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IMPROVEMENT OF THE SYSTEM FOR DEVELOPING EXTRA-CURRICULAR SPORTS ACTIVITIES OF STUDENTS OF TECHNICAL HIGHER EDUCATIONAL INSTITUTIONS BASED ON SMART TECHNOLOGIES.

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Annotatsiya

Mazkur maqolada texnika oliy ta'lim muassasalari talabalarining darsdan tashqari sport faoliyatini smart texnologiyalar asosida rivojlantirish tizimini takomillashtirish masalalari yoritilgan. Smart texnologiyalar — mobil ilovalar, fitnes-trekerlar, onlayn monitoring tizimlari va sun'iy intellekt asosidagi dasturlarning ta'lim jarayonida qoʻllanilishi talabalarning jismoniy faolligini oshirishga xizmat qilmoqda. Tadqiqotda 100 nafar talaba ishtirok etdi, ulardan 50 nafari smart texnologiyalar asosida mashgʻulot olib bordi. Natijalarda jismoniy faollik, mashgʻulotlarga qatnashish chastotasi va sportga boʻlgan motivatsiya darajasi sezilarli oshgani aniqlangan. Maqolada texnika OTMlarda "Smart Sport Platformasi"ni joriy etish zarurligi asoslab berilgan.

Kalit so'zlar

smart texnologiyalar, darsdan tashqari sport, texnika oliy ta'lim muassasalari, jismoniy faollik, raqamli monitoring, fitnes-ilovalar, motivatsiya.

Abstract

This article examines the improvement of the system for developing extracurricular sports activities of technical university students based on smart technologies. The use of mobile applications, fitness trackers, online monitoring systems, and AI-based programs helps to increase students' physical activity. The research involved 100 students, 50 of whom trained using smart technologies. The results showed a significant increase in physical activity, training attendance, and motivation towards sports. The article substantiates the need to implement a "Smart Sport Platform" system in technical higher education institutions.

Key words

smart technologies, extracurricular sports, technical universities, physical activity, digital monitoring, fitness applications, motivation.



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Introduction. Today, the field of physical education and sports is gaining importance in every aspect of society. Especially among students of higher educational institutions in the technical direction, the formation of a healthy lifestyle, increasing physical activity and developing sports culture is a requirement of the time.

In the age of digital technologies, the possibilities of smart technologies for effective management and stimulation of sports activities of young people are expanding. Through mobile applications, fitness trackers, artificial intelligence-based monitoring systems, online platforms, students can monitor their physical condition and track results in sports training in real time.

The Law of the Republic of Uzbekistan "On Physical Education and Sports" and the Presidential Decree No. PF-6099 (October 30, 2020) emphasize the need to widely promote a healthy lifestyle among young people and develop sports activities based on innovative approaches. In this regard, improving the system of organizing extracurricular sports activities in technical higher educational institutions based on smart technologies is an urgent issue. The purpose of this study is to analyze the system of developing extracurricular sports activities of students of technical higher educational institutions through smart technologies and develop proposals for its improvement.

Methods. The study subjects were 2nd-4th year students of technical higher education institutions in Tashkent and the regions. The methods of questionnaire, experiment, observation, comparison and statistical analysis were used during the study.

100 students participated in the study. 50 of them were selected as an experimental group that conducted sports training based on smart technologies, and the remaining 50 were selected as a control group that engaged in traditional methods.

The following tools were used as smart technologies:

- Mobile applications: Google Fit, Strava, MyFitnessPal;
- Smart watches (Samsung Watch, Mi Band);
- Online sports monitoring platform (weekly physical activity reports via the university's internal portal);
 - Training recommendations using artificial intelligence (AI Fit program).

The study was conducted for three months. Data such as daily activity, duration of training, heart rate, and distance traveled were collected from each student through smart applications.



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Results. According to the results of the experiment, the level of physical activity and motivation in students who conducted sports training based on smart technologies significantly increased. The following key indicators were recorded:

- The number of weekly training sessions increased by 28%;
- The average walking distance of students increased from 5.2 km to 7.8 km;
- A stabilization of heart rate (a sign of adaptation to sports loads) was observed;
- In the questionnaire, 84% of students stated that smart applications motivated them to do sports more.

In the control group, the changes were less pronounced: among them, the number of skipping classes was 23%, and activity increased by only 10%.

With the help of smart technologies, students had the opportunity to compare their results with their friends, which created an atmosphere of healthy competition. An online monitoring panel was also created for teachers, where student activity was evaluated in real time.

Discussion. The results of the study show that smart technologies are an important factor in increasing the effectiveness of extracurricular sports activities.

First of all, digital monitoring tools accurately record data on the individual load, recovery level and physical condition of the student. This allows teachers and coaches to create personalized training programs.

In foreign experiences, in particular, in universities in the USA, Japan and South Korea, "smart sport campus" systems have been widely implemented, with the help of which students keep their activities under constant control in a healthy competitive environment. This experience can also be adapted to local conditions in technical higher educational institutions of Uzbekistan.

The approach based on smart technologies has the following advantages:

- Students' independent control skills develop;
- Interest in sports and motivation to participate increase;
- Analysis of teachers' activities becomes easier;
- Accurate digital data on increasing physical activity is formed.

Conclusion. Based on the results of the study, the following conclusions were reached:

- 1. Smart technologies are an important tool for effectively organizing extracurricular sports activities of students of technical higher educational institutions.
- 2. With the help of digital monitoring systems, it is possible to monitor the physical condition of students, analyze results, and introduce a personalized approach.



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- 3. Students develop such qualities as a healthy lifestyle, regularity, self-control, and interest in sports.
- 4. It is necessary to create a **"Smart Sports Platform"** in higher educational institutions, train students and teachers in the use of digital sports equipment.
- 5. By developing this system, it is possible to increase the physical activity of young people, raise a healthy generation, and form a digital sports culture.

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