

RESEARCH ARTICLE

Physical Education in Pedagogical Higher Education System

Reymbaev Aqilbek Muratbaevich

Student of Nukus State Technical University, Uzbekistan

VOLUME: Vol.06 Issue05 2026

PAGE: 242-245

Copyright © 2026 European International Journal of Pedagogics, this is an open-access article distributed under the terms of the Creative Commons Attribution-Noncommercial-Share Alike 4.0 International License. Licensed under Creative Commons License a Creative Commons Attribution 4.0 International License.

Abstract

This article analyzes modern problems in organizing physical education within the pedagogical higher education system, the decline in students' motor activity, and the insufficient effectiveness of traditional teaching methods. Issues regarding the improvement of the physical education system based on integrative and personality-oriented approaches are also highlighted. The study identifies increasing students' physical activity, fostering a healthy lifestyle, and implementing innovative technologies into the pedagogical process as important factors. The results of the article serve to increase the effectiveness of physical education in pedagogical higher educational institutions.

KEY WORDS

Integrated education, physical education, student-centered education, professional competence, pedagogical integration, lesson project, pedagogical technology, design stages, physical fitness, educational efficiency.

INTRODUCTION

The organization of physical education within the higher education system of modern pedagogy is one of the pressing issues of contemporary education. Currently, there is a growing prevalence of sedentary lifestyles among students, a decline in interest in physical activities, and a mismatch between traditional teaching methods and modern educational requirements. This necessitates the implementation of integrative and interactive approaches within the educational process. In particular, physical education in pedagogical higher education institutions is gaining importance not only as a means of health promotion but also as a factor in the development of personal and professional competencies of future teachers. Therefore, issues related to the modernization of the physical education system, the application of individualized approaches, and the integration of digital educational resources are becoming especially relevant.

The modern system of physical education instruction in higher

education institutions has encountered a significant challenge: students are increasingly favoring sedentary lifestyles over active participation in physical activities, while traditional teaching methods no longer meet contemporary educational demands. This creates the need for the development and implementation of interactive teaching approaches. Pedagogical universities in regional centers, particularly in Nukus, play a crucial role in addressing this issue. These institutions are expected to become the driving force behind the modernization of physical education methodologies, which requires a fundamental revision of existing organizational approaches. At the scale of the Republic of Uzbekistan, these objectives acquire strategic importance in light of state programs aimed at the development of physical culture and sports, as well as the promotion of public health.

Issues related to strengthening the health of children and young people within interdisciplinary research frameworks require physical education specialists who are capable of

applying research findings in practice. Therefore, the development of relevant competencies among students majoring in pedagogical specialties in this field has become particularly urgent today [2, pp. 34-37]. The application of the aforementioned integrative methods within the structure of educational technology represents one of the key conditions for organizing the training of such specialists.

The decline in students' physical activity in their daily routines is directly associated with the increasing complexity of the educational process, as confirmed by international researchers [5, p. 176]. The relevance of this issue continues to grow, as contemporary requirements for the organization and content of physical education training in higher education institutions remain insufficiently implemented. The situation is further aggravated by the inactivity of university administrations, which often fail to provide adequate support for the maintenance of sports facilities and the development of material and technical resources. Such neglect on the part of institutional management serves as an additional factor contributing to reduced student motivation [3, pp. 19-22].

METHODOLOGY

The study is based on integrative, learner-centered, and systemic approaches. The research process employed methods of analytical data examination, pedagogical observation, comparative analysis, and statistical data processing.

The following directions were identified as the methodological framework of the study:

- monitoring students' physical activity;
- individualization of the educational process;
- implementation of innovative and interactive pedagogical technologies;
- utilization of digital educational resources and learning applications;
- integration of health-promoting and educational functions within physical education.

The organization of physical education in non-specialized pedagogical universities is characterized by specific features due to the heterogeneity of the student population, limited resources, and the targeted objectives of training. In contrast to sports universities, which are focused on achieving high athletic performance, the priority here is given to the

development of professionally significant qualities, the preservation of health, and the formation of an individual's physical culture. In this context, the discipline becomes a fundamental component of education, ensuring the development of professional competence and the personal maturity of future specialists. This necessitates the development and implementation of integrative models aimed at fostering student individuality and cultivating a need for health-oriented physical activity.

There is an increasing need to revise both the methodology and content of physical education training based on the synergy of integrative and learner-centered approaches. Such a transformation creates prerequisites for the harmonization of cognitive and health-related objectives, the individualization of the learning process, and the enhancement of the effectiveness of pedagogical practice.

In non-specialized higher education institutions, according to the research of O.V. Goncharova, significant difficulties in the implementation of regulatory management are caused by the absence of a unified classification of monitoring activities. This gap in the system of physical education requires urgent resolution.

As a methodological response, a comprehensive system of problem factors is proposed, which includes: adjustment of management strategies based on analytical data; design and experimental validation of a model using empirical material; statistical processing and systematization of data; formalization of criteria assessment methods; establishment of regulated intervals for data collection; formation of a representative sample of participants; and initial identification of relevant indicators. At the same time, ensuring continuity in physical development is impossible without the organization of continuous monitoring and support of the dynamics of the educational process.

DISCUSSION

Flexible, personalized pedagogical solutions are becoming an objective necessity in contemporary higher education. The student population of pedagogical universities demonstrates significant variability in levels of physical fitness, functional health status, and motivation for physical activity. Among students, there are individuals with medical limitations, minimal motor experience, and negative associations formed during their school education. The complexity of organizing the educational process is further exacerbated by strict time

constraints within the curriculum. The hours allocated to the discipline "Physical Education" are predominantly concentrated in the first and second academic years, which critically limits opportunities for systematic physical development. Under these conditions, reliance on traditional standards and standardized requirements demonstrates limited effectiveness. The application of unified approaches does not ensure sustainable educational outcomes within a compressed schedule and a highly heterogeneous student population.

According to the research of Sh.D. Abdullayev, a paradox is observed in physical education universities: despite students' strong interest in sports, their cognitive academic engagement remains low. For the psychological support of students who demonstrate insufficient academic involvement, it is necessary to understand the criteria for diagnosing their cognitive activity and the factors that determine this indicator.

In a broader context of teacher training, the developmental potential of physical education as a tool for the personal and professional formation of future teachers remains underutilized. The discipline is often reduced to a formal procedural requirement rather than being perceived by students as a meaningful component of professional preparation.

When organizing physical education in technical and humanitarian higher education institutions, a contradiction arises between the social significance of physical culture and the limitations of traditional pedagogical models. This contradiction can only be overcome through the implementation of integrative methodologies and learner-centered technologies that create conditions for variability in content, personalization of physical loads, and strengthening of students' intrinsic motivation. At the same time, the effectiveness of educational innovations is directly dependent on the consideration of regional specificity. In the Republic of Uzbekistan, particularly in Nukus, this factor becomes critically important. It is necessary to take into account harsh climatic conditions, local traditions of physical activity, the state of sports infrastructure, and young people's attitudes toward physical education. Without attention to these parameters, the pedagogical process inevitably loses its effectiveness.

Regarding the essence and principles of the integrative approach in education, it should be noted that students' active independent cognitive activity, their readiness for self-improvement, and the organization of the educational process

taking into account individual characteristics are enhanced through its implementation, which represents a leading objective⁶.

Interdisciplinary connections reflect the objectively inherent unified and interconnected nature of the educational process. In modern pedagogy, integration is often identified with these connections. This concept has become widely used and is interpreted as the integration of knowledge from different disciplines [7, 8].

According to the research of J. Ulmer, S. Brown, Chi-Zong Cheng, and co-authors [23], the highest learning outcomes and improvements in students' self-esteem can be achieved by combining pedagogical integration with technological tools, a differentiated system of tasks with varying levels of complexity, and a carefully balanced ratio of positive and corrective feedback. The implementation of innovative methods within integrative classes significantly enhances cognitive effectiveness. Among non-traditional pedagogical forms, interactive learning is particularly appealing to students. This approach demonstrates the highest effectiveness when applied in practice-oriented instruction and when supported by extensive use of digital educational resources-learning applications and online programs that contribute to the development of holistic thinking. The integrative approach represents a research paradigm in which education is viewed simultaneously as both the result and the process of pedagogical integration. The organization of this process and the conditions of its implementation directly determine the effectiveness of educational impact.

Despite their terminological proximity, the integrative approach should be distinguished from related pedagogical concepts. The interdisciplinary orientation focuses on dialogue between academic disciplines, while the complex approach emphasizes the instrumental use of diverse methodological tools. The systemic approach involves the study of structural and functional parameters of pedagogical systems. In contrast, the integrative model functions as a synthetic construct that generates a new quality of educational reality through the unification of heterogeneous components. The conceptualization of integration in modern pedagogy is carried out at different levels depending on the scope of analysis. At the processual and local level, attention is focused on thematic or interdisciplinary integration, highlighting specific forms and methods of organizing learning activities. Another perspective examines the interaction between participants in the

educational process and pedagogical technologies aimed at implementing specific ideas. The most extensive level encompasses institutional complexity, integrating various educational institutions into a unified educational space.

The foundational elements of this concept are the following principles. The principle of subjectivity emphasizes the active role of the learner as a full-fledged participant in the educational process. Variability presupposes a multiplicity of available educational trajectories and the freedom to choose among them. The interconnection between theoretical foundations and practical activity ensures the synergy of academic knowledge and professional experience. The humanistic orientation and health-preserving principle form an environment that safeguards the physical and psychological well-being of students. The system is completed by the principle of integrity, which implies the inseparable unity of aims, content, and learning outcomes.

CONCLUSION

Thus, a balance between excitation and inhibition is ensured, which represents an essential element of pedagogical practice: «During physical exercise, the strength and mobility of nervous processes in the cerebral cortex increase, and the balance between excitation and inhibition improves. As a result, the plasticity of the central nervous system is enhanced, meaning its ability to adapt to new types of activity and different environmental conditions»

The personal and professional development of students can be facilitated through physical education, which functions not only as a means of physical development. Such an understanding is realized through the integration of physiological, psychological, pedagogical, and sociocultural aspects of this field. Considering the interdisciplinary nature of physical education, the integrative approach acquires particular significance in this context.

REFERENCES

1. Azzarito L., Kirk D. Pedagogies, physical culture, and visual methods. - London: Routledge, 2013. – 256 p.
2. Osipov A.Yu., Kudryavtsev M.D., Iermakov S.S., Yanova M.G., Lepilina T.V., Plotnikova I.I., Dorzhieva O.S. Comparative analysis of effectiveness of some students' physical culture training methodic // Physical education of students. - 2017. - № 4. - P. 176-181
3. Dunlosky J., Rawson K. A., Marsh E. J., Nathan M. J., Willingham D. T. Improving students' learning with effective learning techniques: promising directions from cognitive and educational psychology // Psychological Science in the Public Interest. - 2013. - 14(1). - P. 4–58
4. Абдуллаев Ш.Д. Признаки и факторы познавательной активности студентов факультета физической культуры в учебной деятельности. Вестник интегративной психологии // Журнал для психологов. 1 (28),
5. Петрова С. И. Потребность, интерес, мотив: об их взаимосвязи и взаимообусловленности // Образование и наука в России и за рубежом. – 2018. – № 7(42). – С. 19–25.;
6. Хасанов А. А., Маматкаримов К. З. Межпредметные связи как дидактическое условие эффективности учебного процесса // Молодой ученый. – 2016. – № 20 (124). – С. 25.
7. Ulmer J., Braun S., Cheng C.-T. et al. Gamification of virtual reality assembly training: Effects of a combined point and level system on motivation and training results // International Journal of Human Computer Studies. – 2022. – P. 165–177.