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Eureka Journal of Education & Learning Technologies (EJELT)

ISSN 2760-4918 (Online) Volume 2, Issue 2, February 2026

https://eurekaoa.com/index.php/2

EFFECTIVENESS OF METHODS USED IN DEVELOPING THE GENERAL TRAINING OF STUDENTS IN THE PHYSICAL CULTURE DEPARTMENT

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Abstract

This article analyzes the effectiveness of modern pedagogical and methodological approaches used to develop the general physical preparedness of students majoring in Physical Education. The study examined the content of training sessions, load dynamics, individualized approaches, functional readiness indicators, and pedagogical monitoring tools. The findings indicate that methodologies developed on the basis of an integrated approach significantly improve students' strength, endurance, agility, and speed. The article also provides practical methodological recommendations.

Keywords. physical education, general physical preparedness, pedagogical methods, training methodology, functional readiness, load dynamics, student.

Introduction

In the modern education system, the issue of developing students' physical fitness is one of the priority tasks facing higher educational institutions. In particular, students studying in the field of physical culture are trained as specialists who promote a healthy lifestyle, convey physical development and movement culture

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to others. Therefore, improving their general physical fitness using scientifically based methods and tools is of urgent scientific and practical importance. In recent ears, modern methods aimed at functional training, a system of interval loads, strength-speed exercises, rehabilitation and preventive complexes have been widely introduced into the physical education process. However, the compatibility of existing methods with the individual characteristics of students, the level of load, and sports and educational preparation does not always ensure high efficiency. Therefore, it is necessary to select the most optimal training methods for students in the field of physical culture and to scientifically analyze their pedagogical effectiveness.

Research Objective

To study ways to increase students' physical activity and develop effective methods.

Research Methodology

This study was conducted on the topic "The effectiveness of methods used in the development of general physical fitness of students in the field of physical culture", the following methods were used in the research process: Theoretical analysis, scientific literature, articles on physical activity, its impact on efficiency, its importance in students' lives and modern approaches, a sociological survey was conducted to determine the attitude of students to physical activity, their level of daily physical activity. In addition, using observation, statistical analysis, and comparison methods, ways to increase students' physical activity were analyzed, and scientifically based proposals and recommendations were developed.

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Literature Review

M.L. Listkova. The author's article "Software and methodological support for independent physical education classes for university students" is devoted to the development of software and methodological support for organizing independent physical education classes for students in higher educational institutions. Listkova presents plans, exercise complexes, progressive directions and control and assessment systems for independent training with practical examples. The main advantage of the article is specific recommendations for implementing the methodology in practice, and the disadvantage is the lack of test results of guaranteed control and monitoring methods. This source will be an important basis for modeling software and methodological approaches to organizing independent training for the current study [1].

S.N. Klyuchnikova, O.V. Demidenko, N.V. Gushina. The article “Methodological foundations of managing physical education and sports activities of students with the aim of preparing for professional activity” provides a methodological analysis of the management of physical education and sports activities. The authors paid attention to the issues of management mechanisms, planning, quality control and effective distribution of inventory infrastructure in the organization of physical education. Among them, the importance of interfaculty cooperation, the staff of trainers and teachers within the institute and sports programming integrated into the educational process is emphasized[2].

I.A. Kovacheva. In the article “Using the method of circuit training in classes with students for more effective improvement of physical qualities”, the author discusses the effectiveness of the circuit training method in developing certain physical qualities (endurance, strength, agility) that are constantly used. Kovacheva, comparing different intervals and loads through experimental studies, provides data on the short-term improvement of general physical condition of circuit training [3].

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G.P. Griban et al. The article "State of physical fitness of students of Ukrainian higher educational institutions" conducted a mass study of sports fitness for students and statistically analyzed the state of physical training by region and educational direction. The scientific goal is to assess the effectiveness of physical education and physical culture programs in higher educational institutions from the results of the analysis of the data [4].

M. Usmanov. "Ways to increase the physical activity of students" (Journal of Universal Science Research, 3(5), 117–119) is a recent study that describes the effectiveness of interfaculty approaches, the influence of motivation systems, and the experience of organizing sports events [5].

Discussion of the results The physical fitness of students is of great importance in ensuring their success in physical culture classes. For students, these methods are aimed at increasing their physical performance.

To determine the effectiveness of the applied method in the experimental group, it is necessary to compare it with the control group. In this case, the dynamics of students' physical fitness, that is, the changes observed in their physical indicators during practical training, are analyzed. This analysis serves as the basis for assessing the effectiveness of the developed methodology.

Changes in physical fitness indicators, such as speed, endurance, strength, and resistance to injuries, also indicate the effectiveness of the methodology. Also, the mental state of students is taken into account to increase the effectiveness of the practical training process.

This is an analysis based on the results of a study conducted to assess physical fitness between the control and experimental groups.

Based on the results of the study, the dynamics of students' physical qualities in the control (CG) and experimental (TG) groups were analyzed. Such physical qualities in practical training lessons ensure the effectiveness of students' movements during physical education and sports lessons. Each test result is

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analyzed in depth, and their practical significance in the context of a physical education lesson is consistently substantiated.

Dynamics of physical fitness of students in the control and experimental groups (n=66)

Tests Group TB V,% TO V,%

№	Tests	Group	TB	V,%	TO	V,%
1	100 m. Run (s)	NG	14,80±0,98	6,08	14,51±0,97	6,68
		TG	14,84±0,87	5,86	14,01±0,94	6,70
		t	0,34		2,64	
		p	>0,05		<0,05	
2	3×10 m run (s)	NG	8,15±0,84	10,30	8,02±0,64	7,98
		TG	8,13±0,92	11,31	7,14±0,81	11,34
		t	0,37		2,15	
		p	>0,05		<0,05	
3	11 minutes of running (m)	NG	2308,08±11,3 5	9,18	2332,32±21,2	9,10
		TG	2310,10±14,2 4	8,70	2454,54±21,1	8,61
		t	0,31		2,97	
		p	>0,05		<0,05	
4	Standing jump (cm)	NG	181,5±18,1	9,97	188,9±17,3	9,15
		TG	180,1±17,1	9,50	200,5±18,5	9,22
		t	0,34		2,64	
		p	>0,05		<0,05	
5	Pull-ups on the horizontal bar (times)	NG	5,8±0,45	7,75	8,0±0,81	10,12
		TG	6,0±0,39	6,5	11,0±0,75	6,81
		t	1,97		3,68	
		p	>0,05		<0,01	

Note: NG - control group, TG - experimental group, TB - at the beginning of the experiment, TO - at the end of the experiment. 100-meter run assesses the student's overall agility. The ability to move quickly is crucial. For example, a student in a practical lesson on running 100 meters should develop the ability to quickly switch to the movements of a partner student. The results of the TG show that the developed methodology helps to improve agility.

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At baseline: no significant difference was observed between NG and TG ($p>0.05$). After the experimental period: TG results (14.01±0.94 s) were significantly improved compared to NG (14.51±0.97 s) ($p<0.05$).

At baseline: no difference was observed between NG (8.15±0.84 s) and TG (8.13±0.92 s) ($p>0.05$). After the experimental period: TG results (7.14±0.81 s) significantly improved compared to NG (8.02±0.64 s) ($p<0.05$). Agility refers to the student's ability to move quickly, change positions, and quickly transition from one movement to another. Mockingbird running indicators are important for improving the quality of tactical movements in physical education lessons. The indicators in TG confirm that the developed methodology is effective in developing students' movement agility and increases their competitiveness in control lessons.

The results of the experimental group confirm the effectiveness of the developed methodology. Improving the speed and agility qualities of students allows you to significantly increase their overall physical activity. Thus, the widespread use of the methodology makes a significant contribution to the development of students.

An 11-minute running test was conducted to assess the level of endurance of students. Endurance is very important in physical education and sports lessons, as it helps the student maintain high motor activity throughout the lesson. Below is an analysis of the results and their significance in physical education and sports activities. Initial indicators: NG: 23.08±21.2 m (V=9.18%). TG: 23.10±20.1 m (V=8.70%). Test statistics: $t=0.31$; $p>0.05$. (No significant difference was found between the groups).

After the experimental period: NG: 23.32±21.2 m (V=9.10%) TG: 24.54±21.1 m (V=8.61%). Test statistics: $t=2.97$; $p<0.05$. (TG results significantly improved compared to NG).

Ensures the effectiveness of actions during classes aimed at increasing endurance. Physical education classes require endurance. A resilient student can achieve an advantage even in the last minutes.

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In TG, the 11-minute running distance increased significantly ($p<0.05$). This indicates the effectiveness of the methodology in developing students' endurance. This effect confirms the use of special training aimed at improving serious physical loads and functional training.

Interval running exercises, dynamic and static endurance training can affect endurance.

TG students demonstrate strong endurance and are able to maintain high activity compared to competing students. This allows them to maintain a higher level of speed of movement.

After the experimental period, the results of TG show that they have achieved high efficiency in endurance. This confirms that the developed methodology plays an important role in developing endurance.

The standing long jump test assesses the student's explosive strength and the level of development of the lower body muscles. In physical education, this is of great importance when performing physical movements and speed exercises. Initial indicators: NG: 181.5±18.1 cm (V=9.97%). TG: 180.1±17.1 cm (V=9.50%). Test statistics: $t=0.34$; $p>0.05$. (There is no significant difference between the groups). After the experimental period: NG: 188.9±17.3 cm (V=9.15%). TG: 200.5±18.5 cm (H=9.22%). Test statistic: $t=2.64$; $p<0.05$. (TG results significantly improved compared to NG).

The results of the standing long jump indicate the explosiveness of the student's lower body muscles. It is crucial for the rapid execution of movements in the lesson. For example, jumps and quick steps are used when the student changes or moves away from the opponent.

The significant improvement in the results in the TG ($p<0.05$; $p<0.05$) indicates that the developed training methodology has high efficiency in developing explosive power. These results are much higher than the changes in the NG. The improvement in the long jump indicators helps to increase the student's speed and

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perform with force. The results of the TG indicate the possibility of bringing the student's physical fitness to a higher level.

The results of the standing long jump confirm the importance of the developed methodology in the development of students in terms of strength and explosiveness.

The improvement in the TG results indicates that students can further increase the efficiency of their movements during the lesson.

The pull-up test on the horizontal bar assesses the student's upper body strength, especially the muscles of the shoulders, arms and back. This indicator plays an important role in maintaining high activity during the physical education lesson. At the beginning of the experiment, NG: 5.8±0.45 times (V=7.75%). TG: 6.0±0.39 times (V=6.50%). Test statistics: $t=1.97$; $p>0.05$ (No significant difference was found between the groups).

After the experiment, NG: 8.0±0.81 times (V=10.12%). TG: 11.0±0.75 times (V=6.81%). Test statistics: $t=3.68$; $p<0.01$ (TG results are significantly improved compared to NG).

Pull-up indicators on the horizontal bar are important for assessing the endurance of the student's body movements. In order to implement physical fitness strategies in the lesson, the upper body muscles must be strong. The results in the experimental group show that the developed methodology significantly improves upper body strength and endurance.

The results of the experimental group (11.0±0.75 times) were significantly higher than the results of the control group (8.0±0.81 times). This confirms the effectiveness of the methodology in developing upper body strength in students.

The high results in the experimental group can be explained by the special exercises used in this methodology (complex loads on the horizontal bar or dynamic strength exercises). They are likely aimed at simultaneously developing explosiveness and endurance in muscles.

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The results of pull-ups on the horizontal bar indicate that the developed methodology is effective in developing upper body muscle strength. These changes can have a significant positive impact on students' teaching practice.

In conclusion, the proposed methodological approach for the experimental group served to develop students' physical fitness in a targeted, step-by-step manner. The use of this methodology in long-term training serves as an important tool in increasing the atmosphere of healthy competition among students' peers, improving their coordination of movements, and developing their overall physical fitness.

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