are diminishing, in consequence of globalization, technology expansion and urban growth.¹³

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A growing culture of fear about the possible accidents that might happen affect parent's and professionals attitude towards outdoor play, so children tend to be kept inside, occupied with structured activities, and controlled by adults.^{3,14,15} Possible hazards, interactions with strangers and car traffic are the most frequent factors mentioned by parents for not letting their children play outside, even though they acknowledge the importance of such experiences.^{13,16} According to Gill,¹⁴ these fears are often brought by misinterpretations of reality, without having a real expression in society. For example, the fear about child's abduction is not linked to an increase in these type of crimes, although a greater emphasis is given to these situations by social media.

Adding to this, there is a concern to occupy children during the day, considering that most parents work long hours and want to guarantee the best opportunities for children to acquire different skills and knowledge. Academic activities and sports often occupy children's time to play freely. Going from one activity to another, children tend to be transported by car, without experiencing the outdoor environment through the interaction with the community.^{17,18}

In this scenario, there is a need to raise general awareness regarding children's right to play outdoors, as well as its potential in supporting children's well-being, learning and development. Acknowledging the time children spend in educational settings, concerns about the time and space to play outside should be integrated in education planning and intervention, starting in day-care and kindergarten. In Portugal, research shows that early childhood education is too centred in what happens inside the activity room, wrongly considering that the outdoor environment serves merely as recess time, during which children can stretch their legs and expend their energy.^{19–23} A recent study focused on the use of outdoor spaces in four Portuguese kindergartens showed that the number of times children go outside is very reduced, especially in the winter months. Children tend to spend long periods in closed environments, more exposed to disease contamination and saturated air.²⁴ Also, the time spent outside was often insufficient, varying between 16 and 30 min. This is a very short period for children to take advantage of the benefits related to outdoor play, being recommended a minimum of 40 min, per day.⁷

The outdoor education project

With the desire of offering a different educational response to young children and acknowledging the importance of the outdoors for learning and development, a Portuguese early childhood a Portuguese early childhood centre took the initiative of implementing an innovative outdoor education project, going against the tendency of keeping children inside. During a period of three years, the setting located in a rural area in the centre of Portugal, catering for children from 4 months to 10 years of age (from 6 to 10 years old children attend an after school service), introduced gradual changes in pedagogical practices, in order to create quality outdoor play opportunities for children.

Despite having a large and well equipped outdoor area, with natural elements and different type of structures to promote play, in the beginning of the project the children did not used the outdoors regularly. The professionals perceived the indoor environment has being more secure and comfortable, so they avoided going outside for long periods. They were also afraid about possible accidents or diseases that might affected children, fearing for negative reactions from the families.

To overcome these obstacles, a methodology close to action-research was adopted to facilitate practices' transformation, which included teachers' training in outdoor play, regular team meetings and observations of children's play. In this way, problems that

emerged were interpreted as mile stones in the process of improving educational practice and specific strategies were experimented to achieve a solution.

This outdoor project directly involved all the early childhood teachers of the institution (5 women) and, indirectly, the board of the setting, other professionals, families, community members and, of course, the children. In this paper, the experience of one of the groups, with 14 children between 15 and 36 months old will be shared.

Through qualitative data collection techniques, such as observations, written records, videos and photographs focused on children's outdoor play, three dimensions were identified as key to promote learning and development: contact with natural elements; importance of risk; socialization opportunities. The analysis of each dimension will take in consideration current international literature. Also, these three components of outdoor play can only be fully developed if children are accompanied by attentive and responsive adults, concerned with their needs and interests.^{25,26} The role of professionals and families in this project is also presented, considering that cooperation between adults is an important aspect for the success of outdoor play experiences.

Promoting learning and development outside

Contact with natural elements

The outdoor environment offers unique stimulus that capture children's attention and interest. Sticks, rocks, flowers, soil, water, etc., are explored with curiosity and drive to learn, as they offer countless possibilities for play. As White²⁷ states, natural elements are open-ended materials, that can respond to children's imagination and needs. In this process of reinvention and assigning new meaning to objects (e.g. a stick can be a gun, a boat or a pen), it is possible to mobilize skills related to divergent thinking, creativity, problem solving, among others. The use of natural elements in children's play also creates a more sustainable strategy in what concerns resources provision. Natural elements are easy to find, cheap and they do not offer the limited options that commercial toys do.²⁸

The exploration of natural elements is also important to capture children's attention to the richness and diversity of Nature. The sense of discovery and fascination influences meaningful learning and allows for the development of an emotional connection towards the environment. If we assume that attitudes of respect and care are more likely to emerge regarding something that is dear to us, than it is crucial to promote a sense of belonging and familiarity towards Nature from an early age to facilitate ecological and sustainable behaviours along life.

Through outdoor play and the exploration of natural elements, it is possible to promote education in its broadest sense. Activities related to playing with soil and water can serve as examples of learning opportunities in which concepts related to mathematics, science or language were promoted in an integrated way. As children filled and emptied containers, several times, they could explore notions related to weight, volume and time, and as they talked about what they were experiencing, new vocabulary was being acquired. Similar findings were found in other researches, showing, for example, children's ability to learn and employ mathematical products and procedures during outdoor play, using their body as a learning tool.^{29,30}

It what concerns health, the interaction with natural elements such as the soil helps build immunity. Growing research has been showing the importance of experiences that promote the contact with "harmless microbes", that provide protection against diseases.³¹ Among the group we worked with, some children had respiratory and skin problems (e.g. asthma and eczemas), and going

outside often helped them deal with periods of aggravated symptoms.

Importance of risk

Today's society often neglects the importance of risk for children's learning and development. A culture of fear lead us to underestimate what children are capable to do, creating an even more "dangerous" learning environment, where children do not have the possibility to learn, by experience, how to stay safe.^{14,32} It is essential to adopt a wider vision of risk, going beyond the possibility of accidents to consider the positive implications related to the feelings of success and happiness when a challenge or a new skill is mastered.^{33,34}

In the outdoor environment, opportunities to exceed personal limits often emerge in situations like climbing up a tree or using a tool. In risky play, the adult should interpret the signs of the child, giving the necessary support or space that he or she needs. From our experience and following other studies in this area, it is possible to state that risky play promotes important skills related to persistence, entrepreneurship, self-knowledge and problem solving.^{35,36}

During outdoor play, children should have the opportunity to experiment moments of failure and success, learning by trial and error. If we try to prevent all risky situations, children will not know how to deal with unpredictable environments and will lack the necessary confidence to overcome challenges in an autonomous way. During the project, we had different situations in which risk emerge, for example when wild mushrooms appeared in the garden, after a period of rain, and children were interested by that phenomena. In that situation, we could either prohibit the exploration or help children understand what was happening in the safest way possible. Choosing the second option, we told the children that it was very dangerous to eat the mushrooms and we gave them some tools to facilitate observation (e.g. magnifying glass and clamps). We always remain close to them, helping, and answering to the questions that emerged. If we had avoid going out because of the mushrooms or if we had ignored that situation, an important learning opportunity would have been missed.

Socialization opportunities

The environment created outside can offer interesting conditions for children and adults to show different aspects of their personality, which normally do not emerge during the time indoors. Following the findings of Maynard, Waters and Clement,³⁷ we have realized that outdoor play allows for a deeper knowledge about children, facilitating a more adequate educational intervention from the adult. Likewise, less conflicts occur during outdoor play and children tend to cooperate more with each other.^{28,38} The characteristics of the space (open and unpredictable) enable the development of joint goals between children, leading to experiences of companionship among peers. During outdoor play, children become teachers and learners, sharing their knowledge and skills to accomplish different tasks or challenges. In this process of cooperation, it is possible to develop empathy, as children begin to understand other's people feelings and needs. The crucial difference about socialization in the outdoor environment is that opportunities for interaction happen in a gradual way, giving children the possibility to choose the moments to connect with others or to play individually, without having to continually run into each other as it so often happens in close and exiguous rooms.

The interaction with adults also seem to be facilitated in the outdoor area. In different moments along the project, adults recognized that they felt more available to support children outside, where they felt relaxed and calm. This statement suggests that the outdoor environment is not only a healthy environment for children, but also for adults, where the levels of stress and anxiety seem to diminish. Other studies found evidences that support different

models of interaction between adult and child during outdoor play, being more child-led, flexible and based on dialogue about children's discoveries and interests.^{4,39,40}

The role of professionals and families in the provision of outdoor play experiences

To develop quality outdoor practices, that can have a positive impact in children's health and development, it is fundamental to promote conditions for adults to feel comfortable and motivated during the time spent outside. Adult's involvement will influence the type of experiences that children have access to and how they incorporate new knowledge. From the experience acquired during the project it is possible to state that teamwork is a crucial component for quality planning and intervention, facilitating the need for constant evaluation and reflection upon children's well-being and involvement.

Besides from collaboration among professionals, families should participate as much as possible in outdoor play. If professionals explain to the parents why it is important to play outside and make an effective effort to get them involved and satisfied, possible negative reactions related to fears about children getting sick, dirty or injured will be progressively solved. It is important to never forget that most families just want the best for their children and it is the job of professionals to help them achieve this goal. Desirably, the valorization of outdoor time from parents will also promote the integration of these type of experiences in family routines, creating conditions for stronger and more positive effects in children's development.

To overcome parents' anxieties and to promote quality outdoor play experiences, it was very important to assure that all children had proper equipment to play outside in different weather conditions (e.g. waterproof suits and rubber boots for winter). Having the adequate clothes is an essential dimension to assure children's safety and health. Also, we encouraged the parents to talk to the children's paediatrician about outdoor play, especially regarding children's respiratory and skin problems. This effort of articulation between health and education professionals was very important to earn parents' confidence in this learning approach.

Finally, the cooperation between family and school allowed for a progressive improvement of structures and play resources available outside. Often, parents offered their skills and time to the setting, working afterhours to build or recover play structures (e.g. trees houses, benches and tables for children) or collecting daily objects for children to play with (e.g. kitchen supplies to play with soil and water).

During the development of the project we always good lines of communication with families, trying to find solutions and strategies that satisfied everybody's needs.

Final thoughts

The need to guarantee that children have the possibility to play outside, facing adventures and challenges, without being constantly engaged in activities controlled by adults is a recent concern for most western societies. We have evolved to a more modern, technological, and globalized world but, in the process, we lost habits and experiences that influence our quality of life. One of the major challenges of present and future generations may be the need to find a balance between an increasingly "busy" society and the preservation of experiences of well-being and connection to the world. The educational settings have an important role in this process, guarantying that during the first years of life children have the means and opportunities to develop a positive self-esteem, curiosity and motivation about learning and good socialization

skills. The quality experienced in education services may help the child to overcome vulnerabilities related to other contexts (e.g. poverty, low levels of parents' education). Opportunities to contact with Nature, deal with risks, and socialize with peers and adults in a responsive and caring environment will contribute to quality educational experiences, influencing children's motivation and enthusiasm about learning and school.

The valorization of early years and outdoor play can be understood as a mean to promote healthier lifestyles, acknowledging that today's children will be the adults of tomorrow. Parents, educators, and policy makers should work to promote better childhood experiences, guarantying that children's interests are considered in urban and school planning. Without ignoring the slow rhythm of practices transformation, it is important to instigate educational settings to promote outdoor play, considering the amount of time that children spent in school and the impact of those experiences for learning and development.

With these ideas in mind, this testimony aims to highlight the importance of outdoor play in natural environments for children's learning and development and to inspire and challenge others to take advantage of the opportunities that the outdoor environment can offer.

Conflicts of interest

The authors declare no conflicts of interest.

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