JOURNAL OF EDUCATIONAL SCIENCES THEORY AND PRACTICE Vol. 19, No 2, 2024

Received: 15. 10.2024
doi: 10.46763/JESPT2419210sv
UDK 373.2.011.3-052:793.7]:502.12
Revised: 10, 11.2024
Accepted: 15. 11. 2024

PLAY AS AN ACTIVITY FOR FORMING ENVIRONMENTAL AWARENESS IN PRESCHOOL CHILDREN

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Abstract. As an independent children's activity, play is formed during the upbringing and education of children and it contributes to their assimilation of experience through human activity. As a form of organizing the life of children in kindergartens, play is important because it serves to form the child's psyche and personality. The main function of play is developmental: it increases intelligence, contributes to the sensory perception of the world and emotional well-being of the child. Therefore, in addition to all other types of activities, play is of primary importance in preschool childhood. Preschool age is considered the classic age of play.

In the area of environmental education, ways are currently being sought to introduce elements of different types of games into the teaching process of preschool children so that they form a conscious and correct attitude towards nature and towards themselves as a part of it. The relationship between children's play (games) and other activities and the formation of ideas about nature is an issue that is poorly explored in science and disorganized in practice. Children of preschool age are happy to participate in theatrical games. By depicting different heroes (animals, birds), children get to know the natural world that surrounds them through images, colours, and sounds.

The paper will present several games with environmental messages implemented in preschool institutions in Stip, North Macedonia, as activities that develop environmental awareness among preschool children.

Key words: play, environmental awareness, preschool children.

K. Groos described play as "a phenomenon that occurs when a growing individual activates and develops their natural abilities out of their own internal motivation and without any external goal" (Groos 1907, cited in Okoń 1987, p. 26). He also added that "play is a preparatory school for later life, with methods that are more varied the higher the level of development represented by the given species". This means that children play, not because they have to achieve something specific, but because they are naturally inclined to do so. Groos also suggested that play serves as a preparatory stage for later life. The methods of play become more diverse and complex as the species exhibits a higher level of development. This indicates that more advanced species, including humans, have more varied and sophisticated forms of play, which help prepare individuals for the challenges and tasks they will face in adulthood.

It is worth mentioning the conclusions from the ethnographic research of E. Piasecki (1959, p.111), who identified three mechanisms for the creation of games:

1. Transforming old dances or rituals (such as fortune-telling or magic) into games and play activities.

2. Imitating human activities that ensure the individual's survival, such as hunting, warfare, agriculture, and romantic pursuits.

3. Using movement to illustrate natural phenomena, beliefs, and legends.

Movement based games, also known as physical play, are activities that involve bodily movement and coordination. These games are essential in early childhood development and can take many forms, such as running, jumping, climbing, dancing, or organized sports. Through these activities, children not only improve their physical fitness, developing stronger muscles and bones, but they also enhance their motor skills, such as balance, agility, and coordination.

In movement-based games, all participants, despite being divided into groups or teams, perform the same movements, often of a more complex nature. The rules governing the game are the same for all participants, and the final outcome is the result of the entire team's effort, as exemplified by "Row Races". Team games often require greater physical dexterity, often associated with roles assigned within the game. In team games, effectiveness in team competition is primarily assessed, reflected in the final score, with the governing rules often collectively established (or modified) by the players (or by the teacher) before the game. Participation in team games demands significant skills from students, as well as some knowledge of game tactics, which can be developed collectively with the team captain or teacher.

Environmental education and ecology are disciplines that require critical thinking and engagement by the children in order to understand concepts that are presented. Applying Gardner’s theory of multiple intelligences of art, interpersonal and scholastic talents provide for a multidisciplinary format that allows children to absorb and reflect information in several ways (Gardner, 2011). Not every child is academically inclined (Kou et al., 2019). Some struggle with reading, some are unmotivated or bored, and others are easily distracted by other children (Coyle, 2010; Kou et al., 2019). Incorporating games and activities into lesson plans may be effective for reaching children with attention deficit hyperactivity disorder (ADHD), behavioural disorders and other learning disabilities to comprehend environmental concepts (Collini, 2019; Coyle, 2010; Schneller, Schofield, Frank, Hollister & Mamuszka, 2015; Szczytko et al., 2018). By adding games and activities, these children may gain a new perspective and success that they could not have achieved in the past (Haney, 2007).

2. BENEFITS OF THE GAME ON CHILDREN'S DEVELOPMENT

The play fosters social and emotional development. When children engage in group activities, they learn to interact with their peers, they follow rules, cooperate, and resolve conflicts. This social interaction helps them develop important skills like teamwork, communication, and empathy. Emotionally, movement-based games provide an outlet for energy and stress, contributing to better mood regulation and overall emotional well-being. Cognitively, these activities stimulate brain function and enhance learning abilities. Children involved in play often display improved concentration, problem-solving skills, and memory. They learn to follow instructions, make quick decisions, and adapt to changing situations, which can positively impact their academic performance.

Summarizing the definitions presented in this chapter, several general characteristics of play can be identified:

1. Emotional Impact: Play evokes positive emotions and sensations, and helps in creating and releasing psychophysical tensions related to the uncertainty of the play activity's outcome.

2. Imaginary Reality: It involves a distinct and specific imaginary segment of reality governed by its own rules and themes, often different from but influenced by the surrounding reality.

3. Reflection of a Child's State: Play reflects the child's experiences and current intellectual-emotional state, incorporating creative elements in both the content and the physical activities involved.

4. Developmental Benefits: It contributes to the development of a sense of aesthetics and self-worth, preparing children for life in human society through various roles, skill enhancement, and knowledge acquisition.

5. Voluntary and Universal: Play is a voluntary form of using free time for mental and physical relaxation, undertaken regardless of age, gender, social conditions, or education, and it serves as a form of individual expression within group participation.

In essence, movement-based games are a fundamental aspect of a child's growth and development, offering a holistic approach that benefits physical health, social skills, emotional stability, and cognitive abilities.

Movement-based games, or physical play, have additional important aspects and benefits worth mentioning:

- Enhancing Creativity. Physical play often involves imaginative scenarios where children create their own games, rules, and roles. This fosters creativity and innovation, allowing children to explore different possibilities and solutions.

- Improving Language Skills. During play, children frequently communicate with each other, which enhances their language development. They learn new vocabulary, practice sentence structure, and improve their verbal communication skills.

- Encouraging Risk-Taking. Through play, children learn to take calculated risks and understand their limits. This helps build confidence and courage as they navigate challenges and learn from their experiences.

- Developing Resilience. Play often includes both successes and failures. Learning to cope with disappointment and persist through challenges builds resilience and a growth mindset, which are valuable life skills.

- Fostering Independence. As children engage in movement-based games, they often make decisions and solve problems independently or in small groups without direct intervention of an adult. This promotes self-reliance and decision-making skills.

- Supporting Sensory Integration. Movement activities help children integrate sensory information from their environment, which is crucial for their ability to process and respond to sensory stimuli. This can be particularly beneficial for children with sensory processing issues.

- Encouraging Lifelong Physical Activity. Early positive experiences with the play can foster a lifelong appreciation for physical activity. This helps establish healthy habits that can prevent lifestyle-related diseases and promote overall well-being throughout life.

- Building Community and Cultural Awareness. Group games and traditional physical activities can introduce children to cultural traditions and community values. This helps them appreciate diversity and understand the importance of cultural heritage.

3. THE ROLE OF CHILDREN'S PLAY IN THE CREATION OF ECOLOGICAL CULTURE

Children's games play a crucial role in shaping environmental awareness because it allows children to learn through experience and interaction. Environmental education carried out through play is exceptionally effective since children best absorb knowledge when they are engaged and interested in what they are doing. Through play, children can learn the principles of waste segregation. An example of this is a recycling game, where children sort various items into appropriate containers. This activity not only teaches them the types of waste and how to segregate them correctly, but also develops habits that will stay with them throughout their lives. Another example is creating items from recycled materials. Children can build toys or create art projects using used materials, which fosters their creativity and ecological awareness. They learn that many items can be reused instead of being thrown away, which is a key element of sustainable living. Children's play also shapes positive habits related to natural resources conservation. Through games and activities that promote saving water and energy, children learn how important it is to use natural resources responsibly. For example, games that focus on saving water while washing toys can become the foundation for future, more conscious decisions about water usage. Contact with nature and outdoor play are equally important.

Through direct interaction with nature, children develop empathy and respect for the natural environment. Activities such as bird watching, planting plants, or building shelters for insects help children understand the importance of protecting nature and caring for ecosystems. These experiences also teach them that even the smallest creature has its place in the ecosystem and is important. Ecological play often promotes cooperation and teamwork, which is essential for developing children's social skills. Joint projects, such as creating a garden in preschool or organizing clean-up activities, teach children to collaborate and share responsibility for the environment. Through cooperation children learn that caring for the environment is a task that requires everyone's involvement. Creativity and innovative thinking are also stimulated by ecological play. Creating eco-toys or solving environmental puzzles inspires children to think outside the box and seek new solutions to environmental problems. Children learn that even their small actions can have a real impact on improving the state of the environment.

3.1. EXAMPLES OF ENVIRONMENTAL GAMES

1. "Little Gardeners"

In this game, children can create small gardens in pots or designated garden beds. They can plant seeds of vegetables, herbs, or flowers and observe their growth daily, learning responsibility for the plants at the same time.

1. "Waste Segregation". Children play by sorting waste into appropriate bins for plastic, paper, glass, and organic waste. They can use colourful bins and toy waste items, making the game both attractive and educational.

3. "Eco-Friendly Shopping". Children play shop, where they sell and buy eco-friendly products. They can use everyday items that are environmentally friendly, such as reusable bags, local produce, and organic products. The biological effects of ecological and physical

play on children encompass a wide range of benefits. Engaging in movement-based activities promotes physical fitness, strengthens muscles and bones, and enhances coordination and balance. Moreover, ecological and physical play supports the development of cardiovascular health and aids in the regulation of body weight. It also contributes to the release of endorphins, which can improve mood and reduce stress levels. Additionally, regular participation in ecological and physical play can lead to better sleep patterns and overall cognitive functioning. These biological effects highlight the importance of integrating movement-based activities into children's routines for their holistic development and well-being.

Movement-based games in ecological education activity in kindergarten play a vital role in fostering holistic development. They enhance physical fitness, motor skills and coordination, while promoting a healthy lifestyle from an early age. Through teamwork and cooperation, these games also nurture social skills and positive relationships among students. Moreover, engaging in ecological activity releases endorphins, contributing to emotional well-being by reducing stress and anxiety. Additionally, movement games stimulate cognitive function, improving concentration, memory, and learning readiness. By accommodating children of different abilities, these games ensure inclusivity and respect for diversity. Ultimately, the enjoyment and engagement provided by movement-based games motivate students to actively participate, while also teaching valuable life skills such as leadership, problem-solving, and resilience. Preschool teachers should be energetic, inspiring, and adaptable. They should demonstrate enthusiasm for ecological activity and have the ability to motivate students to participate in kindergarten. It is important for them to be empathetic and understanding of individual students' needs and abilities, adjusting activities accordingly. Additionally, the teacher should be communicative and able to effectively convey instructions while collaborating with children and other teachers. The ability to organize activity in an engaging and safe manner is also crucial.

4. SUMMARY

Ultimately, kindergarten teacher should serve as a positive role model for their students, promoting physical activity and a healthy lifestyle. Consistently applying these strategies can help build a positive attitude towards nature and encourage children to love nature. In summary, movement-based games are not only fundamental for ecological education and physical health but they are also crucial for the holistic development of children, touching on creativity, language, risk-taking, resilience, independence, sensory integration, lifelong health habits, and cultural awareness.

5. APPENDICES

The daily operational plans are attached from the implementation of activities in, on the theme "Water Day" and the other activity was realized in Kindergarten "Vera Ciriviri Trena", Stip, Republic of North Macedonia on the topic "Air".

DAILY OPERATIONAL PLAN

Date 22.03.2023

Age: Preschool level group, Kindergarten, "Vera Ciriviri Trena", Stip, Republic of North Macedonia

<table>
<tr><td colspan="2">1. Standard/s:

The child observes and describes the characteristics of inanimate nature</td></tr>
<tr><td colspan="2">2. Title of the daily topic: ECOLOGY Water Day</td></tr>
<tr><td colspan="2">3. Objectives:

- To encourage awareness and discovery of the properties, meaning and application of water, air, soil, light, sound

- To encourage interest and love for nature and provide support for curiosity expressed through children's questions;

- To encourage a correct attitude towards material values (food, water, energy) and develop responsible behaviour;</td></tr>
<tr><td rowspan="2">4. Early learning and teaching strategies used:

Forms – Frontal, individual

Methods – Method of oral presentation, method of illustration, method of conversation, method of demonstration.</td><td>5. Time of realization:

09:00-09:30</td></tr>
<tr><td>6. Place of realization:

Kindergarten classroom</td></tr>
<tr><td colspan="2">7. Materials and means of realization:

Model "Fountain" (made of cardboard boxes, bags, plastic cups, decorative paper and flowers), plasticized photos, toothpicks, glue, drops, water bottles, food dyes.</td></tr>
<tr><td colspan="2">Activities:

Introductory part:

Children, what day is celebrated today? (I show them a picture showing a drawing of water drops with an inscription – March 22 – WORLD WATER DAY)

Before I ask them the question about water, I show them a "Fountain" model from which water flows.

“Why do we need water?" Becaaaaause… without it, there will be no life. I continue to tell them about water... It serves us for everything, it constantly keeps us company and circulates through nature. It is all around us, both deep down and high up, in a river and in a lake, in an ocean and in a sea. Somewhere it's salty, somewhere it's fresh, somewhere it's long, and somewhere it's short. Somewhere it is clear, somewhere it is muddy, and somewhere it is expensive as if it were gold. But even though it serves us and makes friends</td></tr>
</table>

with us, sometimes it can get angry.

I ask them questions again:

What could happen if we don't drink water?

What do we pollute water with?

Main part:

Activity 1: Processing of the text THE DROPLET WATERY (I read them the story about the droplet Watery.)

After reading the story, I ask questions that will develop a discussion with the children.

1. How did you like the story about the droplet Watery?
2. Why do we need water? (We talk about water and everything we use it for.)
3. Where does water come from?
4. How should we take care of nature?
5. What kind of air do you want to breathe?
6. Come on, tell me who is polluting our water and air?
7. Should we save water?
8. How should we save water?

ECO MESSAGES

Take care of the planet Earth, it will pay you back!
Plant a tree, plant a flower for a more beautiful world!
Save water - it's in fashion!
Water is saved because it is worth a lot!
A drop of water - a drop of life.
Clean air - healthy life.
Save the planet, it's in your hands!
Every drop counts

Then I start a conversation with the children about ecology (with which I will introduce them to the daily activity) and through eco messages I encourage them to come up with ideas on how we can all together protect and not pollute our planet.

Activity 2:

I show the children the planet Earth. We talk about who pollutes nature and how we should take care of it.

Activity 3.

First, I show them two transparent plastic bottles with water in them (The bottles are 0.5 l of ordinary water). I ask them if the water in the two bottles is different. I explain to them that the water in both bottles is clean. Then I put some food dye in one bottle (I take food dye because it is safe for working with children), and I put some thin broken twigs and small pieces of paper. I show them the water bottles again. I ask them - Is the water in both bottles the same? I explain to them that the water in one bottle is polluted because if waste is thrown into the water, it becomes polluted.

Final part:

I show the children two boxes of flowers. One flower will be fresh and the other withered in order to emphasize the importance of water for the life of plants and all living beings. I read

them the poem "LITTLE FLOWER".

Little Flower

A beautiful little flower
of many colours
bowed its head
and stands crookedly
What's wrong with it?
Anna asked diligently.
It wants water, it's very thirsty.

DAILY OPERATIONAL PLAN

Date 05.04.2023, Kindergarten “Vera Ciriviri Trena’’, Stip, Republic of North Macedonia
Age: 3-4

<table>
<tr><td colspan="2">1. Standard/s:

The child observes and describes the characteristics of inanimate nature</td></tr>
<tr><td colspan="2">2. Title of the daily topic: AIR</td></tr>
<tr><td colspan="2">3. Objectives:

- To encourage awareness and discovery of the properties, meaning and application of water, air, soil, light, sound;

- To encourage interest and love for nature and provide support for curiosity expressed through children's questions;

- To encourage a correct attitude towards material values (food, water, energy) and develop responsible behaviour.</td></tr>
<tr><td>4. Early learning and teaching strategies used:

Forms – Frontal, individual

Methods – Method of oral presentation, method of illustration, method of conversation.</td><td>5. Time of realization:

09:00-09:30

6. Place of realization:

Kindergarten classroom</td></tr>
<tr><td colspan="2">7. Materials and means of realization:

photos, tubes, liquid glue bags and cardboard, balloons.</td></tr>
<tr><td colspan="2">Activities:

Introductory part:

Through conversation, we introduce the children to the activity. We discuss that air is necessary for the survival of life on earth. It is used by plants, animals and humans. Humans and animals cannot survive without air for more than a few minutes. Pollution is especially harmful to you, children. It causes sickness, headaches, dizziness and cough.

Main part:

Activity 1: Processing of the text Bibi and Bobby about air (I read them the story about Bibi and Bobby about air – BIBI AND BOBI ABOUT AIR)

After reading the story, I ask questions that will develop a discussion with the children.

9. Who pollutes the air?
10. How does it affect our health?
11. What do our friends Bibi and Bobby suggest? Let's not pollute the air and let’s preserve nature.

Final part:

Then we start a conversation with the children about AIR and, through a poem about air, I encourage them to come up with ideas on how we can all together protect the environment</td></tr>
</table>

and not pollute the air.

Air

How beautiful this world is, waste here, garbage there!
No flowers, grass, shade, concrete, dust and smoke everywhere!
Dead rivers and deserted banks, acid rain and black snow...
Air's like tar, in village and cities, the old and the young breathe hard!
Eco-bells are ringing loudly: What have you done people?!
From the earth, your mother, you've made a black mess!"

Using a visual aid, I demonstrate to the children how we inhale air.

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