

THE USE OF INTERACTIVE TECHNOLOGIES IN THE CONTEXT OF HIGH-QUALITY TRAINING OF FUTURE SPECIALISTS IN HIGHER EDUCATION INSTITUTIONS

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Abstract

In the context of rapid changes in all sectors of the national economy, globalization processes, and increasing demands of the labor market, the integration of active, practice-oriented, and digital approaches into the training of students is becoming increasingly relevant.

The article aims to study how interactive learning technologies improve the quality of professional training in higher education by examining students' opinions about their use, their attitude toward interactive teaching methods, and the main challenges of using them.

The study used a mixed-method approach, combining a review of scientific literature with collected data to examine the role of interactive technologies in improving professional training in higher education. Data were collected through an anonymous Google Forms survey of bachelor's students from several Ukrainian universities and analyzed using basic statistical methods such as frequencies and percentages. The results helped identify students' views on interactive technologies, the most common ways they are used in lectures and practical classes, and how students believe they affect the quality of education.

An analysis of recent research on the use of interactive methods, such as case studies, project-based learning, problem-based learning, and online learning platforms, shows that interactive technologies help develop key competencies, including communication, organizational, analytical, creative, and digital skills. They also help students learn to solve practical problems independently and adapt to changing professional environments. The study highlights the benefits of combining better understanding knowledge and developing practical skills. Additionally, it discusses the challenges and future prospects of implementing interactive technologies. The conclusions emphasize that the systematic use of interactive technologies in university training is an effective way to improve the quality of education and develop professional competence, meeting the need of the modern job market and increasing graduates' competitiveness.

Keywords: *interactive technologies, quality of education, students, future specialists, higher education institution, case study, project-based learning, problem-based learning*

Introduction

Dynamic changes taking place in modern society under the influence of digitalization, globalization processes, and increasing job market demands require the renewal of

approaches to the professional training of specialists in various fields. Today, the priority is the development of competent and competitive professionals who can effectively work in conditions of rapid socio-economic changes. In this context, the modernization of professional training for future specialists in higher education institutions becomes crucial.

At the same time, the nature of modern professional activity involves constant interaction with clients, partners, colleagues, and representatives of different social groups. This requires a high level of communication culture, the ability to conduct constructive dialogue, work effectively in teams, and prevent and resolve conflicts. Therefore, during professional training in higher education institutions, special attention should be paid to the development of social and communication competencies of future specialists. However, traditional forms of teaching do not always fully meet modern challenges and the needs of practice-oriented training, for this reason, the role of interactive learning technologies is increasing. They promote active interaction among participants in the educational process, allow the modeling of real professional situations, and support the development of critical thinking and the ability to make well-reasoned decisions in conditions of uncertainty. The integration of case-based, problem-based, and project-based learning, together with simulation-based approaches, role-playing and business games, brainstorming, collaborative discussions, and interactive training formats, enhances the alignment of the educational process with real-world professional conditions.

Therefore, the implementation of interactive technologies in the training of future specialists is an important condition for improving the quality of education, developing students' professional and social competencies, and ensuring their readiness to work effectively in today's competitive environment. In this context, there is a clear need for a thorough scientific study of the role of interactive technologies in the professional training of future specialists.

Literature Review

Modern higher education increasingly focuses on student-centred learning approaches that promote active participation, collaboration, and the practical application of knowledge. Interactive teaching technologies have become an important pedagogical tool for developing professional competencies of future specialists. These technologies include case-based learning, project-based learning, simulations, brainstorming, training sessions, and business games, all of which aim to transform students from passive recipients of information into active participants in the learning process.

A significant body of research has focused on the role of interactive digital media in collaborative learning processes. For instance, Gan, Menkhoff, and Smith demonstrated that the use of interactive digital tools such as mobile devices, social learning platforms, and collaborative web applications can significantly enhance student engagement and support collaborative learning activities in higher education settings. Their study highlighted that interactive digital environments promote active participation and knowledge construction among students (Gan, Menkhoff, & Smith, 2015).

In their study, the researchers emphasize: "to ensure the quality and accessibility of education, improve individual and differentiated learning, and help students gain digital skills, higher education institutions should use available digital technologies in the educational process. The use of IT technologies in the training of future specialists makes it possible to improve the learning process and ensure the quality of education". (Plachynda &

Rybalko, 2024, p. 95)

The integration of mobile technologies into interactive learning environments has also been widely studied. Zhang explored the application of mobile interactive technologies in blended learning models and concluded that combining online and traditional teaching methods improves flexibility and enhances students' learning experiences. Mobile-based interaction allows personalized learning pathways and increases student engagement in academic activities (Zhang, 2024).

But it is worth focusing on interactive technologies that are used directly in classrooms and encourage students to engage in active learning activities. One of the most widely studied interactive methods is case-based learning (CBL). Research shows that the use of case studies helps students analyze real professional situations, develop decision-making skills, and apply theoretical knowledge to practice. Case-based learning encourages analytical thinking and promotes collaborative discussion, allowing students to examine complex situations from multiple perspectives. Studies in higher education demonstrate that systematic implementation of case methods increases students' engagement and improves their ability to transfer theoretical knowledge to professional practice (Chen, 2024; Thistlethwaite et al., 2012).

Closely related to case-based learning is problem-based learning (PBL), which encourages students to solve complex real-world problems through collaborative investigation. Studies indicate that PBL contributes to the development of analytical thinking, teamwork skills, and self-directed learning, as students work in small groups to analyze authentic problems, identify knowledge gaps, and independently search for solutions (Hmelo-Silver, 2004; Dochy et al., 2003; Schmidt et al., 2011). Research also demonstrates that PBL improves students' critical thinking and professional competencies by promoting active participation and collaborative learning processes in higher education (Demikhova, 2016; Ge et al., 2025).

Another important interactive approach is project-based learning, which allows students to work on complex projects over extended periods of time. Project-based learning encourages research activity, collaboration, and the creation of tangible outcomes. Studies demonstrate that students involved in project-based learning environments show improved problem-solving abilities, deeper understanding of academic content, and stronger professional skills development (Lepe & Jiménez-Rodrigo, 2014).

A growing number of studies also highlight the importance of simulation-based learning as a powerful interactive teaching method. Simulations recreate realistic professional situations, enabling students to practice decision-making, apply theoretical knowledge, and develop critical thinking in a safe educational environment. Research shows that simulation-based learning promotes experiential learning and improves students' understanding of complex processes through active engagement in simulated scenarios (Vlachopoulos & Makri, 2017; Dittrich et al., 2022). Furthermore, empirical studies indicate that simulations allow learners to connect theoretical knowledge with professional practice and develop higher-order cognitive skills such as problem-solving and decision-making (Chernikova et al., 2020; Saputra et al., 2022).

In addition to simulations, *role-playing and business games* are widely used to develop communication, negotiation, and teamwork skills. These methods create interactive environments where students perform professional roles and solve practical tasks collaboratively. Research indicates that experiential activities such as role-playing and

business games enhance students' motivation, deepen learning through active participation, and improve the acquisition of professional competencies (Crookall, 2010; Bellotti et al., 2013).

Brainstorming and collaborative discussion methods are also highly effective in higher education. These techniques encourage creativity, critical thinking, and collective problem-solving by motivating students to generate ideas and evaluate alternative solutions in group settings. Studies show that structured brainstorming sessions improve students' analytical abilities, teamwork, and classroom interaction (Çelik & Akay, 2025). Recent experimental studies demonstrate that integrating several **active learning methods** – such as case-based learning, team-based learning, and problem-based learning – can significantly enhance students' critical thinking, engagement, and higher-order cognitive skills. For instance, systematic implementation of multiple interactive learning methods in university courses led to measurable improvements in students' analytical thinking and collaborative problem-solving.

Interactive training formats, including workshops and structured training sessions, are increasingly applied in higher education to foster professional competencies. These formats combine practical exercises, group discussions, and reflective activities, allowing students to practice skills in realistic scenarios and develop teamwork, leadership, and decision-making abilities. Overall, the analysis of existing research demonstrates that interactive teaching technologies significantly improve learning outcomes, student motivation, and professional competence development. However, scholars also note the need for further research on the methodological conditions for integrating interactive learning technologies into professional training programs in higher education institutions.

The purpose of the study is to examine the significance of interactive learning technologies in enhancing the quality of training of future professionals in higher education institutions based on the analysis of student survey results concerning the use of interactive teaching methods by instructors, students' attitudes toward these learning approaches, and the identification of key challenges associated with their implementation.

Methods

The study used a mixed method, combining a review of scientific literature with empirical data, to provide a comprehensive understanding of the role of interactive technologies in ensuring the quality of professional training of future specialists in a higher education institution. During the study, scientific publications, academic and electronic resources devoted to the use of interactive technologies in higher education institutions were analyzed in order to determine their pedagogical capabilities, advantages and potential difficulties in the professional training of education seekers. At the same time, pedagogical observations carried out in the conditions of the real educational process made it possible to obtain a contextual understanding of the features of the implementation of interactive teaching methods, their impact on the activity of education seekers and ensuring the quality of students' professional training.

Primary empirical data were collected by surveying 319 undergraduate students from several Ukrainian universities, including National University “Yuri Kondratyuk Poltava Polytechnic”, Khmelnytskyi Humanitarian and Pedagogical Academy, Zaporizhzhia National University, Pylyp Orlyk International Classical University, Volodymyr Vynnychenko Central Ukrainian State University. The survey was conducted anonymously using Google Forms

(<https://docs.google.com/forms/d/1ap5-YlrvbsbcGui4gnORN2stC12p462CGJeu0rRi8A/edit>), which ensured open answers and an unbiased attitude. The use of Google Forms enabled efficient distribution of the questionnaire and ensured standardized and accurate recording of participants' responses. The collected data were subsequently analyzed using descriptive statistical methods, including frequency and percentage analysis.

Students were asked questions about which teaching methods they prefer (traditional or innovative); whether teachers use interactive learning technologies in their HEIs; which interactive learning technologies teachers mainly use; what is the attitude of students towards the use of interactive technologies in the educational process; which lectures and practical classes they prefer (traditional or innovative); and whether, in their opinion, the use of interactive technologies by teachers in the educational process improves the quality of education.

The survey made it possible to determine students' attitude toward the use of interactive learning technologies in the educational process, to determine their educational preferences, and to establish how actively teachers use such technologies in higher education institutions. The results obtained made it possible to assess the experience of students in using interactive methods during lectures and practical classes, to identify the most common forms of their application and to determine how students perceive the impact of interactive technologies on the quality of the educational process. This created an empirical basis for further interpretation of the research results and generalization of conclusions.

This methodological approach enabled a comprehensive analysis of students' attitudes and practices related to the use of AI and supported the interpretation of both empirical findings and insights derived from the literature review.

Results

This section presents the results of a student survey on their awareness of interactive learning technologies, how these technologies are used in higher education institutions, and students' views on their impact on learning effectiveness and the quality of the educational process. Students were asked the question: "Which teaching methods do you prefer: traditional or innovative?", with clarification that:

- traditional refers to a way of organizing the learning process that has historically developed in education and is based on transferring knowledge from the teacher to the student;
- innovative refers to modern ways of organizing the educational process that involve active student participation, the use of new technologies, a creative approach, and the development of critical thinking.

The responses were distributed as follows: 80.3% of respondents prefer innovative teaching methods, while 19.7% prefer traditional approaches. These results are consistent with classroom observations, which show that students are more active during classes when teachers use interactive technologies.

Answers to the next question showed that 64.3% of students reported that teachers use interactive learning technologies during classes. At the same time, 32.6% of respondents indicated that these technologies are used occasionally. Only 3.1% of students said that interactive learning technologies are not used at all. These results show that interactive technologies are generally used actively in higher education, although the level of their use varies among teachers.

Students' answers to the question "Which interactive learning technologies are most often used by teachers in your HEI?" are also of interest. The responses are presented in Figure 1

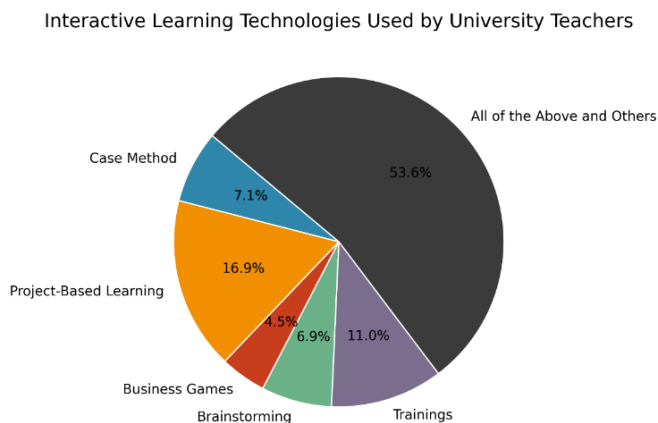


Figure1

Answers of students to the question "What interactive learning technologies do teachers in your higher education institution mainly use?"

The survey findings on the use of interactive learning technologies among university instructors can be summarized as follows: a substantial proportion of respondents (53.6 %) selected the option "all of the above and other methods," indicating that most instructors tend to integrate multiple interactive approaches rather than relying on a single pedagogical technique. This suggests a preference for diversified and flexible teaching strategies. Among the individual methods, project-based learning emerges as the most widely used (16.9 %), highlighting the importance of practice-oriented and experiential learning formats in higher education. This is followed by training-based activities (11.0 %), which further emphasize the role of active engagement and skills development in the instructional process. The case method is utilized by 7.1 % of respondents, while brainstorming techniques account for 6.9 %, reflecting a moderate level of adoption aimed at fostering analytical and creative thinking among students. The least frequently applied approach is business simulations/games, reported by only 4.5 % of participants.

Overall, the results point to a clear tendency toward combining various interactive teaching methods, with an emphasis on their complementary use to enhance learning outcomes. Most students demonstrated a positive attitude towards the use of interactive technologies in the educational process (90.3 %), while only 1.3 % of respondents expressed a negative attitude, and 8,5% could not decide. In general, the survey results indicate a high level of positive attitude of students towards the use of interactive technologies in the educational process.

Regarding the advantages in the format of lectures and practical classes, only 6 % of students prefer traditional methods, 31 % noted greater interest in lectures and practical classes with the use of interactive technologies, while the majority of respondents (63 %) consider it advisable to combine traditional and innovative teaching methods. In general, the results indicate that students prefer a combined approach, combining traditional and interactive teaching methods, which indicates the importance of integrating innovative

technologies into the educational process without completely abandoning classical formats.

The majority of respondents (85.3 %) believe that the use of interactive technologies by teachers in the educational process contributes to improving the quality of education. Only 0.9 % of students answered that such technologies do not improve the quality of education, and 13.6 % of students could not decide on the answer. In general, the survey results indicate a positive perception of interactive technologies by students as a means of improving the quality of the educational process. In general, the survey results indicate a high interest of future specialists in the application of interactive technologies in the educational process and a predominantly positive attitude towards their use. The majority of respondents (66-79 %) prefer a combined approach, combining traditional and interactive teaching methods, and believe that interactive technologies contribute to improving the quality of education and activating cognitive activity. Only a small proportion of students demonstrate a negative attitude or remain undecided about the effectiveness of these methods, which emphasizes the general support for innovative approaches in the educational process.

Discussion

Professional training of future specialists in modern conditions is becoming increasingly relevant. The high demands of the job market naturally transform approaches to education, forcing the system of training future specialists to adapt to new dimensions of globalization, digitalization and innovative activity. As scientists note (Bayaga, 2025; Zhang, 2023), there are the strengthening of the competency-based approach, orientation towards practical activities and the introduction of the latest educational technologies among the main trends of modern education.

The quality of training of future specialists is determined not only by the volume of theoretical knowledge, but also by the ability to apply it in real professional situations. In this context, given the significant variability of professional functions, the need for universal competencies is rising: communicative, organizational, creative, digital and the ability to think critically. Romero emphasizes: “The development of Creativity, Communication, Critical Thinking, and Collaboration is a central objective of contemporary competency-based education” (Romero, 2026, p. 49).

Interactive technologies in pedagogical activity are defined as a system of means and methods that ensure the active participation of students in the learning process and contribute to the formation of professional competencies through direct interaction between the teacher, students and the educational environment. The pedagogical essence of interactive technologies is the stimulation of activities aimed at the formation of knowledge through action, cooperation, discussion, project work and reflection (Shalgimbekova et al., 2024; Suleimenova et al., 2024).

At the same time, the study demonstrates that modern students increasingly perceive the educational process as an interactive space, which involves not only the perception of knowledge, but also active activity, reflection, group interaction and independent search for solutions. Therefore, in the context of reforming the educational system of Ukraine, the integration of active, practice-oriented and digital technologies into the educational process is becoming a key. The use of interactive teaching methods contributes to the activation of students' cognitive activity, the development of their independence, the formation of cooperation skills and the ability to apply theoretical knowledge in practical situations. Such technologies ensure the creation of an educational environment in which the student is not an object of learning, but an active participant in the educational process. Among the most

effective interactive technologies in higher education institutions, researchers distinguish the case study method, project-based learning, problem-based learning, discussion methods, role-playing and business games, and the use of digital interactive platforms. Their use allows you to simulate real professional situations, develop critical thinking, communication skills and decision-making skills. For example, a case study involves the analysis of real or simulated professional situations, which allows students to apply theoretical knowledge to solve practical problems. Project-based learning contributes to the formation of research and organizational skills through the implementation of collective or individual projects. Problem-based learning stimulates students to search for information and independently form knowledge through solving problem tasks. At the same time, the use of digital interactive platforms allows you to increase the level of student involvement in the educational process and contributes to the development of their digital competencies (Table 1).

These technologies are based on the principles of democratization of the educational process, where the role of the learner changes from a passive consumer of knowledge to an active participant in their own learning. At the same time, interactivity contributes to the development of key skills that are difficult to form in traditional lecture forms: the ability to work in a team, solve practical problems, formulate reasoned conclusions and adapt to changing conditions of professional activity. Empirical experience shows that interactive technologies play an important role in the training of future specialists, where not only is the theoretical basis essential, but also practical cultural competence. Flipped lectures, role-playing games, case methods, business simulations and other types of interactive activities allow you to model complex professional situations that are closest to real professional activity. This ensures not only a better level of assimilation of educational material, but also the formation of the professional identity of future specialists.

Table 1

Interactive learning methods and their role in forming the competencies of future specialists

Interactive method	Example of application in the educational process	Competencies under development
Case study	Analysis of real professional situations, discussion of possible solutions in small groups	critical thinking, analytical skills, decision-making ability
Project-based learning	Students carry out a team project to develop a practical product or research	teamwork, organizational skills, creativity
Problem-based learning	Solving problematic tasks that require information search and analysis	research skills, critical thinking, independence
Discussions and debates	Discussion of controversial issues during seminar classes	communicative competence, argumentation, critical thinking
Role-playing and business games	Modeling professional situations (negotiations, management decisions)	communication, leadership, ability to work in a team
Use of digital interactive platforms	Online surveys, brainstorming, team boards	digital competence, collaboration, creativity

Interactive technologies significantly enhance the quality and effectiveness of the educational process, particularly in the professional training of future specialists in higher education institutions. One of the key arguments supporting their use is the positive dynamics observed in the development of students' professional competencies when they are engaged

in active learning formats. Such formats include discussions, intensive practical sessions, collaborative projects, and case-based tasks that reflect real professional contexts. Through these approaches, students become active participants in the learning process, which contributes to deeper understanding of academic content, the development of critical thinking, and the acquisition of practical skills relevant to their future professional activities.

Particular attention should be paid to distance and blended learning, which have become unavoidable during global challenges (in particular, the COVID-19 pandemic). The integration of distance technologies into a standardized system of professional education has opened up new opportunities for a flexible educational environment, where learners can interact through video conferences, webinars, online platforms, etc. Scientific works (Akram et al., 2021) demonstrate that such models contribute to the formation of digital literacy and independent work skills, which are an integral part of the professional training of a modern specialist. At the level of educational content, interactive technologies allow not only to transfer knowledge, but also ensure the formation of practical skills, they enable learners to work with situations simulated on the basis of real professional situations. This contributes to the development of professional thinking, social skills, and critical evaluation of information, which are extremely important in difficult market competition.

Interactive technologies play an important role in the training of future specialists as a tool for the formation of professional competencies, because they are based on the principle of activity-based learning, where knowledge is formed not through reproduction, but through practical application (Fig. 2).

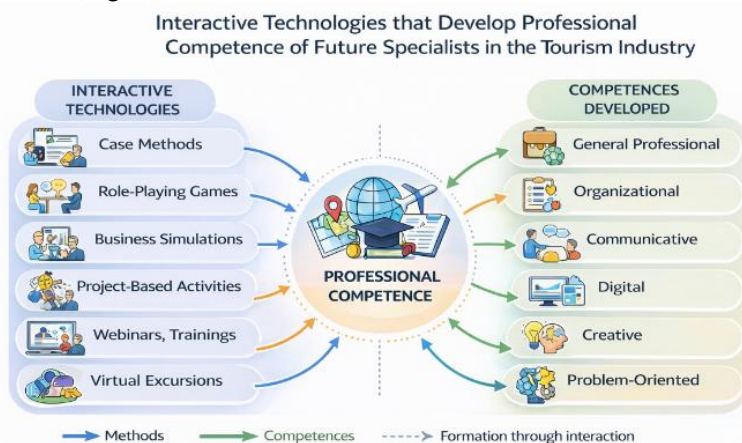


Figure 2
Interactive technologies as a means of forming professional competence of future specialists

Developed by the author, visualization created using artificial intelligence tools.

Investigating the problem of forming digital competencies of higher education teachers, scientists (Basilotta-Gómez-Pablos et al., 2022) demonstrate the results of a study where teachers' self-assessment of their own level of digital competencies is average or below average. Another study demonstrates that although teachers had a sufficient level of digital research skills, this level could vary depending on transversal skills such as creativity and entrepreneurship. The results showed that, although teachers possessed an adequate level of digital research skills, this could vary depending on transversal skills such as creativity and entrepreneurship, with large differences when these skills were at a basic level. (Guillén-

Gómez et al., 2024). We emphasize the need to develop skills in the use of digital technologies in the educational process, especially regarding the integration of digital resources into pedagogical activities. In this context, it is worth highlighting a number of challenges that higher education institutions face when it comes to implementing interactive technologies, although their undeniable advantages cannot be underestimated. These include:

- insufficient level of digital competence of teachers, which limits the effective use of interactive tools in the educational process;
- lack of modern digital resources and technical platforms in educational institutions, which are critical for the implementation of interactive learning strategies;
- organizational barriers associated with the formal structure of educational programs, which do not always provide for a sufficient number of practical modules.

Overcoming these problems is possible with systemic support from state and educational institutions, the development of relevant guidelines for interactive learning models and advanced training of teachers.

The digitalization of education and the spread of distance learning (in particular, due to the COVID-19 pandemic and the ongoing war in Ukraine) have highlighted the need to develop teachers' digital competencies. This encourages the strengthening of teachers' professional development and the creation of practice-oriented advanced training programs aimed at the effective integration of modern interactive technologies into the educational process of higher education institutions.

The findings of this study have several practical implications for higher education institutions. First, universities should develop clear institutional strategies that support the systematic integration of interactive learning technologies into the educational process in order to enhance the effectiveness and quality of professional training. Second, educators should actively incorporate interactive methods into teaching practices, encouraging student participation, collaboration, and critical engagement with learning materials. Third, teaching and assessment approaches may need to be reconsidered by integrating interactive formats such as discussions, collaborative projects, case-based learning, and problem-solving activities that foster deeper understanding and practical skill development. The implementation of such measures can contribute to creating a more student-centered learning environment and improving the overall quality of higher education.

Conclusion

High-quality professional training of students in higher education institutions is a key factor in the development of the educational sector and in ensuring the global competitiveness of future specialists. The integration of interactive technologies into the educational process creates favorable conditions not only for the acquisition of professional knowledge but also for the development of practical competencies, social skills, and digital literacy that correspond to the demands of the contemporary labor market.

The findings of this study demonstrate a strong interest among students in the use of interactive learning technologies and reveal their predominantly positive attitudes toward the integration of such approaches into the educational process. This indicates that interactive methods are perceived by students as an effective means of enhancing engagement, improving understanding of learning materials, and supporting the development of professional competencies.

The implementation of interactive learning methods contributes to increasing students'

cognitive engagement, fostering their creative potential, and developing their ability to independently solve complex professional tasks. At the same time, the effectiveness of this process largely depends on the modernization of educational programs, continuous professional development of academic staff, and the establishment of a modern digital infrastructure within higher education institutions.

Further research should focus on the development of methodological guidelines for university educators aimed at the effective integration of interactive technologies into the educational process in order to enhance the quality of professional training of future specialists.

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Ամփոփագիր

Ազգային տնտեսության բոլոր ոլորտներում տեղի ունեցող արագընթաց փոփոխությունների, համաշխարհայնացման գործընթացների ու աշխատաշուկայի աճող պահանջների համատեքստում ուսանողների պատրաստման գործընթացում գործուն, գործնականորեն ուղղորդված ու թվային մոտեցումների ներդրումը գնալով ավելի մեծ արդիականություն է ձեռք բերում: Հոդվածի նպատակն է ուսումնասիրել, թե ինչպես են ուսուցման փոխներգործուն տեխնոլոգիաները բարելավում մասնագիտական պատրաստման որակը բարձրագույն կրթության ոլորտում՝ քննության առնելով դրանց կիրառման վերաբերյալ ուսանողների կարծիքները, դասավանդման փոխներգործուն մեթոդների նկատմամբ նրանց վերաբերմունքը ու դրանց կիրառման հիմնական մարտահրավերները: Հետազոտության ընթացքում կիրառվել է խառը մեթոդաբանական մոտեցում, որը համատեղել է գիտական գրականության վերլուծությունը հավաքագրված տվյալների հետ՝ նպատակ ունենալով վերհանել փոխներգործուն տեխնոլոգիաների դերը բարձրագույն կրթության մեջ մասնագիտական պատրաստման որակի բարելավման գործում: Տվյալները հավաքագրվել են ուկրաինական մի շարք համալսարանների բակալավրիատի ուսանողների

շրջանում (Google ձևաթղթերի կիրառմամբ) իրականացված անանուն հարցման միջոցով և վերլուծվել են այնպիսի հիմնարար վիճակագրական մեթոդներով, ինչպիսիք են հաճախականությունների ու տոկոսային հարաբերակցությունների հաշվարկը: Արդյունքները հնարավորություն են ընձեռեցին պարզելու փոխներգործուն տեխնոլոգիաների վերաբերյալ ուսանողների պատկերացումները, դասախոսությունների ու գործնական պարապմունքների ընթացքում դրանց կիրառման առավել տարածված եղանակները, ինչպես նաև ուսանողների համոզմունքներն այն մասին, թե դրանք ինչպես են ներագրում կրթության որակի վրա: Դասավանդման այնպիսի փոխներգործուն մեթոդների, ինչպիսիք են իրավիճակային վերլուծությունը, նախագծահեն ուսուցումը, հիմնախնդրահեն ուսուցումն ու առցանց ուսուցման հարթակները, կիրառման վերաբերյալ վերջին հետազոտությունների վերլուծությունը փաստում է, որ փոխներգործուն տեխնոլոգիաները նպաստում են առանցքային կարողունակությունների՝ ներառյալ հաղորդակցական, կազմակերպչական, վերլուծական, ստեղծագործական ու թվային հմտությունների զարգացմանը: Դրանք նաև օգնում են ուսանողներին սովորել ինքնուրույն լուծել գործնական խնդիրներ ու հարմարվել փոփոխվող մասնագիտական միջավայրին: Ուսումնասիրությունն ընդգծում է գիտելիքների ավելի խորն ընկալման և գործնական հմտությունների զարգացման համադրման առավելությունները: Բացի դրանից՝ քննվում են փոխներգործուն տեխնոլոգիաների ներդրման մարտահրավերներն ու ապագա հեռանկարները:

Եզրահանգումներում շեշտադրվում է, որ համալսարանական պատրաստման գործընթացում փոխներգործուն տեխնոլոգիաների համակարգված կիրառումը կրթության որակի բարձրացման ու մասնագիտական կարողունակության զարգացման արդյունավետ ուղի է, որն ընդառաջում է արդի աշխատաշուկայի պահանջներին և բարձրացնում շրջանավարտների մրցունակությունը:

Հիմնաբառեր՝ փոխներգործուն տեխնոլոգիաներ, կրթության որակ, ուսանողներ, ապագա մասնագետներ, բարձրագույն ուսումնական հաստատություն, իրավիճակային վերլուծություն, նախագծահեն ուսուցում, հիմնախնդրահեն ուսուցում:

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