

## DIFFERENTIATED APPROACH TO PHYSICAL EDUCATION OF STUDENTS WITH DIFFERENT LEVELS OF PHYSICAL FITNESS

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### Summary

In the context of the intensification of the educational process and the growing information load on students, the issue of preserving and strengthening their health, increasing their level of physical fitness and forming a sustainable motivation to engage in physical education is of particular importance. Implementation of a differentiated approach to physical education of students with different levels of physical fitness is an urgent task, the solution of which will help to increase the effectiveness of physical education in higher education institutions and improve the health of student youth.

The article deals with theoretical aspects of a differentiated approach to physical education of students with different levels of physical fitness. The current state of the problem of physical education of student youth is analyzed and the necessity of introducing a differentiated approach as an effective means of individualizing the educational process is substantiated.

The essence and principles of a differentiated approach are revealed, the main criteria for differentiating students by their level of physical fitness are determined. Particular attention is paid to the analysis of the peculiarities of physical education of student youth in modern conditions, the specifics of load dosage for different groups of students and the peculiarities of their motivation to engage in physical education.

It has been established that the effectiveness of a differentiated approach is ensured by a comprehensive consideration of morphological and functional characteristics, level of physical fitness and motivational characteristics of students. The necessity of differentiating not only the quantitative parameters of the load, but also the qualitative characteristics of physical exercises is substantiated.

The theoretical significance of the study is to systematize and generalize the scientific provisions on the implementation of a differentiated approach to physical education of students. The practical significance is determined by the possibility of using theoretical provisions for the development of methodological recommendations for the implementation of a differentiated approach to the practice of physical education in higher education institutions.

**Key words:** differentiated approach, physical education, students, physical fitness, physical activity, motivation, individualization.

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### 1. Introduction

In the context of the intensification of the educational process and the growing information load on students, the issue of preserving and strengthening their health, increasing their level of physical fitness and forming a sustainable motivation to engage in physical education is of particular importance. The trend of deteriorating health and decreasing physical fitness among students is associated with a sedentary lifestyle, poor nutrition, excessive use of gadgets,

and a general decrease in motivation for physical activity. The traditional unified approach to the organization of physical education classes in higher education institutions often does not take into account the individual characteristics of students, their initial level of physical fitness and functional capabilities of the body.

A differentiated approach to students' physical education is a scientifically based system of organizing the educational process that takes into account individual differences in students' physical fitness and ensures optimal dosage of physical activity. This allows us to create favorable conditions for the development of physical qualities of each student, increase the efficiency of classes and reduce the risk of overload or underload.

Of particular relevance is the problem of developing and implementing scientifically based methods of differentiating physical activity that would take into account not only the level of physical fitness of students, but also their individual characteristics, health status, sports interests and motivation. The use of such methods will increase the effectiveness of the physical education process, promote the formation of a sustainable interest in physical education and sports, and ensure that each student achieves the optimal level of physical fitness.

The relevance of the topic is also reinforced by the need to modernize the physical education system in accordance with modern educational standards and the requirements of society. A differentiated approach is considered to be one of the key tools for improving the quality of physical education and forming a healthy lifestyle for students.

The purpose of the article is to substantiate the effectiveness of a differentiated approach to physical education of students with different levels of physical fitness to optimize the educational process and improve their physical fitness.

## **2. Features of physical education of student youth in modern conditions**

The peculiarities of physical education of student youth in modern conditions are characterized by a set of specific factors and challenges that affect the organization and efficiency of the educational process.

The modern system of higher education is characterized by the intensification of the educational process, which leads to a significant intellectual and psycho-emotional load on students. With the increase in the amount of educational information and the duration of independent work, there is a tendency to reduce students' physical activity. Studies show that about 70% of students lead a sedentary lifestyle, spending most of the day sitting at a computer or in class.

An important feature of modern physical education is the need to adapt curricula to different levels of health and physical fitness of students. Statistics show an increase in the number of students who have health problems and belong to a special medical group. This requires individualization of physical activity and development of special methods of teaching.

A significant factor is the change in the motivational priorities of modern youth. Traditional forms of organizing physical education classes often do not meet the interests of students, which leads to a decrease in their activity and interest. Modern students show more interest in new types of physical activity, such as fitness, crossfit, yoga, which should be taken into account when planning classes (*Barsukova, Antipova, 2021*).

Technologization of the educational process opens up new opportunities for the modernization of physical education. The use of modern fitness trackers, mobile applications and other technological tools allows monitoring the physical activity and health status of students, which helps to optimize the educational process and increase its effectiveness (*Beliak, Hrybovska, Muzyka, Ivanochko, Chekhovska, 2018*).

A special role is played by the need to develop students' health competence. In modern conditions, it is important not only to develop physical qualities, but also to form students' understanding of the value of a healthy lifestyle, the skills of independent exercise and the ability to control their own physical condition.

A significant challenge is the organization of a distance format of physical education classes, which has become especially relevant in a pandemic and requires the development of new methodological approaches, the provision of appropriate electronic resources and the creation of a system for monitoring students' independent work.

Therefore, the peculiarities of physical education of students in modern conditions are characterized by the complex influence of various factors, which requires the modernization of traditional approaches and the introduction of innovative methods of organizing the educational process. Taking these features into account is a prerequisite for the effective implementation of a differentiated approach to physical education of students.

### 3. The essence and principles of a differentiated approach

The essence and principles of a differentiated approach to physical education of students is a comprehensive system of organizing the educational process aimed at ensuring the individualization of physical activity in accordance with the capabilities and needs of each student.

As noted by Krutsevych T. (*Krutsevych, 2018*), a differentiated approach in physical education is a pedagogical strategy that involves taking into account the individual characteristics of students in the process of group learning. According to O. Tymoshenko (*Tymoshenko, 2015*), its essence lies in the fact that with a common goal and curriculum for all students, different ways of achieving it are used, depending on the individual capabilities of each student or group of students.

Chernenko S. (*Chernenko, 2022*) emphasizes that the basis of a differentiated approach is the principle of individualization of the load, which implies the correspondence of physical activity to the functional capabilities of the body of each student. According to Kozeruk Y. (*Kozeruk, 2015*), this is achieved by varying the intensity, volume and nature of exercises, as well as the pace of their implementation.

Gryban G. (*Hryban, 2018*) proves the importance of the principle of systematicity and consistency, which ensures a gradual increase in loads and complication of tasks in accordance with the level of adaptation of the student's body to physical activity.

Semenova N. (*Semenova, 2016*) emphasizes the importance of the principle of accessibility and feasibility, which requires that physical activity corresponds to the level of students' fitness, is sufficiently difficult, but at the same time is really achievable.

According to the results of research by Bondarchuk N. (*Bondarchuk, 2012*), in the practical implementation of a differentiated approach, it is important to correctly diagnose and divide students into groups according to such criteria as the level of physical fitness, health, motor abilities, sports interests and motivation to exercise.

Researchers (*Prysiashniuk, Oleniev, Krasnov, 2018*) emphasize the need for variability of teaching tools and methods, noting that specific sets of exercises should be developed for each group of students, optimal teaching and control methods should be determined, and appropriate standards and evaluation criteria should be established.

Thus, the essence of a differentiated approach is to create optimal conditions for the physical development of each student by taking into account their individual characteristics and capabilities. The implementation of the basic principles of a differentiated approach allows

to increase the effectiveness of physical education and ensure the achievement of educational goals by all students, regardless of their initial level of fitness.

#### **4. Peculiarities of motivation of students of different groups for physical education**

The peculiarities of motivation of students of different groups for physical education are characterized by a complex structure of motives and needs that determine their attitude to physical education and the level of activity in the classroom.

According to O. Marchenko (*Marchenko, 2018*), the motivation for physical education among students with different levels of physical fitness is significantly different. Students with a high level of fitness, as a rule, have a stable internal motivation focused on achieving sports results and self-improvement.

According to the research of Vorona V. (*Vorona, 2016*), young people with an average level of physical fitness demonstrate mainly external motivation related to obtaining a credit, maintaining physical fitness and appearance. This group of young people has an unstable interest in exercise that requires constant reinforcement. At the same time, students with a low level of physical fitness are often characterized by a negative attitude towards physical education, which is associated with lack of confidence in their abilities and fear of failure. For this group, it is especially important to create a situation of success and gradually form a positive experience of physical activity.

According to Romanenko V. (*Romanenko, 2015*) an important factor in the formation of motivation is the professional orientation of training. Students of different specialties show different priorities in choosing forms and types of physical activity, which should be taken into account when organizing classes. Therefore, it is necessary to implement a differentiated approach to the formation of motivation in different groups of students.

Thus, the motivational sphere of students is characterized by heterogeneity and depends on many factors, among which the level of physical fitness, gender characteristics and professional orientation of study are crucial. Students with a high level of physical fitness demonstrate a stable intrinsic motivation focused on achievement and self-improvement, while students with an average and low level of fitness need additional external incentives and special attention from teachers.

Effective motivation is only possible if a differentiated approach is applied that takes into account the individual characteristics and needs of different groups of students. An important aspect is to create a favorable psychological climate in the classroom, provide a situation of success for less prepared students, and support the progress of each student regardless of their initial level of preparedness.

#### **5. Features of workload dosing for different groups of students**

In the context of implementing a differentiated approach to physical education, it is necessary to define clear criteria for differentiation. Among the complex of individual physical parameters, the priority is given to the level of physical condition, which integrates a system of indicators characterizing the morphological and functional features of the body, the degree of development of physical qualities and adaptive capabilities necessary for optimal functioning of the body.

The structure of physical condition is a multicomponent system that includes anthropometric, motor and physiological components. Its integral characteristics are: the level

of physical development, which reflects the morphological and functional properties of the organism; indicators of physical performance, which demonstrate the potential of functional systems; parameters of physical fitness, which characterize the level of development of motor skills; health status as an indicator of the functional fullness of the organism; as well as the functional capabilities of the main life support systems (*Bondarchuk, 2012*).

The formation of differentiated groups is based on the analysis of the level of development of individual physical qualities or their lagging behind, while the methodology for assessing students' physical fitness may vary depending on the chosen testing system. A fundamentally important aspect of the implementation of a differentiated approach is the comprehensive consideration of not only the quantitative parameters of physical activity (volume, intensity), but also the qualitative characteristics of motor tasks, in particular their coordination complexity and structural features of individual elements.

In the context of practical realization of differentiated use of physical exercises it is expedient to develop specialized complexes adapted to different levels of physical fitness of students (low, medium, high). Differentiation of such complexes is based primarily on the variation of complexity of biomechanical structure of motor actions. The key parameters of modification are: compositional structure of the complex (number of exercises), spatial and temporal characteristics of performance (starting positions, trajectories of movements), load dosage (number of repetitions), as well as its volumetric and intensity characteristics (*Bondarchuk, Chernov, 2011*).

The methodological features of such differentiation can be illustrated by the example of the specifics of building individual groups of exercises, where the emphasis is on different components of motor activity and their modification according to the level of students' fitness.

Based on the analysis of the peculiarities of load dosage for different groups of students, it can be stated that rational dosage of physical activity is a key component of a differentiated approach to physical education. The optimal ratio of load components (volume, intensity, complexity of exercises) should be determined taking into account the individual characteristics of students, their level of physical fitness and functional capabilities of the body.

The variability of load parameters for different groups of students should ensure a gradual increase in the training effect and create optimal conditions for the development of physical qualities. At the same time, it is important to comply with the principle of accessibility, which implies that the complexity of physical exercises corresponds to the capabilities of students, and the principle of systematicity, which ensures a consistent increase in loads in accordance with the adaptive capabilities of the body.

Thus, differentiated load dosage is an effective tool for individualizing the process of physical education, which allows to ensure optimal development of physical qualities and increase the functional capabilities of the body of students with different levels of physical fitness.

## 6. Conclusions

The differentiated approach is an effective pedagogical strategy that ensures individualization of the physical education process by taking into account the individual characteristics of students. The fundamental principles of this approach are: individualization of the load, systematicity and consistency, accessibility and feasibility, consciousness and activity.

The theoretical analysis of the peculiarities of physical education of student youth in modern conditions has shown the existence of a set of specific factors that affect the effectiveness of the educational process. Among them are: intensification of the educational process, decrease in students' physical activity, increase in the number of students with health problems, change in motivational priorities and the need to introduce innovative technologies.

A key aspect of differentiation is an objective assessment of the level of physical condition of students, which integrates indicators of the morphological and functional state of the body, physical performance, fitness and health. Based on these criteria, homogeneous groups of students are formed, which allows optimizing physical activity and ensuring that it meets individual capabilities.

It is necessary to differentiate not only the quantitative parameters of the load (volume, intensity), but also the qualitative characteristics of physical exercises (complexity, coordination structure). This is realized through the development of specialized exercise complexes adapted to different levels of physical fitness of students.

An important component of a differentiated approach is to take into account the peculiarities of motivation of different groups of students to engage in physical education. It has been found that students with different levels of physical fitness are characterized by a specific structure of motives, which requires the use of appropriate methods to stimulate their activity.

Thus, the theoretical study confirms that a differentiated approach is an effective means of optimizing the process of physical education of students, which allows to ensure individualization of the educational process and create optimal conditions for the physical development of each student.

A promising direction for further research is to experimentally test the effectiveness of the proposed theoretical provisions and to develop specific methodological recommendations for their practical implementation in higher education institutions.

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