

The Use of Means of Competitive Gaming Techniques in the Main Part of Physical Education at the University and their Impact on Student Attendance

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Abstract: Low attendance and low activity of students in physical education classes is a well-known problem in universities today. In the interests of sustainable development of youth education in the field of physical culture, it is necessary to achieve stable attendance of classes in this discipline. This allows to make adjustments to traditional teaching methods. The article analyzes the experience of using the means of competitive gaming techniques in the main part of physical education classes at the university. The means of competitive gaming techniques are proposed, such as game tasks, outdoor games of medium and high intensity, sports games according to basic and simplified rules, etc., used in the amount of 70-80% of the duration of the main part of the lesson. The criteria for evaluating the effectiveness of the use of these tools is the dynamics of students attending classes before and after the pedagogical experiment.

1 INTRODUCTION

Physical education is an integral part of the educational process at a higher educational institution. It is integrated into the system of humanities disciplines that take into account new requirements for young specialists (Sorokina, 2022).


The requirements of the labor market initiate the preparation of a graduate of a new formation, who must have mobility, competitiveness, effectively solve professional tasks, strive for self-improvement and self-development, possess high communication abilities and build a trajectory of his development (Fokin, 2021).


At the same time, a significant proportion of full-time students who have the opportunity to engage in physical education within the framework of the curriculum are dissatisfied with such classes. It is not uncommon for students to systematically skip physical education classes and do not see the benefits of such classes (Yusupov, 2020).


The introduction of new methods and programs, as well as the improvement of the bases for physical culture classes will lead to an increase in class attendance, and, consequently, an increase in the level of health of young people, their education in the field of physical culture (Davydova, 2022).

Gaming activity is a special type of mental activity and has the greatest impact on the development of intellectual processes. In particular, the so-called divergent thinking underlies creativity and gaming efficiency (Duricek, 1988; Yanev, 1990).

However, until now, the capabilities of this method are far from being used enough. The learning process of competitive gaming activity itself is particularly affected, which in most cases does not take into account its specifics and integrative essence. It is possible to eliminate this contradiction only with the help of a methodology and training technology adapted to the peculiarities of competitive gaming. The basis of this methodology is the regularities of the processes of reflection of the external world in our consciousness (Portnyh, 2010).

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The use of competitive and game methods in educational programs determines the formation of new motor actions, skills and abilities among students, improves discipline, increases interest in physical education; they have health, educational and training significance. Through games, the formation of the student's personality and his moral qualities continues. An important factor is the influence of games on the mental sphere of students. Games and exercises of a playful nature develop a sense of rhythm, attentiveness, the ability to make certain movements, which develops a certain psychological resistance to stress.

The competitive game methodology provides for solving the tasks of physical education classes in a

changing game model, making decisions by students in a particular game situation and achieving the goal.

The dominant characteristics of the competitive gaming methodology are: activity, competitiveness, creativity, accessibility, positive background of classes, independence, diversity in choice depending on goals and objectives, as well as conditions of the event, contributes to the development of "non-physical" qualities, such as logic, reaction, rapid response to a changing gaming environment.

The rationale for the use of competitive gaming techniques in the main part of physical education classes at the university is shown in Figure 1.

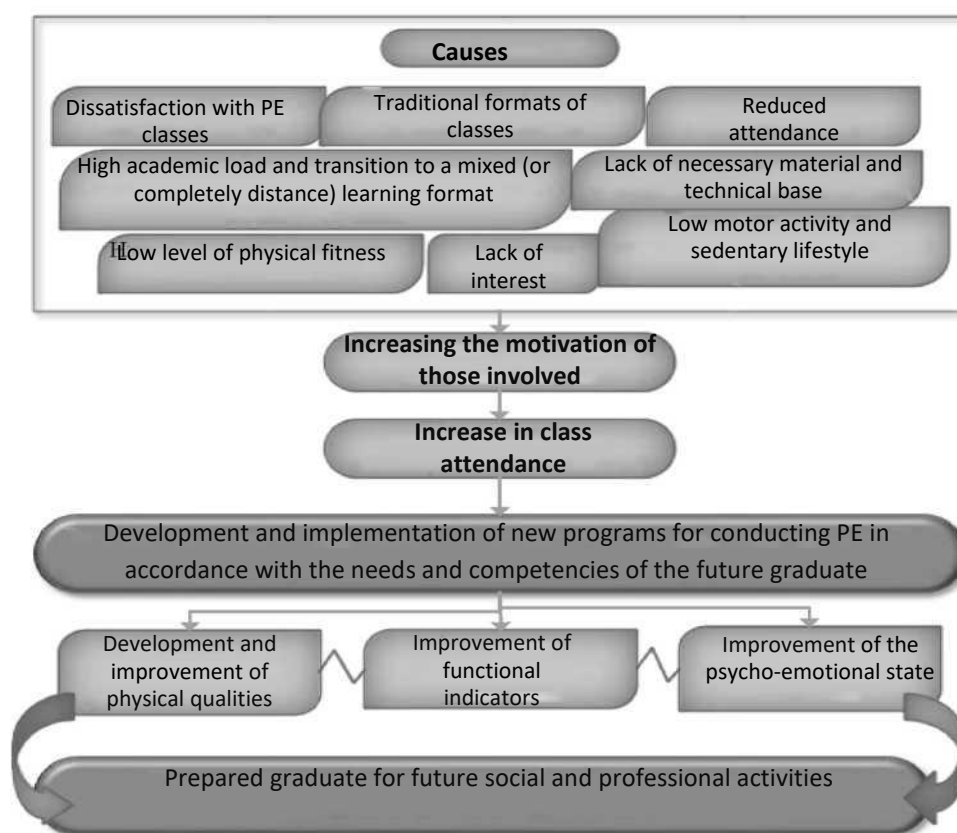


Figure 1: Justification of the use of competitive gaming techniques in the main part of physical education classes at a technical university.

Based on the theoretical generalization of scientific literature data, consideration of the dynamics of attendance of physical culture classes, the need for modernization of the educational process in physical culture at the university is revealed. Increasing the attendance of physical education

classes by students through the use of competitive game techniques is relevant.

Prior to the pedagogical experiment, a preliminary retrospective study was conducted on the attendance of students in physical education classes, 4 study

groups were considered at the 1st, 2nd and 3rd months of training in the amount of 60 people.

At the 1st month of training, attendance at physical education classes was 72%, at the 2nd – 56%, and at the 3rd – 58%. The floating dynamics of the general decrease in attendance of classes by 14% was revealed.

2 STUDY METHODS

For 3 months on the basis of SPbSUT named after prof. M.A. Bonch-Bruevich, a pedagogical experiment was conducted, in which 60 students of the main and preparatory medical groups were involved.

Classes for students of the main and preparatory medical groups are held together, if necessary, students of the preparatory group can be exempted from performing the exercise and involved as refereeing, also the load intensity can be limited.

To ensure self-control and load control by the teacher, before the pedagogical experiment, a training session was conducted with students using the method of heart rate measurement.

The students were divided into two equal groups, with whom a pedagogical experiment was conducted for 3 months. In the control group (n=30), classes had a traditional character.

In the experimental group (n=30), classes were conducted through the use of competitive game techniques in the main part of physical education classes

The experimental method assumed an increase in the use of the means of competitive gaming techniques up to 70-80% in the main part of the lesson.

In the main part of the lesson (55-70 minutes), medium and high intensity means are used (heart rate = 120 to 160 beats / min.) that meet the tasks of a particular lesson: development of physical qualities, improvement of motor skills, form building exercises of a corrective orientation (strengthening of the musculoskeletal system). In this part of the lesson, it is recommended to include 2-3 games or game tasks with a break for recovery, summing up the previous one and preparing for the upcoming game. Games with elements of gymnastics and athletics, martial arts, sports and outdoor games, coordination and strength-oriented game exercises with gradual complication (changing support points, adding sport gear), exercises to improve joint mobility, game forms and outdoor games were also used, leading to

sports for mastering, consolidating and improving game motor skills and abilities (Table 1).

Table 1: Use of means of competitive gaming techniques in the main part of the lesson.

The main part of the lesson		
Period	Means of competitive gaming techniques	Organizational & methodical instructions
1 month	Outdoor games: "Tag", "Seine", "Pionerball with a fitball", "Tag with a ball", "Hugs", "Dodgeball with a fitball", "Bardfight", "Mini-basketball", "By colors"; game tasks: "Rise", "Sat-up", "Resistance", "Noughts-and-crosses"; game exercises in pairs, "Ball", obstacle courses	Outdoor games and game tasks according to simplified rules.
2 month	Relay races with a task, using a cardio ladder, Outdoor games: "Hand ball", "Pionerball with a fitball", "Back", "Hit the ball"; "Mini-volleyball", "Noughts-and-crosses" "Football with a fitball", "By colors", "Mini-handball", "Basketball with a fitball"	Outdoor games and relay races with more complex technical actions.
3 month	Outdoor games: "Badminton through the net", "Bardfight"; Sports games: volleyball, mini-football, basketball	High-intensity gaming activity.

The selection of tools and methods used in physical education classes varied depending on the tasks set and taking into account the sections of the program (Rodichkin, 2020; Rodichkin, 2015; Stepchenkova, 2022).

3 STUDY RESULTS

After the experiment, an analysis of the attendance of students of the studied groups over the past 3 months was carried out. The percentage of attendance for the first month of classes in the experimental group is higher than in the control group by 7% and is 81%,

for the second by 17% and is 76, and for the third by 24% and is 78%. (Figure 2).

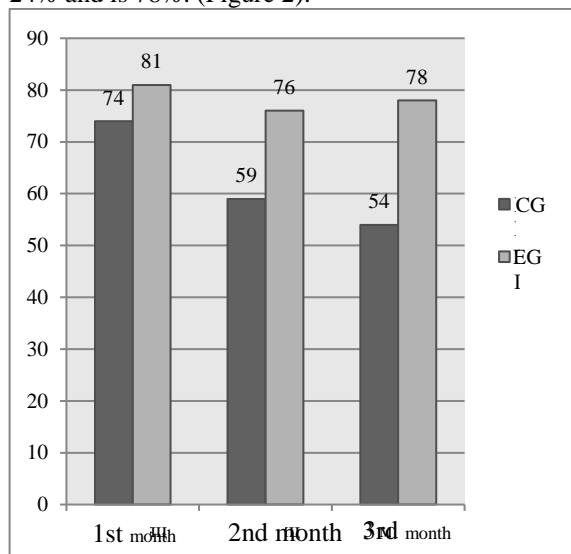


Figure 2: Attendance of physical education classes by students of the study groups at the 1st, 2nd and 3rd months of training during the pedagogical experiment and after (%).

4 RESULT DISCUSSION

The analysis of the attendance of physical education classes for students of the 1st, 2nd and 3rd months of training during the pedagogical experiment and after indicates an improvement in the attendance of physical education classes for students of the experimental group by 12% and a decrease in the percentage of attendance in the control group by 24%. Based on this, we can say that the stimulating factor for students is the new forms of classes, namely, the means of competitive gaming techniques.

Conclusion. The idea of the study was to develop means of competitive gaming techniques and its use in the amount of 70-80% in the main part of physical education classes at the university. The pedagogical experiment demonstrated the effectiveness of the use of the means of competitive gaming techniques in physical education classes at the university. There is a positive trend in the percentage of attendance of classes in the experimental group relative to the control group, due to the variety of tools, methods used and interest in them among students.

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