EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 2, Issue 6, June 2026
brightmindpublishing.com
ISSN (E): 3061-6972

PEDAGOGICAL AND SOCIO-PSYCHOLOGICAL FOUNDATIONS OF IMPLEMENTING PHYGITAL SPORTS IN HIGHER EDUCATION INSTITUTIONS

Gimazutdinov Radik Galimovich
Acting Associate Professor of the Department of
Theory of Physical Culture Chirchik State Pedagogical University
radikgimazutdinov4@gmail.com
99-955-46-27

Abstract
This article scientifically analyzes the current challenges and prospects for the development of phygital sports in universities. It examines the organizational, pedagogical, technological, and motivational factors influencing its effective implementation in the educational environment. The study also reveals the essence of phygital sports as an innovative field that integrates traditional sports, virtual reality, modern technologies, and gamification.

Keywords: Student, higher education organizations, phygital sports, cybersport, sports, virtual reality, reality, innovations.

Introduction

Modern society is experiencing a rapid transformation of cultural and social norms under the influence of digital technologies. One of the most interesting trends emerging at the intersection of physical and digital reality is phygital sports, a concept that combines physical activity with digital initiatives. The relevance of studying phygital sports in educational institutions, especially within the higher education system, is determined by the increasing integration of advanced digital technologies into various spheres of modern life. In addition, the strong interest of the younger generation in the key aspects of esports, including computer and video games, which constitute one of the core components of phygital sports, also plays an important role. The introduction of phygital sports into educational curricula can significantly enrich the learning process by providing students with opportunities to develop skills in working with new technologies and innovative forms of interaction. This approach

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 2, Issue 6, June 2026
brightmindpublishing.com
ISSN (E): 3061-6972

meets the contemporary demand for training competitive specialists who are capable of functioning effectively in a rapidly changing digital environment.
The purpose of the study was to analyze the current state of phygital sports disciplines, identify their advantages and disadvantages, and examine their development prospects in the context of the growing popularity of electronic and virtual entertainment among university students.

Research objectives:
to analyze information from scientific literature and Internet resources related to the research problem;
to identify the prospects for the development of phygital sports in higher education institutions;
to investigate students' interest in phygital sports, their motivation, and their level of participation;
to develop scientific and practical recommendations for the implementation of phygital sports in higher education institutions.

Research methodology and organization. During the study, a wide range of scientific literature and information resources were examined to explore the integrative nature of phygital sports, which combines physical activity with digital technologies. A questionnaire survey was used as the primary research method. The survey involved first- and second-year students (n = 34) from the Faculty of Physical Culture at Chirchik State Pedagogical University. The collected data were used to assess students' awareness of phygital sports, their level of interest, motivation, and attitudes toward the development and implementation of this innovative sport format within higher education institutions.

Research results and discussion. Phygital sports represent a modern direction of sports activity that combines elements of physical activity and digital technologies. This type of sport is based on the use of gaming platforms, virtual reality (VR), and augmented reality (AR) technologies to create unique training and competition experiences in esports, virtual fitness, and other sports disciplines. The term "phygital" originates from the English words "physical" and "digital." It is a

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 2, Issue 6, June 2026
brightmindpublishing.com
ISSN (E): 3061-6972

distinctive form of hybrid competition in which participants compete both in a video game and in its real-world counterpart.

Phygital sports provide athletes and individuals interested in a healthy lifestyle with opportunities to engage in sports activities without leaving their homes. Through the application of virtual and augmented reality technologies, participants can take part in innovative training sessions and competitions that would not be possible in traditional real-life settings. This combination of physical and digital environments enhances the attractiveness of sports participation, increases motivation among young people, and contributes to the development of new forms of physical activity in the context of the digital transformation of society.

Phygital sports enable individuals to improve their physical condition, participate in engaging training sessions and competitions, and simultaneously develop their skills in the field of gaming technologies. This synthesis of physical activity and digital entertainment creates unique sporting opportunities for people of all ages and levels of physical preparedness.

The analysis of the literature revealed the multifaceted nature of phygital sports as a phenomenon situated at the intersection of traditional and innovative approaches to sports and physical activity. Furthermore, phygital sports have been identified as a catalyst for interdisciplinary integration, fostering the development of new forms of interaction between sports, technology, education, and digital communication.

The study also highlighted not only the significant potential for the further development of phygital sports but also a number of challenges that require deeper understanding and the adaptation of existing regulatory, organizational, and methodological frameworks. Addressing these issues is essential for the effective implementation and sustainable development of phygital sports within contemporary educational and sporting environments.

Phygital sports also provide opportunities for remote participation in sporting activities under conditions of public health restrictions and safety regulations. Participants are able to engage in training sessions and competitions from any location worldwide without being constrained by geographical barriers. This significantly expands access to sporting activities, promotes the growth of the global sports community, and creates more favorable conditions for maintaining an active and healthy lifestyle.

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 2, Issue 6, June 2026
brightmindpublishing.com
ISSN (E): 3061-6972

Furthermore, the integration of innovative sports approaches enables participants not only to enhance their physical performance and overall fitness but also to develop competencies in computer gaming, digital technologies, and virtual reality environments. The combination of physical activity with advanced technological tools contributes to the acquisition of new skills that are increasingly relevant in the digital age.

Consequently, phygital sports represent a promising direction in the evolution of contemporary sports, fostering both physical development and digital literacy. Their implementation offers unique opportunities for broadening participation in sports, encouraging lifelong engagement in physical activity, and adapting sporting practices to the demands of an increasingly digitalized society.

For the successful implementation of phygital sports, it is necessary to take into account the specific characteristics of each higher education institution. This requires analyzing students' needs and interests, developing individualized programs, and creating appropriate and supportive conditions for participation. In particular, informational support through social media platforms, websites, and other communication channels plays a significant role in promoting phygital sports activities.

In addition, it is essential to provide systematic training for teachers and coaches in phygital technologies and sports science, as well as to organize seminars and training workshops. Issues related to safety and data protection also require special attention. Only under these conditions can phygital sports become a safe and effective component of the educational process.

The introduction of phygital sports can increase students' interest in learning, as this approach integrates physical activity with digital gaming technologies and makes the educational process more engaging and attractive.

The development of phygital sports in higher education institutions also requires the creation of a modern material and technical base. Sports facilities should be equipped with VR trainers, sensor-based devices, and other technological tools. This provides students with higher-quality training opportunities.

In addition, it is necessary to establish a system of competitions and events in phygital sports. This increases students' motivation, strengthens team spirit, and enhances experience sharing among participants.

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 2, Issue 6, June 2026
brightmindpublishing.com
ISSN (E): 3061-6972

It is also important to attract sponsors and partners. Financial support enables the purchase of necessary equipment, the organization of events, and the training of specialists. Cooperation with IT companies and sports organizations facilitates the use of advanced technologies and professional experience.

In order to determine students' level of knowledge on the topic, an anonymous survey was conducted among students of the "Applied Mathematics and Informatics," "Informatics and Computer Engineering," and "Applied Informatics" programs.

The results showed that 96% of respondents were well informed about phygital sports and esports competitions. This can be explained by the fact that students of these fields form the core of the university's esports team.

However, the main distinguishing feature of phygital sports is the integration of computer gaming and physical activity. Therefore, in response to the question "Are you ready to participate in phygital sports?", 30% of respondents gave a negative answer. Among them, 54% indicated a lack of time as the main reason, while 36% reported a lack of interest. Only 9% of respondents pointed to the absence of necessary equipment.

The main factors reducing motivation were distributed as follows: the factor of standardization of competition regulations — 31%; financial factors — 24%; spectator-related factors — 22%; and methodological factors — 23%.

In implementing phygital sports within the higher education system, it is necessary to consider both its positive and negative aspects. The positive aspects include an increase in students' interest and activity, as well as the development of critical thinking and problem-solving skills.

The negative aspects are related to the need for retraining teachers, limited resources, and issues of data security.

Studying students' attitudes toward phygital sports is essential for developing effective implementation strategies. In particular, to reduce the reasons for rejection, it is necessary to conduct extensive promotional activities highlighting free training sessions, provision of equipment, and opportunities for the development of physical abilities.

The implementation of phygital sports in the higher education system requires a comprehensive approach. It is necessary to ensure student engagement, teacher training, adequate resource provision, and data security. Only under these conditions

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 2, Issue 6, June 2026
brightmindpublishing.com
ISSN (E): 3061-6972

can phygital sports become a fully integrated part of the educational process and contribute to the all-round development of students.

The popularization of phygital sports among students is also important. Interest in new forms of sport can be developed through information campaigns, presentations, and open training sessions. At the same time, the development of adapted programs for individuals with disabilities ensures the inclusiveness of phygital sports.

The literature review indicates that the integration of phygital sports into higher education institutions is still at an early stage of development. Its effective incorporation into the educational process requires the development of new strategies and approaches. The obtained results demonstrate that there is a certain level of interest among students in this field.

Future research and practical projects may contribute to improving the effectiveness of phygital sports implementation and enhancing the overall quality of education.

References

1. Resolution of the President of the Republic of Uzbekistan No. PQ–139 dated February 18, 2022. “On measures for the digitalization of sports and the development of modern sports technologies.” – Tashkent, 2022.
2. Po‘latov A.A. Innovatsion sport texnologiyalari va raqamli ta’lim. – Toshkent: Fan va texnologiya, 2023. – 256 b.
3. Xonkeldiyev Sh.K. Sportda axborot texnologiyalaridan foydalanish. – Toshkent: Yangi asr avlodi, 2022. – 240 b.
4. Umarov M.N. Oliy ta’lim tizimida zamonaviy pedagogik texnologiyalar. – Toshkent: Barkamol fayz media, 2021. – 288 b.
5. Hamidov B.B. Kibersport va raqamli sport industriyasi asoslari. – Toshkent: Lesson Press, 2024. – 198 b.
6. Rasulov A.N. Talaba yoshlar jismoniy faolligini oshirishning innovatsion usullari. – Toshkent: Navro‘z, 2023. – 224 b.
7. G‘ulomov S.T. Virtual reallik va ta’lim texnologiyalari integratsiyasi. – Toshkent: Universitet, 2022. – 210 b.
8. Isroilov Sh.X. Sport menejmenti va raqamli transformatsiya. – Toshkent: Sano-standart, 2024. – 232 b.
9. Qodirov U.U. Fidgetal-sport: nazariya, amaliyot va rivojlanish istiqbollari. – Toshkent: Fan, 2025. – 216 b.