Methodology for developing motor activity of 5-6-year-old children in preschool educational organizations using the “Healthy Child” multi-fit trainer

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Abstract

This article explores the development of motor activity in 5-6-year-old children in preschool educational institutions using the "Healthy Child" multifit simulator. Based on each element, a development and program of classes used in a preschool educational organization, in physical education classes, developing motor activity, fine motor skills, physical qualities, and mental activity of children, has been compiled.

Keywords: physical activity, health-improving exercises, "Healthy Child" multi-fit simulator, multifunctional simulator, motor development, preschool education, coordination, balance.

Introduction

Motor activity in preschool children is a decisive factor in their overall health, level of physical development, and formation of psychomotor skills. In recent years, efforts to enrich the content of preschool educational organizations through active games, health-improving exercises, and sports elements have intensified. In this context, the use of age-appropriate, safe, and multifunctional equipment is of particular importance.

One of the most important indicators of preschool children's development is their motor activity. Motor activity directly impacts not only physical condition but also mental development, speech, thinking, behavior, and social adaptation. Therefore, in recent years, scientific research has been expanding on further improving the system of health-promoting exercises in preschool education and introducing pedagogical tools aimed at developing motor activity.

Multifunctional exercise equipment allows preschool-aged children to combine various natural movement types in one place, enriching the exercise process and increasing children's independence, interest, and motivation. Therefore, in this study, a methodology was developed based on the use of a multifunctional exercise equipment created by the author.

Research objective:

To develop a methodology for health-promoting exercises using the multifunctional "Healthy Child" multifit exercise equipment to increase physical activity in 5-6 year old children and to study its effectiveness.

In our republic, phased reforms are being implemented to increase children's participation in the preschool education system and to enhance their physical and mental development. Tasks have been set to "conduct 'Methodological Mastery Hour' and 'Methodological Mastery Day' in preschool educational institutions, and to update the professional standards for preschool educators, which define the main requirements for personal qualities, professional knowledge, skills, and competencies of preschool education teachers."

The practice of issuing electronic certificates to children who have completed one -year school preparation groups based on their development maps has been implemented. Tasks have been assigned to improve the state educational program for preschool education according to international standards, ensure continuity and consistency between preparatory group and primary education curricula, develop electronic resources, audiovisual products, and educational-methodological materials within the framework of the state preschool education program, as well as to make these materials available in the information system for free access.

A child's physical development during the preschool years serves as the foundation for their overall health, mental and emotional well-being, and success in social life. Physical activity ensures children's bodies are strong and healthy, helps strengthen the cardiovascular system, boosts the immune system, and improves overall health. During the preschool years, children consolidate their motor skills, reinforcing the process of forming basic movements such as walking, running, jumping,

and maintaining body balance, which strengthens their muscular and skeletal systems.

Physical exercises have a positive effect on a child's overall development. Physical skills play a crucial role in achieving success in school and future life activities. Furthermore, physical activity stimulates a child's mental abilities and helps with quick concentration, as the practice of physical exercises and skills creates opportunities for their successful application in future life. Additionally, teaching physical activities to preschool children contributes to their physical and emotional development by fostering skills in healthy competition, cooperation, and teamwork. The physical development of preschool children is extremely important, as it significantly impacts their health, behavior, and overall development. Physical activity not only strengthens a child's muscles and bones but also improves their skills, balance, and coordination. It also enhances a child's self-control, reduces stress, and makes them more socially active.

Currently, physical education classes in preschool educational organizations are conducted in accordance with the "State Standard of Preschool Education and Upbringing" (2020) and the "Improved First Step" (2022) program. The program defines the goals and objectives of the classes, as well as the content and forms of work.

The main principles in the process of physical education and upbringing of preschool children describe the expected outcomes from preschool educational institutions of the Republic of Uzbekistan, as well as the characteristics of the developmental environment that should be ensured by teachers of preschool educational institutions when implementing the state curriculum, and approaches to educating and developing preschool children. Additionally, the principles of education and upbringing in a preschool educational institution are as follows:

1) Recognizing childhood as a unique value, with childhood being an important age and life period. A distinctive feature of childhood is that children have the ability to learn and change more than adults as a result of their educational experiences. Childhood is an important stage of a child's development, during which the right to a happy childhood is acknowledged. Taking into account the child's rights, individuality, and developmental potential. All children are born with great potential, and each has innate talents. Every child is a unique individual. All children have the right to the protection and enhancement of their health and well-being, as well as equal access to quality preschool education.

Children, including those with special needs, are recognized as active participants in the educational process. They contribute to their learning and development by choosing activities, participating in planning, and satisfying their natural curiosity for knowledge.

2) Ensuring the comprehensive development and well-being of every child.

Preschool education is a harmonious process of care, education, and upbringing. It ensures the child's development in all areas, which determines the interdependence of all developmental domains in the educational process. This necessitates diverse and comprehensive learning opportunities and integration across each developmental area.

3) Preserving and strengthening the child's health and ensuring a safe environment. By meeting various needs of children, including their need for movement through active games and daily physical exercises, children develop their emotions and both gross and fine motor skills. They explore the world around them through movement, learn to control various objects, distinguish the influences and capabilities of their own bodies, begin to take care of themselves, and adopt a healthy lifestyle.

4) Learning and development through play. Play is a crucial approach in educating preschool children. It brings joy and motivates children, allowing them to acquire new skills and knowledge, and to explore themselves and the world around them. The preschool system recognizes the child's right to play, acknowledges the importance of play for the child, and recognizes its pedagogical potential in contributing to their individual development, learning, and well-being.

5) Collaboration of preschool educational organizations with families, communities, and schools. A child's well-being depends on their family members and close ones understanding the importance of preschool education. Children learn and develop better when parents and the local community are involved and contribute to the educational and upbringing process within the curriculum.

6) Recognition of national, historical, and cultural traditions, spiritual wealth, and respect for the cultures of other peoples.

Research objectives: Implementation of

the "Healthy Child Multifit" technology in physical education classes at preschool educational organizations;

Developing children's gross, fine, and sensory motor skills, teaching walking and running, performing general developmental exercises, and encouraging children to engage in independent creative games using the "Healthy Child Multifit" technology;

Implementation of the "Healthy Child Multifit" technology in physical education classes at preschool educational organizations;

Increasing overall physical activity in children.

Research methods: The study employed methods such as analysis of scientific and methodological literature, pedagogical observation, pedagogical control, pedagogical tests, and pedagogical experiment.

Results of the study and its discussion: Description of the "Healthy Child" multifit children's equipment. It is a multifunctional

Lesson plan for using technology in games

Topic: "Exercises for Developing Coordination and Balance"

Objective: To develop children's gross, fine, and sensory motor skills, teach them to walk and run, perform general development exercises, and encourage children to play independent creative games using the "Healthy Child" technology.

Required equipment: "Healthy Child" children's mini-trainer

Expected results:
Perform gross motor actions;
Improve fine motor movements;
Diversify motor activities using "Healthy Child";
Strengthen balance;
Improve concentration.

1. Introduction (3 minutes)	The teacher: asks children to stand in a circle; short "body awakening" exercises: arm rotations (10 repetitions each), neck rotations, knee bending and straightening, alternating leg lifts. Exercise 1: "Walking the Color Ladder" Task: the child slowly ascends the equipment using colored brackets or handles. Skill: balance, hand-foot coordination. Teacher's supervision: ensure the child is holding correctly and their feet are not slipping. Exercise 2: "Reach the Ring" (using hanging rings) Task: The child holds the rings, moving from one hand to the other, and hangs while moving 3-4 steps. Option: Younger children may simply hang from the rings. Skills developed: Arm strength, shoulders, pulling up.
2. Main part (15 minutes)	Exercise 3: "Safe slide descent" Task: The child climbs onto the upper platform and slides down the slide. Skills developed: Overcoming fear, body control. Note: The teacher waits at the bottom. Exercise 4: "Back crawling" (under the equipment) Task: The child crawls through the lower part of the wooden structure. Skills developed: Back muscles, body flexibility, spatial awareness. Exercise 5: "Balance path" (using the slide board) Task: Lay the slide flat and use it as a "balance beam" - children walk along it without stepping off. Skills developed: Balance, leg stability.
3. Final part (3 -5 minutes)	Game: "Who flies like a bird?" Children run freely and lightly around the room, the teacher gives commands such as "Birds fly - birds land!" Breathing exercises: Take deep breaths, raise arms, exhale slowly Repeat 3 times. Advice for educators: Strictly enforce queuing to prevent children from colliding; ensure only one child is on the equipment at a time; use barefoot or non-slip footwear; begin with gentle, slow exercises for timid or shy children.

device that engages children in motor activities, and the play equipment is primarily designed for children aged 3-7 years. It stands approximately 1-1.2 meters tall and features a lightweight, stable structure consisting of two-sided smooth columns (4 base pieces), attached staircases (one short and one long), a board with a downward-facing sliding flat surface that can rotate front to back, and suspended (hanging) parts.

Design features of the equipment: simple, open structure, designed for children's independent movement. It includes colored elements, such as red, yellow, blue, and green ladders and woven nets, which are intended to attract children.

Auxiliary components of the equipment: hanging toys (for example, green and red rings) made of soft plastic, which are tied to the wood with string. This equipment supports children's physical, cognitive, and social development. Below is the methodology for using the equipment:

Motor development: climbing stairs (for fun and balance), sliding (for speed and coordination), grasping suspended rings (for arm muscles).

Cognitive exercises: learning colors (red and blue parts), discovering shapes (rings and sticks), and movement (how to climb up and down).

Social game: Playing in a group, waiting for one's turn, and developing mutual assistance.

Conclusion

In preschool educational organizations, it is advisable to use various innovative technologies and modern equipment in the development of motor activity of 5-6-year-old children through health-improving exercises. Research on preschool children confirms that physical inactivity, that is, the child's behavior and physical inactivity while sitting with gadgets for a long time (such as diabetes, heart disease, and depression), can lead to the development of certain diseases. At the same time, the World Health Organization recommends that preschool children engage in general physical activity for 180 minutes daily, including 60 minutes of moderate and intense physical activity. The more active games preschool children (from 3 to 5 years old) participate in, the better. They must be active for at least 3 hours a day, as well as include 1 hour of active play, such as running, ball games or racing, kicking, shooting and jumping, jumping by creating interesting obstacles, etc. This should be done not all at once, but throughout the day. Teaching children to follow a daily routine, explaining their unique healthy lifestyle, and simultaneously developing physical and volitional qualities - all of these positively influence the formation of a child's personality. It should also be taken into account that today, in addition to the "Waldorf System," "Mary Montessori Methodology," "Zaitsev's Cube" of preschool education, such technologies as our multifit children's equipment "Healthy Child," developed within the framework of the study, are relevant and are an effective technology for preventing preschoolers from immersing themselves in the virtual world in the age of computer technologies.

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