

PAPER

THE CURRENT STATE IN PRACTICE AND RELEVANT RECOMMENDATIONS FOR DEVELOPING PHYSICAL ABILITIES OF PRIMARY 4TH-GRADE STUDENTS IN EXTRACURRICULAR ACTIVITIES

Asqarov Ahliddin Alisher o'gli^{1,*}

¹University of Business and Science Senior teacher of the department pre- primary and physical education, Namangan, Uzbekistan

*ahliddinasqarov@gmail.com

Abstract

This article highlights the issues of developing the physical abilities of 4th-grade students through extracurricular activities. The aim of the research is to determine the effectiveness of extracurricular activities in developing physical abilities and to provide recommendations for optimizing this process, based on an analysis of scientific literature on physical education, practical observations, and the results of experimental research. Relevant recommendations for practice are given based on the research.

Key words: Physical abilities, extracurricular activities, 4th-grade students, physical education, speed, strength, endurance, agility, flexibility, physiological maturation, motor skills, adaptability skills, systematization, medicine, facility, hygiene.

Introduction

Since gaining independence, Uzbekistan has followed its unique path of economic and socio-cultural development. Profound changes are rapidly penetrating all areas in this journey. Whether it's medicine, agriculture, industry, or the education system, the need for fundamental reforms has arisen in all sectors. It would not be wrong to say that independence has become a crucial factor for reforms, especially in the education sector. Education not only helps to unlock the inner potential and abilities of the growing generation, but it also serves as the main source for implementing the national program of personnel training. These abilities and talents, as they grow and develop, are sure to contribute to the progress of our country. [1]

The effectiveness of physical education classes is often determined by the feasibility of the plans made by the teacher for organizing and conducting educational activities, the methods and techniques chosen for organizing student activities, the available equipment and sports facilities at the workplace, their technical condition, effective utilization of existing sports facilities, climate conditions, especially considering temperature,

the physical development and preparedness level of students, and taking into account their age and individual characteristics. [1]

Literature Review

The issue of developing students' thinking, organizing and activating the learning process creatively has been extensively discussed in the research of A. G'ulomov, M. Haqberdiyev, T. Ziyodova, S. Yaminova, M. Saidov, B. Adizov, and Ya. Rakhmonov. In Q. Yo'ldoshev's research, methods for organizing literature classes based on pedagogical cooperation have been developed. M. Maxmutov, V. Okon, and R. Ibragimov have explored ways to create problem situations in the educational process and how to enhance students' learning activities based on these situations. The process of independent work and its impact on students' learning activities and thinking has been studied by O. Roziqov, R. Mallayev, A. G'ulomov, T. Niyozmetova, N. Sattorova, S. Matchonov, L. Mirdjalalova, and Y. Rakhmonov. The issue of organizing the educational process through games can be seen in the research of R. Tolipova, J. Tolipova, A. Bobomurodova, and F.

Qodirova. A. Choriyev has philosophically analyzed independent thinking activity as a fundamental component of individual independence. Physical education, based on social-historical experience, is a process aimed at the comprehensive development of the younger generation, shaping its consciousness, behavior, and worldview. [5]

Research Methodology

In organizing the lesson and its material-technical provision, the following are considered: creating and adhering to medical and hygiene conditions in the training area; material and technical support, the adequacy of equipment and supplies; and ensuring the effective resolution of the tasks through the correct selection of methods for organizing students' activities during the lesson. The medical-hygienic conditions of conducting a lesson include the health-improving effects that arise when engaging in physical exercises, the overall set of activities, and the medical-hygienic status.

Ensuring that the place where the activities take place complies with strictly defined medical-hygienic standards, such as maintaining an optimal air temperature of 14°–16°C in the sports hall, spraying water on the grounds during breaks, ventilating the sports halls, and others, plays an essential role in achieving the health-improving goals of the lesson. The typical air circulation (ventilation) in the human lungs is about 4 to 6 liters per minute, while in exercises performed at high intensity (running, sports games), the air intake can reach 10 liters or more. Therefore, the clean air in the training area and its availability is crucial. Thus, as much as possible, lessons should be conducted outdoors. [1]

Especially, the equipment in the hall, items, mats (carpets), and floor cleanliness require constant attention and care. After each lesson, the floor of the hall should be wiped with a damp cloth, and the equipment and mats should be cleaned. After the exercises, the area used for training must also be cleaned, as an unclean hall can greatly harm the health of those practicing. Primarily, the respiratory system and the soiling of sports clothes will be negatively affected.

Material-technical provision of the lesson refers to the adequate provision of educational and training equipment, tools, and the venue, ensuring the optimal density of the lesson and guaranteeing the resolution of the complex tasks. [5]

At present, nearly all schools, at the initiative of physical education teachers, are equipping sports halls and fields with non-standard equipment and apparatus, allowing several students to practice simultaneously. The use of such equipment and tools not only significantly increases the density of the lesson but also positively impacts the effectiveness of the exercises. [3]

Analysis and Results

Whether the activities are part of a physical education class in school, a sports session, or a health-improvement workout, regardless of the type of activity, before discussing its structure and principles, it is necessary to identify and understand the pedagogical categories outlined in the regulations related to physical culture classes. As a result of the influence of the pedagogical ideas of the renowned French Enlightenment thinker J.J. Rousseau (1712–1778) and the famous Swiss democratic educator I.G. Pestalozzi (1746–1827), new types of schools ("philanthropists" schools), known as "schools of lovers of humanity," were opened in Germany, where significant attention was given to physical education. In these philanthropist schools, German gymnastics gradually spread widely. Its founders, Friedrich Ludwig Jahn and his followers, began to regard

gymnastics as an important additional activity to the general education subjects in schools. [5] Later, gymnastics activities became part of physical culture classes. The history of its formation as a subject began with activities involving gymnastics, followed by the emergence of a separate class for the subject. The original system of gymnastics was developed by Swedish dramatist and public figure Per Henrik Ling. However, gymnastics in its initial form did not yet have a clear structure as a subject.

After some time, Per Henrik Ling's son, Hjalmar Ling, together with educators Terngren, Balk, Norlander, and others, developed lesson plans adhering to the principles of "no breaks," "gradual pace," and "bilateralism." Based on these principles, a lesson structure was created primarily aimed at solving hygienic tasks. Many variations of such schemes were developed and, to this day, the four main components of the lesson have formed a generalized lesson concept, which includes: physical exercises listed in the lesson plan, changes occurring in the student's body (physiological, biological, biomechanical, psychological, and others), and the activities of both the teacher and students during the lesson, which together reflect the content of the physical culture lesson. These components are interconnected and represent the characteristic features of a physical culture lesson. [3]

Physical exercises are special movements selected to enhance an individual's level of physical development. Regular and consistent physical exercises form the foundation of physical education. Physical exercises used in physical education (derived from human labor, life, military activities — such as running, jumping, throwing, weightlifting, swimming, and others) have led to the development of gymnastics, athletics, weightlifting, movement games, sports tourism, and more. Scientifically selected physical exercises improve the function of all movement organs and enhance work capacity. It is essential to properly classify the types of physical exercises to achieve the desired outcomes.

Physical exercises, as the main means of physical education, were historically divided into groups such as gymnastics, games, sports, and tourism, and have been used as tools in the educational process. Physical exercise refers to activities that are consciously performed in accordance with the laws of physical education. These activities, which include gymnastics, games, sports, and tourism exercises, have been systematically organized, their methods compiled, and expanded over time. The emergence of physical exercise can be traced back to the period of the primitive communal system, as indicated in various textbooks (e.g., B.A. Ashmarin and others, 1990).

The objective reason for the emergence of physical exercises was early humans hunting for food, while the subjective reason was the development of consciousness. Primitive humans, not yet familiar with weapons, would chase their prey until it was exhausted. This process made them realize that their bodies required physical conditioning. Those who were physically unprepared became the prey. Over time, primitive people began to hunt in groups. Early tools, such as stone spears and sharpened stones, were used in hunting, marking the beginning of social consciousness.

The elders of the tribe, who could no longer participate in the hunt, began to teach the youth how to throw stones more accurately, which laid the foundation for the process of education. Later, activities like throwing, running to catch or escape, and jumping became common exercises. This period can be considered the origin and development of physical exercises and the elements of physical education.

Today, these exercises are used as the primary means of physical education in modern athletics, gymnastics, sports games, wrestling, tourism, and other sports. The increase in the variety of physical exercises has been influenced by human labor activities. It is known that labor demands a certain level of physical readiness,

such as strength, endurance, speed, and agility, which requires the development of these physical qualities. [1] In educational practice, movements used in human labor activities are most often practiced. The development of physical exercises has been influenced by religious rituals, games during festivals, dances, and voluntary actions in military and industrial activities. The nature of physical exercises has been explained through the scientific worldviews of I.M. Sechenov and I.P. Pavlov. According to Sechenov, voluntary movements are controlled by the mind and are goal-directed, while Pavlov scientifically proved the physiological mechanisms of movements, showing that they occur with the involvement of the brain's cortex, the first and second signaling systems, and the active participation of conditioned and unconditioned reflexes. [6]

The physical qualities manifested in a specific movement influence the proficiency in performing that physical exercise. For example, a swimmer's strength differs from that of a gymnast or a weightlifter. Achieving rational coherence between the form and content of a physical exercise is one of the main issues in the theory and practice of physical education. This issue is related to the mastery of movements, skills, and physical qualities. The technique of a physical exercise can be studied from a pedagogical or biomechanical perspective. From a pedagogical viewpoint, the technique of a physical exercise refers to the chosen method of performing a movement in the most effective way to achieve the desired result. The effectiveness is expressed by the optimal influence on the student's body. However, the most effective technique is referred to as the technically correct performance. For example, there are different methods of swimming (crawl, backstroke, and others), but some swimmers may not use any of the classic techniques. The effectiveness of the execution method depends on the individual characteristics of the student, their physical conditioning, and the specific task (e.g., for climbing a rope to a moderate height quickly, the "one-hand" method may be used, while for a stiff rope, a single method, such as grabbing with legs, may be employed). [3]

The technique of physical exercises is continuously evolving: habitual techniques are improved, sometimes methods are abandoned, and new ones are developed. This process is influenced by several factors. The increasing demands on the level of sports training. The continuous search for improved methods of performing movements, the results of relevant assessments, and the increase in their significance. The emergence of new sports equipment. The technique of physical exercise is the result of testing and scientific analysis of the movement methods used by leading athletes (for a specific period). Such modern techniques reflect the most rational foundation for all performers and are therefore called standard techniques. Standard techniques do not exclude deviations in the individual structure in certain methods of execution. Individualization of technique is implemented in two directions: the uniform standard method of individualization, in which changes are introduced in alignment with physical fitness and the standardized characteristics of the body for certain groups of individuals; and a special individualization method that takes into account a person's personal qualities. This higher level of individualization is also reflected in sports and technical skills (in practice, it is described as the "personal method"). The main focus of individualization should be directed towards teaching children movements. Standard technique only reflects the structural foundation of the movement and is built through the analysis of the movements of adults. The problem of individualizing the technique, in accordance with the physical preparedness and body structure characteristics of children, arises. For example, children of primary school age, due to the peculiarities of their calf-foot structure, may struggle with pressing the front part of the foot during running. The term "technique" comes from Greek, meaning "the art of doing". Physical exercise technique is constantly evolving and improving. Improved movement

technique is the key to achieving high results and is attained through the athlete's relentless effort. An athlete's increased physical fitness or the body structure, as well as a variety of indicators of physical development, can cause changes in the technique of physical exercises, their components, or details. The significance of movements influencing the movement activity is not uniform. Therefore, the movement technique is divided into parts: the base of the technique (its foundation), its main components, and the details of the technique.

The base of technique refers to the core part of the movement activity system required to complete the task through the movement. The methods used require the parts of the body to function harmoniously, without disrupting the sequence of movements, while also ensuring the necessary physical qualities are demonstrated. If the method is effective, it can be practically applied and will retain its practical viability for a long time. The core of the technique refers to the primary movement that is connected, first of all, to the outcome of the movement. For example, during a jump from a stand, the hands are used to swing.

The main component of the technique is the most important and decisive part of the primary mechanism in a specific movement. For example, in high jumpers, the main component of the technique is the jump itself, the quick upward leg swing, and its swift uniting. For throwing – the final powerful push, and in gymnastics – the timely and fast flexion of the hip joints (later stopping).

In sports movements, the execution of the main component takes place in a relatively short period and requires a large expenditure of muscle power. The detail of the technique refers to the additional movements that form part of the action, but do not harm the core or components of the movement mechanism, or to the smallest parts within the movement mechanism. These can be performed or not. For example, in long jump, someone may give speed to the body with a sharp acceleration, while someone else may start accelerating slowly. Correctly using individual characteristics demonstrates individual technique.

Individual technique is the most advanced technique for a given athlete. The characteristics of movements form a complex unity of human actions. The unity of a movement act manifests itself in the interconnection and interaction of the movements involved; the change in one detail of a movement results in changes in other details, both spatially and temporally. In physical education theory and practice, the structure of movements is discussed. [3] The structure of movement is the lawful interconnection of all its components as a single whole. All human movements occur in space and at a specific time, so we can talk about the kinematic structure of movements, which includes the spatial, temporal, and spatiotemporal characteristics. The kinematic structure of a movement is defined by its dynamic structure, meaning the interaction of the external and internal forces that cause this movement. Another important aspect of the structure of a complex movement is its rhythmic aspect, which reflects the relationship between time and force in combination. The kinematic and dynamic structures of movement are interconnected, and a change in one leads to a lawful change in the other. [2]

Conclusion

From a pedagogical point of view, the importance of each of these characteristics varies when performing any specific physical exercise. At different stages of training, some of them play a primary role, while others temporarily hold secondary significance. However, the joint and balanced manifestation of all these characteristics in the movements ensures the correct technical execution of physical exercises. The position of the body and the trajectory (path) of its parts relate to the spatial characteristics of the technique of physical exercises. During the

performance of many physical exercises, the body and its parts not only change their relative positions but also maintain a stationary position due to the static tension of the muscles. The effectiveness of many physical exercises often depends not only on the initial position but also on the condition of the entire body or specific parts of the body during the movement process, being in a more advantageous position. For example, the horizontal position of a swimmer, the crouch of a skier, and the crouch of a cyclist reduce external resistance, thus allowing the body to move forward faster. In a long jump, the more horizontal position of the body increases air resistance during the descent but simultaneously reduces air resistance when the body moves forward, thereby increasing the jump distance. Changing the body position during the movement process can alter the direction of dynamic support reactions, thus providing the body with the acceleration needed for that particular direction. Examples of this include the different body positions in short and long-distance running, in the take-off phase of a standing or running long jump. In some types of physical exercises, there are specific requirements for the general position of the body and the position of its individual parts. These requirements stem not only from the biomechanical suitability of the physical exercises but also from the aesthetic execution of the movements.

For example, in figure skating, diving, and gymnastics, not only the coordination complexity of the movements is taken into account, but also the precision of body positioning, the boldness, freedom, elegance of the movements, and other similar outward appearances. In any movement, it is important to distinguish the trajectory of the moving part of the body. [2]

Phases				
Movement system:	Running	–	take-off	–
			landing	–
Movement phases:	1	2	3	4
Movement components:	Preparation, Main, Final.			

Phases showing the process of changes in the body depending on the duration and intensity of physical exercises:

DSWC- FR - Dynamics of sports work capacity, fatigue, and recovery.

DFA - Dynamics of functional activity of certain systems of the organism.

DC-BS - Dynamics of the consumption and recovery of bioenergetic substances.

SE- Supercompensation efficiency.

The importance of the preparation phase is to create the most favorable conditions for performing the movement in the main phase. For example, in running and jumping, the preparation phase involves running. In standing jumps, the preparatory actions involve swinging the arms and bending the legs before take-off, and the main phase consists of the push-off, which is the main movement. With the help of this phase, the main task of the movement is solved. For instance, the push-off, standing jump, and flight. In the main phase, the movements are directly focused on solving the primary tasks of the movement. From a biodynamic perspective, the most important thing in this phase is the correct use of the applied forces at the right place, in the correct direction, and at the necessary moment. For example, in swimming with the crawl stroke, prematurely active arm movements cause the body to rise out of the water and create waves. In the final phase, the movement is completed, and figuratively speaking, this phase allows for exiting the working state. In jumping, this is landing, and in running, it will be a bit of running after reaching the peak. [2]

The main phase is carried out with the help of movements that form the foundation of the technique, while the remaining two

phases are executed with movements that form the details of the technique. Pedagogical Categories of Physical Exercises

The classification of physical exercises is the division into groups based on their most important characteristics. Using these categories, the teacher can define the characteristics of the exercises, which in turn makes it easier to select exercises that meet the requirements of the pedagogical task. As physical education develops, new information continuously enriches the field, and categorization does not remain constant.

References

1. A.A.Asqarov. Jismoniy tarbiya va sport. Darslik. Namangan 2024. 68-114-betlar.
2. Alisher o'g'li A. A. et al. BOLALAR JISMONIY TARBIYASIDA QO'LLANILADIGAN METODLARNING NAZARIY ASOSLARI //Miasto Przyszłości. – 2024. – T. 44. – C. 584-586.
3. F.A.Asqarov. Bolalar jismoniy tarbiyasi. O'quv qo'llanma. Namangan 2022. 89- 97-betlar.
4. G'ulomov, G'. Maktab o'quvchilarining jismoniy tayyorgarligini oshirish yo'llari. Toshkent 2010. 44-46-betlar
5. Б. А. Ашмарина, Л.П. Матвеев -Теория и методика физического воспитания: Учебник /. - М., 1990. – 24 с.
6. Павлов, И. П. Двадцатилетний опыт объективного изучения высшей нервной деятельности (поведения) животных. Условные рефлексы. Сборник статей, докладов, лекций и речей / И. П. Павлов. – 7-е изд. – Москва : Медгиз, 1951. – 507 с.