



THE ROLE AND PROSPECTS OF DIGITAL TECHNOLOGIES IN PHYSICAL EDUCATION AND SPORTS TRAINING

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Abstract

This article examines the role of digital technologies in physical education and sports training, focusing on their effectiveness and application based on international experiences. It explores how digital tools can help organize lessons in an interactive, personalized, and high-quality manner, while also comparing these practices with current approaches in Uzbekistan.

Keywords: Digital technologies, physical education, sports training, virtual reality, interactive methods, international experience, remote workouts.

Introduction

The rapid advancement of modern information and communication technologies is bringing about fundamental changes across all sectors, including education. In particular, the use of digital technologies in physical education and sports has enabled educators to increase efficiency, enhance student engagement, and deliver more interactive and engaging lessons.

Integrating advanced technologies into physical education not only supports the development of sports skills but also fosters digital literacy, self-monitoring, and analytical thinking. This integration aligns with global educational trends that prioritize holistic, technology-enhanced learning environments.

2. Material and methods Digital technologies in physical education are being utilized across various domains:

- **Mobile applications:** Track heart rate, calories burned, and exercise technique in real time.

- **Video analysis and online platforms:** Enable remote physical training and virtual competitions.
- **Gamification modules:** Introduce engaging, interactive ways to learn sports theory and practice.
- **International platforms and tools** analyzed include:
 - Finland: “SchoolGym” allows students to monitor their physical activity, while parents receive updates on their children’s progress.
 - USA: “GoNoodle” tracks children's daily movement statistics and uses a reward system to motivate activity.
 - South Korea: VR-based technologies allow safe and exciting physical exercise.
 - Japan: “Active Life” program encourages daily tracking of physical indicators with personalized recommendations.

In Uzbekistan, technologies such as interactive whiteboards, smartphone apps, and online platforms are increasingly being introduced in physical education classes.

3. Results Successful international practices demonstrate how digital technologies enhance physical education:

- Students become more engaged in lessons through interactive content.
- Teachers gain tools to analyze and individualize training based on student data.
- Technologies enable remote learning and the promotion of healthy lifestyles outside the classroom.
- Virtual competitions, student-created sports blogs, and movement tracking increase motivation and foster tech-savvy learners.

In Uzbekistan, progressive implementation of digital tools in select schools includes:

- Use of interactive displays and online sport platforms,
- Application of modern sport simulators and physical readiness assessment tools,
- Pilot projects in digital self-assessment and data-driven lesson planning.

4. Discussion

Digital technologies offer several advantages:

- **Personalized learning:** Enables tailored training based on student fitness levels and goals.

- **Increased accessibility:** Through remote platforms, students can participate in sports even outside school settings.
- **Digital pedagogy models:**
 - Blended Learning: Combines traditional and online instruction.
 - Flipped Classroom: Students study theory at home and practice during class, optimizing time and understanding.

These methods allow for deeper integration of sports theory and practice, support independent learning, and foster a culture of self-discipline and motivation. In the future, emerging technologies such as AI, IoT, and Big Data could revolutionize sports training, enabling real-time adaptation and intelligent feedback systems.

5. Conclusion

Effectively integrating digital technologies into physical education and sports instruction enhances the ability to cultivate a healthy, competitive, and intellectually engaged generation. This approach contributes to the quality of education through innovative pedagogy and equips students with the skills needed in the digital era. Future directions may include expanding the use of artificial intelligence and advanced data systems to usher in a new phase of physical education.

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References

1. Ziyonet. (2023). *Digital Educational Technologies and Their Role in the Teaching Process*. – Tashkent: Ministry of Digital Technologies, Uzbekistan.
2. Anderson, L. (2020). *Technology in Physical Education: Innovations and Trends*. – New York: Routledge.
3. OECD. (2021). *Digital Education Outlook*. – Paris: OECD Publishing.
4. Park, J.H. (2019). *Virtual Reality and Gamified PE in Korean Schools*. – Seoul: Korea Educational Development Institute.
5. Suomi, R. (2018). *Finnish Physical Activity Monitoring through SchoolGym*. – Helsinki: University of Turku.