# IMPROVING TECHNOLOGIES OF INCREASING THE EFFICIENCY OF THE PROCESS OF PHYSICAL EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS 

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#### Abstract

The following article deals with present processes aimed at improving the technology to increase the effectiveness of physical education in higher education institutions, in which ideas about the organization and conduct of physical culture and sports activities in the field along with indicators such as test standards, anthropometric indicators, and heart rate will be the relevance of the topic, knowledge of goals and objectives is based on the point of view and skillfully advanced.


Keywords: Physical education and sport, organism, physical exercises, healthy lifestyle, qualification, skills, physical culture, professional development, popularization, dexterity, stability, strength, physical preparation.

## Actuality of the topic

Problems related to physical education and ecology in the world have become one of the most pressing and global issues that are waiting for solution today. The results of many fundamental, pedagogical research works are devoted to the solution of these problems, and have been studied and put into practice by the leading scientists of the field in the world's leading higher education institutions. Special trainings are aimed at solving problems related to physical education that are organized with the widespread use of videos, TV shows, social networks on the Internet, websites, newspapers and magazines.

In the education system of the world's leading higher education institutions and research centers, special attention is paid to the use of interactive methods and innovative education to increase the effectiveness of the process of physical education and the solution of problems in this area. In the process of education in our country, a number of scientific and practical works is being carried out to develop and regulate the positive attitude of young people to physical culture and sports. Based on the findings of this process, experts believe that one of the key factors in improving the effectiveness of the process of physical education is the process of physical education in higher education institutions (HEIs). In this regard, Uzbekistan attaches great importance to the development of physical culture and sports. However, despite the many suggestions made by domestic scientists and foreign experts, teachers to further improve the process of physical education, in universities that do not specialize in physical education; no attention is paid to the specifics of the effectiveness of physical education.

It should be noted that the targeted use of some sports allows achieving high levels of physical fitness and professional qualities of the individual.

Today, football, basketball, wrestling and similar sports are becoming more popular among students of technical universities. The use of these sports helps to increase the physical fitness
of university students. Through these sports, first of all, the physical development of students improves and their interest in sports increases.

A comprehensive approach is important in the development of physical fitness issues, with rotational training as the primary tool to help students develop their physical qualities in a smooth manner. Experience and research show that global physical activity aimed at wellness has mixed and aerobic character potential.

In order to assess the physical qualities of TDTU 1st level students, we studied the results of control exercises over the last three years on three indicators: speed, strength and overall endurance.

Based on the analysis of the results of the test exercises, it should be noted that the general physical fitness ( 100 meters, 3000 meters) of students admitted to TDTU (2017 to 2019) is very low. This indicates that the health and physical fitness of school students is not at the level required by the general indicators.

The dynamics of the results of physical training of students for three years (2017-2019) shows an increase in the effectiveness of physical education and sports, because in this period it was 100 m . The result of running on the horizontal bar decreased from 13.98 to 13.96 s , the result of running on 3000 m increased from 818 to $812 \mathrm{~s}(\mathrm{P}>0.05)$, the result of pulling on the horizontal bar increased by 0.7 times ( 10.6 times).

The number of students in the main groups of TDTU in 2017 compared to 2018 decreased by $16.2 \%$, and in special medical groups - by $12.7 \%$ or almost 2 times.

Distribution by different groups (in percent) plays a special role in the development of students' interest in physical education and sports. Therefore, in experiments with physical education activities with students of the 1st stage of TSTU, it is necessary to involve them in this process. 1) A lot of students ( $78.7 \%$ ) have a positive attitude to physical education and sport, appreciate the social significance of physical culture in society and the level of personal development. They believe that strengthening human health is the main object. In fact, only $22 \%$ of TSTU students have been actively involved in physical education and sports.
2) The content of the experimental program and the methodological features of teaching in groups of students are objective factors such as improving the quality of physical education exercises, conducting them in the form of competitions and games, as well as choosing sports that focus on sports, wrestling and national movement games that have a major impact on the level of interest.

Physical education has always been one of the means of preparing a person for work and adapting him to the social environment. The process of preparing students for future careers (physical component) is seen as a complex organized system of self-management.
One of the functions of such a system is management, which includes:

- Analysis and evaluation of the physical condition of students;
- Physical education program;
- Methods of pedagogical control and self-control when the planned indicators of physical fitness differ from the concrete (real) indicators identified in the control process.
In accordance with the theory of periodicity of classes and the peculiarities of teaching students at the institute (2017), we divided the 2 academic years into four stages (4th semester).

In turn, each stage is divided into 3 sub-stages: 1- preparation (adaptation of the basic systems of the body to physical forces); 2- physical condition (optimal location of physical and functional capabilities as a result of the priority development of strength properties); 3 Maintain physical conditions (achieved level). The main methodological features of the practical training are:

1) Practical training in swimming, athletics, and sports games. They are organized on the basis of the structure of a wide range of physical training facilities (general training, special training, competition).
2) The peculiarity of the exercises in the main section is that they allow enriching the experience of students and leading to the development of different muscle groups and the extensive use of opportunities for general development exercises in the preparatory part of methods that serve to increase the intensity of training. The scope of this exercise depends on the role of the educator conducting the training and is $25-50 \%$ of the training time.
3) The competition-game method was widely used in each training session. The training used sports games along with elements of wrestling and national movement games (donkey riding, cockfighting, tug of war and others). This not only increases the effectiveness of the training, but also improves the functional preparation of students, developing in them the qualities of speed, agility, endurance, flexibility and strength.
4) At the end of the main part of the lesson (20 minutes) students are given exercises designed to improve strength qualities. The content of our study focused on improving the level of physical qualities of agility, agility, endurance, flexibility and strength (1st period, strength, 2nd - flexibility, 3rd - high speed, 4th - tolerance, and 5th - agility).
5) Students keep a daily control book (journal) in order to self-monitor, monitor their physical condition and determine the rate of increase in the level of physical ability, and the relevant indicators are constantly recorded.
Monitoring the stability of the exercises included in the rotational training sets is based on the data recorded in the UCC 10 s after the end of the exercise. At the same time, it focused on determining the duration of rest intervals between specific exercise methods and loads.

## Results of pedagogical experience

This pedagogical experiment was a way to study the effectiveness of the physical education process. The results of a post-pedagogical experiment (EG) and control group (CG) survey showed the following;

1) In EG, $80 \%$ of students said that the exercise in the classroom was optimal, $20 \%$ said they weighed. $78.6 \%$ of CG students reported that physical activity was adequate, $14.3 \%$ failed to assess it, and $7.1 \%$ reported weakness of exercise.
2) $60 \%$ of students in the experimental group and $50 \%$ in the control group were assessed as in good health;
3) Most importantly, in the training sessions, EG students learned many new methods (73.3\%), positive changes were observed during the sessions ( $46.7 \%$ ), as well as good leadership of the sessions ( $66.7 \%$ ). $42.8 \%$ of CG students did not evaluate the training, only $35.7 \%$ positively assessed the physical education classes.
4) The analysis of the research data showed that EG students had a better understanding of selfcontrol and performance of various independent tasks than CG students. It has been $100 \%$ proven that EG students are able to self-monitor independently during physical education and sports activities. CG students responded $50 \%$ positively. $67.7 \%$ of EGs and $42.8 \%$ of CGs said that the training was suitable for students, and $60 \%$ of EGs and $50 \%$ of CGs said that the relevant indicators are related to a rational diet. $40 \%$ of EGs and $28.6 \%$ of CGs said they needed to exercise.
5) Physical culture, under the influence of training, accounted for $14.3 \%$ of CG students in $40 \%$ of EG students. Physical development, physical fitness, and performance indicators were measured to determine the effectiveness of the developed program.

During the year, the physical condition of students in the experimental and control groups increased by $0.5 \%$ and $0.7 \%$, respectively, which is statistically unreliable ( $\mathrm{P}>0.05$ )? Body weight of TG students increased by $5.7 \%$, CG students - by $5.6 \%$ ( $\mathrm{P}<0.05$ ). Thus, the main indicators of physical development - buy and weight - showed that the developmental process of students has not yet stabilized. This is consistent with the research data on this topic for students of this age.

In EG, chest ( $\mathrm{P}<0.05$ ) increased by $8.8 \%$, while in CG , an unreliable ( $\mathrm{P}>0.05$ ) decrease of $1.3 \%$ ( 7.6 to 7.5 cm ) was observed. Thus, we can conclude experimentally that in CG students, motor activity is lacking, meaning that the difference between respiration and expiration decreases with their body weight gain.

At the end of stage 1 in the experimental group, the survival capacity (UTS) of the lung was 4253 ml and in the control group was 4243 ml . was In both groups, high growth was observed ( $\mathrm{P}<0.05$ ) and growth was reliable ( $\mathrm{P}<0.05$ ).

During the experiment, it was possible to see the reliability of the manual dynamometer and machine weighing indicators ( $\mathrm{P}<0.05$ ), only a significant increase in left arm strength was observed in TG and NG. In TG, back muscle strength increased by 20.2 kg (20\%) (from 100.3 to 120.5 kg ). In CG, the following condition was observed: the strength of the muscles of the left arm was 0.05 kg ( 5 to 39.1 kg ) and that of the right arm was 44.1 kg ( 45.6 to 46.4 kg ) ( P $<0.05$ ), which while $12 \%$ and $1.5 \%$, respectively and the strength of the back flexor muscles increased by 4.5 kg . Hence, the preparation in EG indicates that there is not enough time for power quality to develop.

It can be concluded that the results achieved by students in two years of physical education classes are relatively lower than the initial level of students in the program of physical culture. This indicates that the effectiveness depends on the quality of the lessons and the attitude of the students towards physical education and sports.

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