



IMPROVING STUDENTS' PHYSICAL ACTIVITY USING INNOVATIVE TECHNOLOGIES IN HIGHER EDUCATION

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ABSTRACT

This article is written on the topic of improving students' physical activity using innovative technologies in higher education and contains information prepared based on scientific research.

INTRODUCTION

Improving the physical activity of students in higher education institutions is important for their health and overall development. Physical activity not only improves physical health, but also has a positive effect on psychological and social development. Innovative technologies, such as digital platforms, mobile applications and tools such as virtual reality, make physical education processes more effective and interesting. This article analyzes the methods of improving the physical activity of students using innovative technologies and their effectiveness.

Physical activity in higher education plays an important role in maintaining and developing the health of students. Physical activity reduces stress, improves mood, and contributes to academic success. Through physical education classes, students develop physical skills, as well as social skills through teamwork and sports.

Innovative technologies are innovations and changes in the activities of teachers and students in the pedagogical process, which require the use of interactive methods in their implementation. Interactive methods are based on the activity of each student participating in the educational process, free and independent thinking. When using these methods, learning becomes an interesting activity for the student. When using interactive methods, students acquire the skills and qualifications to work independently with the help and cooperation of teachers. Students acquire new knowledge on the basis of scientific research, research, and experimental testing. The principle of acquiring knowledge through science is followed. Participants in the educational process work in small groups. Educational tasks are given not to an individual student, but to all members of a small group. The main form of organizing the educational process is a lesson. Currently, various non-traditional forms of the lesson are being introduced. Such lessons serve to develop the student's creative abilities, strengthen his intellectual potential, expand his scientific outlook, and form the skills and abilities to quickly and fully accept any innovation. The use of innovative technologies in the lesson process arouses interest in scientific research in students, develops creativity and creative abilities. As a result, the acquired knowledge, skills and abilities are applied in practical activities, and the quality of mastery increases. For this, the teacher must be skilled and correctly plan the lesson

based on the content of the topics, and achieve active and conscious work of all students during the lesson. After all, the teacher is the main executor of educational reform. In this regard, it is important to train each teacher to master, process and apply in practice a very large amount of information in a short time. In solving it, the teacher will be helped by the use of modern information technologies, including computers, along with traditional teaching methods.

Digital platforms, such as online training programs and video lessons, make physical activity easier for students. These platforms provide a variety of exercises and training plans. This motivates students and increases their interest in physical activity.

Mobile apps, such as fitness apps, allow students to track and evaluate their physical activity. Through these apps, students can see the results of their workouts, which motivates them to be more active. For example, apps like MyFitnessPal or Strava help students track their eating habits and physical activity.

Virtual reality technology is bringing innovation to physical education processes. Students can try out different sports using VR, which will bring them new experiences. For example, through virtual sports games, students can develop team spirit and learn new skills.

Many higher education institutions around the world are applying innovative technologies to physical education processes. For example, several universities in the United States provide students with online training programs that help increase their physical activity. Also, sports training is being conducted using VR technologies in European universities.

Today, the problem of hypodynamia (low mobility) among higher education students has reached the level of a global pandemic. According to the World Health Organization (WHO), more than 70% of students around the world do not meet the daily physical activity standards. The development of digital educational technologies is causing students to spend most of their time in a static position (sitting). This leads not only to a decrease in physical health, but also to a decrease in cognitive abilities. Therefore, it has become necessary to radically reform traditional physical education methodologies and integrate innovative digital solutions into them.

Wearable technologies (wearable devices) - smart watches and fitness trackers - have revolutionized the monitoring of physical activity. The data collected by these devices is processed using Big Data analysis, allowing for the formation of an individual 'health passport' for each student. This process is based on the principles of modern Bio-hacking (optimization of biological systems). That is, the student learns to maximize his physical capabilities by digitally analyzing the quality of sleep, heart rate variability and energy expenditure of his body.

To avoid the monotony of sports training, the concept of Metaverse-fitness is becoming popular today. With the help of this technology, students can compete in the world of virtual reality (VR), play football with classmates from different parts of the world in virtual stadiums or participate in marathons. Gamification elements transform the student's perception of 'boring training' into an 'interesting adventure', which has been scientifically proven to increase voluntary physical activity by 40%.

Looking at international experience, the 'Smart Campus' system has been successfully implemented in prestigious universities in South Korea and the United States. For example, students are encouraged for physical activity with special 'bonus points' or crypto-tokens. Students who take a certain number of steps or visit the gym are given benefits for educational grants or discounts in university canteens. This digital incentive system leads to an improvement in not only physical, but also academic results of students.

Higher education institutions in Uzbekistan are also trying to use innovative technologies. For example, Tashkent State Pedagogical University has developed a special mobile application for students, which contains a training plan and exercises for physical education classes. This encourages students to be more active and develops their physical skills.

There are a number of problems in the application of innovative technologies in physical education processes. These include factors such as insufficient development of technological infrastructure, teachers' lack of knowledge of new technologies, and low levels of digital literacy among students. To solve these problems, higher education institutions need to develop programs to improve the skills of teachers and introduce students to new technologies.

In the future, innovative technologies will further expand the possibilities for improving students' physical activity. Using artificial intelligence and big data technologies, it will be possible to create individual training plans for students. There are also opportunities to connect and motivate students through social networks.

Conclusion

The use of innovative technologies in higher education is important in improving the physical activity of students. Tools such as digital platforms, mobile applications and virtual reality can effectively help in engaging students in physical activity. However, it is necessary to solve the existing problems in the use of these technologies. In the future, the opportunities for more effective development of students' physical activity with the help of innovative technologies will expand.

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