



Innovative technologies as a means of high-quality training of specialists in higher education institutions

Oksana Vasiuk*

Doctor of Pedagogical Sciences, Professor
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0000-0003-0926-7599>

Svitlana Vyhovska

PhD in Pedagogical Sciences, Associate Professor
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0000-0002-8270-7207>

Lesya Matsenko

PhD in Pedagogical Sciences, Associate Professor
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0000-0003-2939-4229>

Olga Syroezhko

PhD in Pedagogical Sciences, Senior Teacher
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0000-0001-9101-6590>

Abstract. At the current stage of development of the national higher education system, innovative technologies are used as a means of high-quality training for competitive specialists, supported by regulatory documents. The purpose of the scientific article was to reveal the essence of innovations in education, demonstrate the role of innovations in the process of training higher education students, and outline the dominant factors of introducing innovative technologies into the educational process. To ensure the reliability of the research results, a set of scientific methods was used: analysis, synthesis, comparison, generalisation, observation, and the tabular method. The competency-based approach served as the methodological basis of the research. An analysis of scientific sources led to the conclusion that innovative technologies involve the introduction of new approaches into the content, goals,

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*Corresponding author (o.vasiuk@nubip.edu.ua)



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methods, forms, and organisation of educational activities. The variety of typologies of pedagogical innovations shows that they are not only tools for modernising the learning process but also act as fundamental factors in transforming the paradigm of professional training. The introduction of innovative technologies depends on organisational, managerial, socio-economic, pedagogical, psychological, and digital components. The quality of professional training in the context of innovative technologies is defined as a set of developed professional competencies, students' abilities for innovative activity, lifelong learning, critical thinking, and self-reflection, facilitated by an interdisciplinary approach to the learning process. Innovative technologies allow for achieving better programme learning outcomes; they intensify the development of abilities, creativity, and initiative; contribute to the formation of soft skills; ensure personalisation of learning and increase motivation; activate creative potential and form research interest; contribute to the openness of the educational system; and provide objective control of students' knowledge. The effectiveness of these technologies is determined by the digital educational environment, partnership relations, activity-and-competency-based forms of training, and the innovative culture of teachers. The practical value of the work lies in generalising the importance of innovative technologies in improving the quality of student education

Keywords: competency-based approach; professional competencies; innovations in education; personalisation of learning; quality of education

Introduction

The determining factors of high-quality training of future specialists are the compliance with international standards, competitiveness in the labour market and the ability to work effectively in changing conditions. This poses new challenges for higher education institutions and requires modernisation and improvement of the educational process, the use of innovative technologies that are based on modern scientific achievements and guarantee the effectiveness of the educational process. In 2021, the EU approved the Council Resolution on a Strategic Framework... (2021), where the European Education Area is considered in terms of promoting cooperation between Member States and stakeholders in order to provide high-quality, innovative and inclusive education and training, which will contribute to the economic growth of countries and the employment opportunities of graduates, as well as the social, cultural and personal development. In particular, the programme pointed out that innovations and new educational approaches to learning will contribute to better meeting the educational needs of applicants. In this regard, higher education institutions should

create more opportunities for innovation, in particular through the implementation of initiatives by European universities, which in turn will contribute to improving the quality of higher education.

The theoretical foundations of the introduction of innovations into the educational process and the practical aspects of the use in improving the quality of higher education attract close attention of scientists. S. Tolochko *et al.* (2025) studied the current state of development of Ukrainian digital pedagogy in the conditions of digitalisation of educational institutions and distance learning through a review of the results of sociological surveys. Based on the results of the questionnaires and interviews conducted, the authors confirmed the unique role of digital pedagogy in formal, non-formal and informal education, its effectiveness in educational and scientific activities; analysed the essence, content, effectiveness of digital pedagogy in open education and established that this is a new branch of pedagogical science, the purpose of which is to use online and hybrid learning environments to improve individual learning, create a methodology that combines

digital tools to facilitate and enhance the effectiveness of educational and cognitive activities. The effectiveness of implementing hybrid communication training technology in the process of forming communicative competence during face-to-face, distance (synchronous, asynchronous) and blended learning was proven by L. Gutor & P. Sodomora (2024). N. Pavlova *et al.* (2024) experimentally confirmed the effectiveness of using gamification in the process of professional training of specialists using distance learning courses, where gamification was the object of study and a means of learning. S. Tolochko (2023) compared gamification and project activities as innovative technologies and indicated that the use of gamification technology ensures an increase in students' learning activity, intensifies the process of developing abilities, and forms a responsible attitude towards collective responsibilities.

The positive experience of implementing partner technologies (collaboration technologies), project technology, credit-modular and modular-rating technologies of education as pedagogical innovations in the process of professional training of masters in a higher education institution is presented in a monographic study by a team of authors led by L. Rebukha *et al.* (2022). A study conducted by A. Bratko *et al.* (2025) on the use of simulation methods in the process of studying professional disciplines in terms of improving the quality of professional training of future border guard officers, demonstrated the effectiveness of simulation training and professional development training, situational and simulation tasks, simulation analysis, "time management", cases, professional-business and plot-role-playing games. Research on the use of artificial intelligence tools in higher education by B. Klimova & M. Pikhart (2025) proves the change in the ways of interaction of students with academic and personal life, as well as the impact on the well-being of students and teachers, including academic, social and emotional aspects. The use of immersive technologies (virtual, augmented and mixed reality) has become a trend in the latest years in the formation

and development of soft skills (communication, leadership, teamwork, empathy), as indicated in the study by A. Dubiel *et al.* (2025). The reviewed studies prove that innovative technologies create and provide tools for effective individual teaching and learning, improving the quality of education.

The aim of the article was to consider the concept of "innovation", typologies of pedagogical innovations; show the impact of innovative technologies on improving the quality of training of future specialists and the transformation of the educational process; to characterise the essence of the concept of "quality of professional training of future specialists in the aspect of the implementation of innovative technologies"; to show the advantages of innovative technologies and the main conditions for the application in the educational process.

Materials and Methods

The methodological basis of the scientific research encompassed elements of a competency-based approach, which allowed focusing on the competency dimension of the effectiveness of implementing innovative technologies in the professional training of specialists, namely, on the formation of professional abilities of higher education graduates to implement innovations, develop cognitive flexibility, critical thinking and skills for autonomous learning throughout life in rapidly changing conditions, assessing risks, problems in professional activity and choosing effective ways to solve these issues.

In order to organise the study of the selected topic, a set of general scientific and special research methods was used. Among the theoretical ones, the following were used: analysis – to study the categorical apparatus of the research, in particular the concepts of "innovation", "novelty", "novation", "innovation in education", "innovative technologies"; synthesis – to generalise the data obtained in the context of forming a holistic vision of the phenomenon of innovative technologies under study. The use of the terminological analysis method allowed determining key differences within the issues under study,

ensuring the representativeness of the source base and taking into account the latest trends in the development of scientific thought. Scientific methods, namely chronological and cause-and-effect analysis, contributed to the study of the impact of pedagogical innovations on the quality of training of specialists in higher education institutions. Comparison and generalisation were used during the analysis and systematisation of scientific sources, regulatory national and international educational documents, as well as to compare scientific views on the impact of innovative technologies on the results of the educational activities of higher education students, in particular the formation of skills to stimulate cognitive interest, motivation for learning, professional self-determination and self-development of students and the competitiveness in the labour market. Using content analysis, the study allowed characterising the current state of the problem, identifying the advantages of innovations in education and factors of effective application in educational practice. The main criteria for selecting literary sources were the relevance of publications, the scientific newness and value, practical significance, as well as regional coverage. The method of theoretical generalisation was used when formulating conclusions. The empirical component of the study was based on the author's own observations, conducted in 2025, of the process of introducing innovative technologies during the professional training of future specialists at the university. The results of the observation showed a change in the role of the subjects of the educational process, where the teacher became the organiser of the development of professional competencies of students. The observation was qualitative in nature and was used primarily to confirm and clarify previously formulated theoretical statements. A graphical method was used to illustrate different approaches to interpreting the essence of innovations. A tabular method was also used to visualise the diversity of classifications of pedagogical innovations.

The study materials included legislative and strategic documents, scientific publications, and

monographs. The search was carried out through the method of systematic monitoring of relevant scientific publications in the leading international scientometric databases Scopus, Web of Science, Google Scholar and others using keywords that correspond to the purpose of the study. The use of a set of the above-mentioned scientific search methods ensured the reliability of the research results, as well as a comprehensive understanding of how innovative technologies affect the improvement of the quality of training of future specialists and the transformation of the educational process.

Results and Discussion

The issues of introducing innovations into the educational process of national higher education institutions are reflected in legislative and regulatory acts regulating the formation of the European Educational Space, in particular Law of Ukraine No. 1678-VII... (2014), Order of the Ministry of Education and Science of Ukraine No. 1501... (2023). As O. Lokshyna (2024) states, in the European Higher Education Space, the "quality" dimension involves focusing efforts on the formation and development of knowledge, basic, transversal abilities in students to build lives (critical thinking, digital competence, entrepreneurial competence, language learning, multilingualism, creativity, civic engagement).

The concept of "novation" comes from the Latin word *novatio* (change, renewal) and is the result of people's intellectual work. Innovation can be the result of fundamental, experimental, applied research in a certain field of human activity in order to improve its effectiveness. In conformity with D. Verbivskyi (2024), the concept of "novation" involves various forms of knowledge (new ideas, theories, discoveries, inventions, processes, models, structures, standards, methods, technologies, etc.). But not all knowledge has practical value, but becomes important when it is transformed into innovations that are able to renew productive forces, create prerequisites for technological or production changes. Only after being adopted for implementation and dissemination

does a novation acquire a new quality – it becomes an innovation. It is believed that innovation is a complex, multidimensional phenomenon that involves the introduction of new or significantly improved services, products, processes, or business models that create additional value for individual entities, organisations, and society as a whole.

S. Tolochko (2023) notes that innovations in education are a process associated with the creation, introduction, and dissemination of new ideas, means, methods, managerial and pedagogical technologies in the educational process, the result of which is an increase in the performance indicators of structural educational components, the transition of the system to another qualitative state. In conformity with D. Verbivskyi (2024), there are three most recognised approaches to defining innovations in Ukrainian pedagogical science. According to the first, innovations in education are changes based on novelties. The main indicator of innovativeness is newness, therefore any novelty will be an innovation. The criteria for assessing the effectiveness of innovation under this approach are both positive and negative

changes in the educational process. The second approach considers innovations in education as the introduction of new concepts into the content, goals, forms, methods, as well as into the organisation of joint activities of subjects of the educational process. Within this approach, innovations in education are novelties that lead to positive changes in the relevant education system where such innovations are used. In line with the third approach, not any introduction of newness that optimises the education system can be considered an innovation. Innovation is the introduction of newness into the content and organisation, novelty is the introduction of new concepts only into the organisation of the process, and novation involves a new method, methodology, technology. Therefore, the differentiation of innovations in education is a difficult methodological task, which is due to the complexity of the concepts of “innovation”, “pedagogical innovation” and “innovation in education”, which causes the emergence of numerous classification lists. Pedagogical innovations are divided into types, based on various classification features (Table 1).

Table 1. Classifications of pedagogical innovations

Approach/characteristic underlying the classification	Types of pedagogical innovations
By technological approach	Productive (obtaining fundamentally new products); procedural (new methods of organising production)
By the level of pedagogical innovation	Innovations-modernisation (aimed at achieving guaranteed results within the traditional reproductive orientation of the educational process); innovations-transformations (directing the traditional educational process in the research direction and organising educational and cognitive activities)
By the intensity of innovative change	Innovations of the zero order (practically regenerate the primary properties of the system); innovations of the first order (characterised by quantitative changes in the system with its unchanged quality); innovations of the second order (regrouping of system elements and organisational changes are carried out); innovations of the second order (regrouping of system elements and organisational changes are carried out); third-order innovations (adaptive changes in the education system occur in new conditions without going beyond the previous education model); third-order innovations (adaptive changes in the education system occur in new conditions without going beyond the previous education model); fourth-order innovations (mainly contain a new solution); fifth-order innovations (initiate the creation of “new generation” education systems); sixth-order innovations (provoke the creation of new-type educational systems with a qualitative change in the functional properties while preserving the functional system-forming principle); seventh-order innovations (modernisation of the education system, during which its main functional principle changes)

Table 1. Continued

Approach/characteristic underlying the classification	Types of pedagogical innovations
By volume	Point, systemic, strategic
By range of implementation	Single (implemented in one place and solve a separate problem); diffuse (implemented on a large scale)
By structural components of the educational process	Instructional, educational, managerial
By scale of application	Large-scale (significantly change the goal, content, structure, and result of the educational process); local (significantly change the forms, methods, and means of teaching, upbringing, and management)
By areas	Psychological and pedagogical (novelties in instructional, educational and managerial processes); scientific and industrial (computerisation, telecommunications, material and technical equipment); socio-economic (personality development technologies, novelties in the legal support of the education system, novelties in the economics of education)
Depending on the scope of application	Innovations in the content of education, innovations in the technology of teaching and upbringing, innovations in the organisation of the educational process, innovations in education management, innovations in educational ecology
By the scale of transformations	Partial (local, single); modular (a complex of interconnected partial novelties); systemic novelties (covering the entire educational institution)
Depending on the innovative potential	Modification, combinatorial, radical or fundamental, global, basic novelties
Depending on the position in relation to its predecessor	Substituting, cancelling, opening, retro-introduction
Depending on the place of appearance	Novelties in science, novelties in practice
Depending on the time of appearance	Historical novelties, modern novelties
Depending on the level of expectations	Expected (planned) and unexpected (unplanned) novelties
Depending on the field of pedagogical knowledge	Educational novelties (in the field of education), didactic novelties (in the field of learning), historical and pedagogical novelties (in the field of history of pedagogy)
Depending on the structural elements of education systems	Novelties in the goal setting, tasks, content of education and upbringing, forms, methods, approaches, teaching technologies, teaching aids, in the diagnostic system, in control, in the assessment of results, etc.
Depending on the personal attitude of the subjects of education	Novelties in the aspect of developing the abilities of applicants and teachers, in the field of developing the knowledge, skills, abilities, means of activity, competencies
By field of pedagogical application	Novelties in the educational process, in the training course, educational sphere, at the level of the education system, in education management
By types of interaction between participants in the educational process	Novelties in collective learning, group learning, tutoring, educating, family learning
By functionality	Novelties-conditions, novelties-products, managerial novelties
By means of implementation	Planned, periodic, systematic, spontaneous, unplanned, accidental novelties
By the scale of distribution	Novelties in the activities of one teacher, association of teachers, in an educational institution, in a group of educational institutions, in the region, at the state level, at the international level
By socio-pedagogical significance	Novelties in educational institutions of a certain type, for certain professional-typological groups of teachers

Table 1. Continued

Approach/characteristic underlying the classification	Types of pedagogical innovations
By the volume of innovative activities	Local, global, mass novelties
By the degree of intended transformations	Corrective, modernising, modifying, radical, revolutionary novelties

Source: developed by the authors based on L. Rebukha et al. (2022)

Therefore, typologies of pedagogical innovations are proposed by scientists based on various classification features and most such typologies are based on classification systems of innovations and do not take into account the specifics of the field of education. The same innovation can be presented in different groups depending on which of its features is taken into account in a particular case. O. Prokopova et al. (2023) noted that methodological ideas about innovations in education (innovative processes in education, innovation dynamics, new knowledge) are of particular value. Such ideas can be introduced through methods and forms of learning, innovative technologies.

D. Verbivskiy (2024) argues that from the point of view of essential features, innovation

should be considered as a result, process, system, activity, or technology (Fig. 1). As a process, innovation involves a change in the state of the system and a certain activity of a person, and innovation as a result is the reproduction (creation) of new concepts, which has a specific name “novation”. Innovation as a system is the relationship between the components of the innovation process and the institutions that ensure it. Innovation as an activity is directly aimed at applying the results of scientific research. Innovation as a technology involves a significant improvement in the structure and quality of production. Therefore, innovation as a result is broader in content, as it includes a system, activity, process, technology and a specific product.

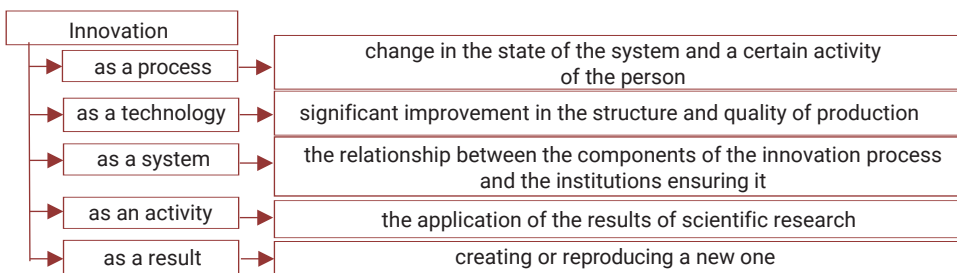


Figure 1. Approaches to interpreting the essence of innovations

Source: developed by the authors based on D. Verbivskiy (2024)

The concept of “innovation” is not stable and depends on what the scientist invests in its essence in a particular case, but a common feature of all concepts will be the introduction of new ideas into practice in order to achieve qualitative changes. L. Rebukha et al. (2022) argue that in the

conditions of modernisation of education aimed at improving its quality, innovative learning technologies deserve the greatest attention, such as: digital, personalised adaptive learning, partner technologies (collaboration technology), which include interactive technology, training, project,

problem-based learning, game technology, case technology. The importance of implementing such innovative technologies as gamification and project activities during the training of students is emphasised by S. Tolochko (2023). The author's research focused on the positive results of using the aforementioned innovative technologies, namely, increasing learning effectiveness, visibility of the results of the work of all team members in gamification, the ability to use simple examples to explain complex phenomena and present various ways of presenting situations in order to understand the research problem in project activities. The researcher named the forms: educational games (intragroup or intergroup, matches of two teams, competitions, global digital didactic games), methods (research, creative, practice-oriented) and tools (templates and designers, mobile services and applications, presentations and videos, flash videos (intellectual games), videos, expeditions, reports), which are effective in terms of forming the competencies of students in gamification and project technology. O. Bulgakova & V. Zosimov (2023) studied the impact of gamification on independent and active learning, in particular, scientists proved that gaming activities contribute to improving the academic performance of students, create an inclusive online community for reviewing basic concepts, help establish effective interaction between teachers and students, etc.

The didactic capabilities of project technology allow students to independently master the material of several educational components. I. Buzhyna *et al.* (2023) believe that while working on a project, students not only acquire the necessary skills and abilities, but also form personal qualities that are important for effective socialisation of the individual. In project activities, students constantly use presentations and search for information on the Internet. Pursuant to O. Voloshyna & V. Zelinsky (2023), work on research projects contributes to the formation of a high level of professionalism of future specialists. M. Kozyar *et al.* (2023) note that project-based learning

technology stimulates the formation of communicative, managerial, motivational and cognitive components of professional competence of future specialists, in particular officers.

In educational practice, project technology and gamification are successfully combined and contribute to the development of creativity, initiative, and interaction skills during group activities. This combination provides greater dynamism of the educational process, affecting both the motivation of students and the course of the process of forming the integral competence of future specialists. According to O. Patlaichuk *et al.* (2025), the combination of these interactive technologies provides the opportunity to create a flexible learning system that takes into account the individual characteristics of students, which contributes to greater inclusion of students in the educational process, the activity, and also allows for feedback. As noted by R. Gurevych *et al.* (2021), the development of the information society of the transformation of higher education is closely related to the introduction of modern information and communication technologies in order to increase the quantitative and qualitative indicators of the education sector and the effectiveness of learning. The digital transformation of education involves equipping higher education institutions with modern digital technologies aimed at increasing the accessibility of education and educational resources for students and teachers. One of the most significant positive features of the digitalisation of education is the possibility of diversifying forms and methods of learning, aimed at the needs of higher education students and taking into account the requirements of the labour market.

E. Mukul & G. Büyüközkan (2023) conducted a systematic review of the digital transformation of education and emphasised the challenges and opportunities for higher education institutions. With the digitalisation of the educational system, there are a sufficient number of predictions regarding its results: high-quality and full-fledged personalisation of the educational process;

support for sustainable learning motivation of students at all stages of the educational process; ensuring operational feedback with students, rapid and objective assessment of the learning outcomes during the performance of a specific educational task; the deepest possible integration of theoretical and practical learning, ensuring the project aspect of educational activities; significant reduction of periods of deployment, development, mastering of educational programmes; increasing information openness and transparency of the education system (Kremen *et al.*, 2022); ensuring an individual educational trajectory through the widespread use of electronic resources and modern control and diagnostic tools (Rebukha *et al.*, 2022).

The use of information and communication technologies significantly increases the efficiency of the educational process. Information and communication technologies include the use of the Internet, telecommunication networks, computers, software, audiovisual systems, multimedia materials, electronic learning tools, video conferences, which provide access to information, allow creating, storing, changing and transferring it. The implementation: contributes to a more thorough assimilation of knowledge and skills by students; develops a creative approach to educational activities in higher education students; provides objective control and testing of students' knowledge; contributes to the formation of personal qualities and professional competencies of students; allows for a differentiated approach to education. With the help of multimedia tools, the teacher has the opportunity to present educational information in various formats, such as text, animation, graphics, sound and video. The teacher independently chooses the forms and sequence of teaching the material and, in order to provide additional explanations of complex issues, can use videos created by other teachers.

Modern approaches to the organisation of the educational process demonstrate the high effectiveness of video content as a tool for implementing the concept of lifelong learning.

Video-oriented learning should be considered as a pedagogical technology aimed at broadcasting the content of education through the integration of visual, audio and text components, which provides a multisensory experience for students. This technology is characterised by flexibility and variability, which creates opportunities, in particular, for the implementation of the micro-learning strategy. The typology of video resources is quite extensive and includes demonstration, explanatory, case video, interactive and personalised materials. The methodological basis for the implementation of video learning is the principles of self-management, collaboration, contextualisation, and individualisation of the educational trajectory. At the same time, the effectiveness of such an approach correlates with the level of formation of self-regulation skills, in particular goal-setting and psycho-emotional stability, among students.

As noted by V. Rebenok & O. Torubara (2023), when teaching professional disciplines, information and communication technologies allow creating models of various phenomena and processes, simulating the operation of laboratory units and stands, conducting measurements, processing experimental results, obtaining instrument indicators using specialised sensors, building tables, diagrams, and graphs. Modelling programmes greatly facilitate the solution of various tasks by higher education students, and working with digital technologies allows activating students' creative potential, forming research interest and increasing cognitive motivation.

According to I. Krasnoshchok *et al.* (2023), the use of simulations, virtual reality, web conferences and other digital tools contributes to the development of critical thinking, communication skills, creativity, and cooperation in higher education students. During such classes, situations are created where future specialists can interact, make decisions, solve problems. Yu. Danylyevych *et al.* (2021) proved that Internet methods are effective in training future specialists in higher education institutions, which provide significant

advantages during the organisation of educational activities due to the ability to independently search for the necessary information. The use of cloud technologies allows storing a significant amount of educational information, video conferences provide effective communication between the teacher and higher education students, and online platforms allow using various forms of monitoring the educational achievements of students. V. Kremen *et al.* (2022) concluded that immersive learning technology using augmented and virtual reality, voice interfaces, machine analysis of user actions, automation of educational processes, testing and learning results (with artificial intelligence), certification using blockchain technologies, inclusive technologies affect the implementation of the principles of open education, ensuring access to quality education for each student, improving distance learning, and implementing the idea of the Internet of Things. The use of artificial intelligence has significant potential for ensuring high-quality training of specialists in higher education institutions due to its ability to automatically process and analyse a large amount of data. In addition, according to O. Nalyvaiko (2023), the capabilities of neural networks allow for an individual approach to each student, to predict the student's learning trajectory, guided by the student's achievements and preferences in the learning process, etc.

The integration of artificial intelligence technologies into higher education is both promising and controversial. There is a strong consensus in the scientific community about the potential of artificial intelligence in increasing personalisation, optimising educational practices and promoting the development of digital competencies. However, there are also deep disagreements, in particular in ethical governance, readiness for implementation and institutional coherence. As pointed out by M. de la Fuente & G. Farhadian (2025), higher education institutions cannot afford to treat artificial intelligence as a neutral tool: its integration should be actively shaped on the basis of ethical foresight,

inclusive management and social context, thus going beyond the boundaries of implementation, assuming transformational leadership in improving the quality of specialist training using the capabilities of artificial intelligence, while ensuring consistency with core academic values.

The active use of innovative technologies in the educational process of higher education is one of the promising opportunities for improving the professional training of future specialists, since such technologies are focused on the formation of professional competencies, individual development of students. The innovative technologies contribute to the intensification of educational activity, increasing motivation, and help overcome stereotypes and monotony in learning. Due to these capabilities, innovative technologies are an important component of effective and high-quality education.

Conclusions

The analysis of scientific approaches to determining the essence of innovations in education made it possible to find out that innovations in education are changes based on novelties; but it is not about any introduction of newness that improves the education system. The innovations also comprise the introduction of new concepts into the content, goals, forms, methods, and organisation of subject-subject activity. The latter statement most accurately reflects the essence of innovative technologies in the educational process. In the scientific literature, there are a significant number of typologies of pedagogical innovations, compiled on the basis of various classification features, but most typologies are based on classification systems of innovations without taking into account the specifics of the educational system.

Theoretical understanding of innovative technologies allows concluding that these technologies are not only tools for modernising the learning process, but also act as fundamental factors in transforming the concept of professional training of specialists in higher education institutions. The implementation directly

depends on the organisational and managerial, socio-economic, pedagogical, psychological, digital, and other components of the educational environment. Therefore, the quality of professional training of future specialists in the aspect of the implementation of innovative technologies is a set that combines highly developed professional competencies, the ability of subjects of the educational process to engage in innovative activity, an interdisciplinary approach to organising the learning process, critical thinking of higher education students, the desire to learn throughout life, self-reflection, etc.

Innovative technologies (digital, project, gamification, training, problem-based learning, case technology, immersive (virtual, augmented and mixed reality), blockchain technology, inclusiveness) in the educational process of training specialists allow achieving better programme learning outcomes; intensify the process of developing abilities, creativity, and initiative; contribute to the formation and development of soft skills (communication, leadership, teamwork, empathy); provide personalisation of learning and increase learning motivation; activate creative potential and form research interest;

promote information openness and transparency of the education system; provide objective control and verification of students' knowledge, etc. The key determinants in the implementation of innovative technologies in the professional training system are the digital educational environment of a higher education institution, partnership relations between subjects of education, shifting the emphasis from reproductive forms of learning to activity-competence forms, ensuring activation and personalisation of the learning process, and the formation of an innovative culture of teachers. Prospects for further research on the selected topic will focus on the targeted selection of innovative technologies according to the programme learning outcomes of specific specialists.

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Інноваційні технології як засіб якісної підготовки фахівців у закладах вищої освіти

Оксана Васюк

Доктор педагогічних наук, професор
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0000-0003-0926-7599>

Світлана Виговська

Кандидат педагогічних наук, доцент
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0000-0002-8270-7207>

Леся Маценко

Кандидат педагогічних наук, доцент
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0000-0003-2939-4229>

Ольга Сиреєжко

Кандидат педагогічних наук, старший викладач
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0000-0001-9101-6590>

Анотація. На сучасному етапі розвитку системи національної вищої освіти інноваційні технології використовуються як засоби якісної підготовки конкурентоздатних фахівців, що підтримується нормативними документами. Метою наукової статті було розкрити сутність інновацій в освіті, показати роль інновацій у процесі якісної підготовки здобувачів вищої освіти, окреслити домінуючі чинники впровадження інноваційних технологій в освітній процес. Для забезпечення достовірності результатів дослідження застосовано комплекс методів наукового пошуку: аналіз, синтез, порівняння та узагальнення, спостереження, табличний метод. Як методологічне підґрунтя дослідження використано компетентнісний підхід. Аналіз наукових джерел дозволив дійти висновку, що інноваційними технологіями стало введення нового у зміст, цілі, методи, форми, організацію освітньої діяльності. Різноманітність типологій педагогічних інновацій засвідчили, що вони були не лише інструментами модернізації процесу навчання, а виступали засадовими чинниками трансформації парадигми професійної підготовки фахівців. Упровадження інноваційних технологій в освітній процес залежить від організаційно-управлінських, соціально-економічних, педагогічних, психологічних, цифрових складників. Якість професійної підготовки майбутніх фахівців у контексті впровадження інноваційних технологій визначається сукупністю сформованих професійних компетентностей, здатністю студентів до інноваційної діяльності, навчання впродовж життя, критичного мислення та саморефлексії, а також реалізацією міждисциплінарного підходу в організації навчання. Інноваційні технології дозволяють досягти кращих програмних результатів навчання; інтенсифікують розвиток здібностей, креативності, ініціативності; сприяють формуванню

soft skills; забезпечують персоналізацію навчання та підвищують навчальну мотивацію; активізують творчий потенціал, формують дослідницький інтерес; сприяють відкритості й прозорості освітньої системи; забезпечують об'єктивний контроль знань студентів. Ефективність упровадження інноваційних технологій у систему професійної підготовки обумовлена цифровим освітнім середовищем, партнерськими стосунками суб'єктів навчання, діяльнісно-компетентнісними формами навчання, активізацією та персоналізацією процесу навчання, інноваційною культурою викладачів. Практична цінність роботи полягає в узагальненні значення інноваційних технологій у контексті підвищення якості освіти студентів

Ключові слова: компетентнісний підхід; професійні компетентності; інновації в освіті; персоналізація навчання; якість освіти