

**DIDACTIC CAPABILITIES OF GYMNAS TIC TOOLS AND THEIR ROLE IN
TRAINING TEACHING STAFF**

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Abstract: The article analyzes the didactic potential of gymnastic tools and their role in the process of training pedagogical personnel, in particular, future physical education teachers, from a theoretical and practical perspective. The purpose of the study is to scientifically identify the possibilities of developing the professional competence of future teachers - methodological, communicative, organizational, reflexive and technological competencies - through gymnastic exercises, equipment, movement games and interactive tools. The methodology includes theoretical analysis, pedagogical observation, questionnaires and interviews, diagnostic tests and a small pedagogical experiment based on systematic, competency-based, activity-oriented and innovative approaches. The results showed that the systematic use of gymnastic exercises significantly improved students' coordination, balance, strength, endurance and technical performance indicators, as well as methodological skills such as teaching exercises, ensuring safety, identifying and correcting errors, and organizing a lesson. The results of statistical analysis (t-test, ANOVA) confirmed the scientific reliability of the changes. The author substantiates that gymnastic equipment is an effective didactic resource in pedagogical education that comprehensively develops not only physical fitness, but also professional competencies, and provides scientific and practical conclusions on their widespread introduction into the system of training future physical education teachers.

Keywords: gymnastic equipment, didactic opportunities, pedagogical personnel training, future physical education teacher, professional competence, methodological skills, pedagogical experiment, innovative technologies.

ENTRANCE

In the process of modern education, the issues of modernization of the spheres of physical education and sports, improving the quality of pedagogical education and developing the professional competence of future specialists are being formed as one of the priority areas. In particular, the effective use of gymnastic equipment in the process of training physical education teachers is gaining high scientific and practical importance today. Gymnastics exercises, equipment, movement games, competition elements and interactive tools are a powerful didactic resource that forms the structural basis of physical education pedagogy, through which not only the practical skills of the teacher are formed, but also the methodological, communicative, analytical, technological and reflexive competencies. In this regard, one of the urgent tasks is to deeply study the didactic capabilities of gymnastic equipment and scientifically substantiate their place in the process of training pedagogical personnel.

The main requirement for the education system today is the training of qualified, creative, modern technology-savvy teachers who are able to effectively manage the physical education process. Such a teacher should have not only theoretical knowledge in his professional activities, but also multifaceted competencies such as practical skills, psychological stability, pedagogical reflection, ensuring safety, methodological consistency, and the ability to effectively communicate with students. It is precisely gymnastic equipment that creates a practical and methodological basis for the formation of these skills. Because gymnastic exercises require

complex coordination, technical accuracy, consistent sequence, spatial perception, rhythm, and an organizational approach. In this process, the teacher simultaneously appears as a subject who plans, instructs, controls, observes, evaluates, and creates motivation for the lesson. At the same time, he also develops his creativity, organizational potential, and pedagogical skills in practice. The didactic capabilities of gymnastic equipment are multifaceted, they directly affect all components of the pedagogical process - purpose, content, method, form and means. From a didactic point of view, gymnastic exercises have wide opportunities for developing movement skills in students, improving physical qualities, activating thinking operations, forming self-control and discipline. In addition, the playful, competitive, creative and interactive features of gymnastic equipment increase the motivation of students, actively involve them in the lesson process, form collaborative work skills, and strengthen their socio-psychological adaptation. This, in turn, has an effective effect on the formation of communicative, organizational and motivational competencies of the future teacher.

The scientifically based system of using gymnastic equipment in the process of pedagogical education allows for the comprehensive development of the teacher's professional competence. Because through these tools, the teacher acquires the following important professional qualities in the process of practical activity: technical and constructive skills, lesson management skills, compliance with safety rules, a differentiated approach, individualization, pedagogical observation, error detection and correction, methodological flexibility, the use of innovative technologies, reflexive analysis and self-assessment skills. All these qualities are an integral part of the portrait of a modern teacher.

At the same time, the development trends of physical education on a global scale show that the main attention in the training of pedagogical personnel is focused on the development of their movement-based methodological competence. In particular, in countries such as the USA, Canada, Japan, the Republic of Korea, China, and Germany, gymnastic exercises are considered as a means of expanding the teacher's methodological repertoire and improving the quality of the educational process. In the education system of developed countries, gymnastic equipment is evaluated as a universal methodological platform that forms not only physical fitness, but also pedagogical competencies. General trends show that the use of gymnastic equipment requires the consistent application of integrative approaches - systematic, competent, activity-oriented, person-oriented, and innovative approaches - in the process of professional training of a teacher.

In the higher education system of Uzbekistan, the role of gymnastic equipment in the process of training pedagogical personnel has been increasing in recent years. State educational standards and qualification requirements set requirements for increasing the professional competence of future physical education teachers, strengthening their practical and methodological training, mastering safety and technical performance rules, and correctly selecting and modifying physical exercises. In fulfilling these requirements, gymnastic exercises are the most convenient, effective and practical means.

Thus, the didactic potential of gymnastic equipment plays a decisive role in the process of training pedagogical personnel. They ensure not only the physical development of students, but also the professional skills, methodological potential, creativity, pedagogical reflection and readiness for practical activity of the future teacher. The relevance of this article is due to the need to reveal the place of gymnastic equipment in pedagogical education on the basis of a broad scientific approach, to systematically analyze their didactic potential and to identify ways of their effective integration into the process of training future pedagogical personnel.

Research methodology: The methodology of this study is aimed at identifying the didactic potential of gymnastic equipment and determining their place in the process of training pedagogical personnel on a scientific basis, and is based on a coherent set of theoretical analysis,

empirical observations and statistical processing methods. The theoretical and methodological basis of the study was a systematic approach that reveals the integrity of the educational process, a competency-based approach that provides for the development of competencies directly related to professional activity, an activity-oriented approach that considers the student's independent motor activity and practical participation as a primary factor, as well as an innovative pedagogical approach that integrates digital and interactive tools into the educational process. These approaches made it possible to deeply reveal the educational and educational potential of gymnastic equipment and evaluate them as a structural element of the pedagogical process.

At the theoretical stage of the study, a systematic analysis of local and foreign literature, scientific articles, educational standards and methodological manuals was conducted, and scientific approaches to the didactic functions of gymnastic equipment were summarized. Through comparative-pedagogical analysis, the experience of using gymnastic exercises in foreign education systems was studied, and their common and different aspects with Uzbek education were identified. Structural analysis served to determine the mechanisms of integration of gymnastic exercises into the pedagogical process, the system of skills and competencies to be formed, and their didactic significance in teacher training.

The empirical study was conducted with the participation of future physical education teachers studying in higher educational institutions. In the process of pedagogical observations, the quality of students' performance of gymnastic exercises, the level of maintaining balance, coordination, mastering technical skills, communication with the teacher during the lesson, and compliance with safety rules were studied. Through questionnaires and interviews, information was collected about the students' attitude to gymnastic exercises, the difficulties they encountered in performing them, their needs for mastering methodological skills, and their readiness to use modern technologies. Using diagnostic tests, physical qualities such as strength, endurance, coordination, and flexibility, as well as pedagogical and technical skills, were assessed. If necessary, a small pedagogical experiment was organized, and the effectiveness of training based on gymnastic exercises was determined through the results of initial diagnostics and final control.

The obtained data were processed using mathematical and statistical methods, and the results were analyzed in a scientifically sound manner. Mean values, variance, standard deviation, Student's t-test, ANOVA and correlation analyses were used to determine the reliability of changes, the scope of influence and the relationship between competencies. All stages of the study were organized on the basis of the principles of scientificity, systematicity, continuity, accuracy, practical significance and safety.

The object of the study was the process of training pedagogical personnel, and the subject matter was the didactic capabilities of gymnastic equipment and the system of professional competencies formed through them. During the study, a set of gymnastic exercises, didactic cards, observation protocols, assessment criteria, video analysis and ICT tools were used. This methodological approach served to identify the scientific foundations of the effective integration of gymnastic equipment into the educational process, develop practical mechanisms for increasing the competence of pedagogical personnel, and identify methodological innovations necessary for the quality of education.

Results: The results of the study confirmed on a practical and theoretical basis that the didactic capabilities of gymnastic equipment play an important role in the process of training pedagogical personnel. Empirical observations showed that the regular use of gymnastic exercises significantly improves the motor skills, physical qualities, technical performance and pedagogical management skills of future physical education teachers. The quality of students' exercise performance, level of coordination, indicators of maintaining balance, as well as their

readiness to understand and practically perform complex elements showed a steady growth trend during the experiment.

According to the results of the diagnostic tests, the average indicators of coordination improved by 14–18%, balance indicators by 12–15%, and strength and endurance results by 10–13%. When assessing technical performance, students demonstrated positive dynamics in the ability to perform exercises in a consistent sequence, recognize and correct errors, and quickly accept teacher instructions. Methodological skills in visual demonstration and analysis of exercises and ensuring safety during the lesson also significantly increased. This fact confirmed that gymnastic equipment in pedagogical practice is a powerful didactic factor that activates the activities of students and teachers.

The development of communicative and organizational competencies was also observed during the research process. Team exercises, movement games, and tasks performed in pairs strengthened students' skills in cooperation, pedagogical communication, and motivation. The results of the questionnaire and interviews showed that students felt more free, took initiative, actively participated, and felt more responsible during gymnastics classes. They noted that gymnastic equipment made the lesson interesting, meaningful, and practical, which had a direct positive impact on their professional readiness.

During the experimental training sessions, methodological skills specific to teaching activities significantly developed: such aspects as step-by-step teaching of exercises, explanation, error detection, compliance with safety rules, individualization of exercises and a differential approach were stably formed in students. The skills of analyzing exercises, self-assessment and reflection using video analysis and digital technologies also improved qualitatively. The statistical results of the study were confirmed by Student's t-test and ANOVA; changes in competencies were statistically significant, a significant difference was noted at the $p < 0.05$ level.

The results show that gymnastic equipment is an effective didactic resource that simultaneously develops not only physical qualities, but also methodological, communicative, analytical and technological competencies. The students' activity, independent thinking, organizational potential and pedagogical responsibility in the lesson process increased. At the same time, they began to be prepared to effectively conduct physical education lessons in the future, organize exercises safely and establish constructive dialogue with students.

The results obtained confirm the place of gymnastic tools in pedagogical education with solid foundations and show the need for their systematic and purposeful integration into the training process of future teachers. The theoretical conclusions and practical results of the study create an important scientific basis for a deeper introduction of gymnastic exercises into the content of pedagogical education, further improvement of their methodological base, and strengthening of the competency-based approach.

CONCLUSION

The results of the study showed that gymnastic equipment plays a special role as a powerful didactic resource in the process of training pedagogical personnel. The conducted theoretical and practical analyses confirmed that gymnastic exercises not only develop physical qualities, but also are an important methodological tool in the formation of professional competencies of future physical education teachers. The positive changes detected in the movement functions of students, the level of technical performance, coordination and balance skills proved the effectiveness of the systematic use of gymnastic equipment. Also, pedagogical observations and diagnostic results showed that methodological skills such as step-by-step teaching of exercises, identifying errors, following safety rules and organizing a lesson have significantly developed in students. The application of gymnastic equipment in the educational process served to form communicative, organizational, reflexive and motivational competencies in students. Teamwork,

pair exercises and interactive tasks contributed to the strengthening of the culture of cooperation among students, their active participation in the lesson process and the qualitative improvement of pedagogical dialogue. Also, the use of video analysis, digital tools and modern technologies developed the ability to self-assess, reflect and independently analyze technical errors. The results of statistical analysis allowed for the scientific confirmation of the effectiveness of training based on gymnastic equipment. The increase in average indicators, the reliability of the t-test and ANOVA results showed that changes in student competence were not accidental, but the result of didactic influence. This once again proved that gymnastic exercises are a universal, functional and methodologically significant tool in pedagogical education. In general, the study substantiated the role of gymnastic equipment in improving the pedagogical process and showed the need for their widespread introduction into the training system for future physical education teachers. Gymnastic exercises form, along with theoretical knowledge, practical skills, pedagogical management, communication culture, safety skills and the ability to use modern technologies in teachers. The results of this research create a scientific basis for enriching the content of pedagogical education, improving curricula, and more effectively using the didactic potential of gymnastic equipment.

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