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THE CURRENT STATE OF IMPLEMENTATION OF VOCATIONAL-PRACTICAL TRAINING OF FUTURE CONSTRUCTION INDUSTRY SPECIALISTS IN THE VOCATIONAL EDUCATION SYSTEM OF UKRAINE

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Abstract

Relevance: the modern conditions of global instability and the unprecedented losses sustained by the Ukrainian economy as a result of the full-scale aggression of the Russian Federation in 2022–2025, the vocational-practical training of qualified construction industry specialists acquires special significance; the educational process during the implementation of vocational-practical training is oriented and adapted to the requirements of production and its regularities, which necessitates the improvement of the content of educational and training programs in accordance with production conditions, while the use of innovative technologies occupies a priority place both in the industrial sector and in the educational process.

*Objective***:** to analyze the current state of implementation of vocational-practical training of future construction industry specialists in the vocational education system of Ukraine, to substantiate measures to overcome educational problems caused by the war of the Russian Federation against our state, and to formulate requirements for updating educational programs in accordance with global and domestic trends in the development of the construction industry, the challenges of the state's post-war recovery, the concept of sustainable development, and industrial modernization.

*Methods***:** theoretical analysis of scientific sources, normative-legal documents, and empirical data – to determine the degree of research into the current state of implementation of vocational-practical training of future construction industry specialists in the vocational education system of Ukraine; surveying pedagogical staff – to assess the level of organization of vocational-practical training in vocational education institutions of the construction profile; synthesis and generalization – to form conclusions regarding the measures necessary to overcome educational problems caused by the war and the requirements for updating educational programs.

*Results***:** the modern conditions of the implementation of vocational-practical training of future construction industry specialists in the vocational education system of Ukraine have been determined; measures to overcome problems caused by the war of the Russian Federation against our state have been substantiated; requirements for updating educational programs in accordance with global and domestic trends in the development of the construction industry, the challenges of the state's post-war recovery, the concept of sustainable development, and industrial modernization have been outlined.

*Conclusions***:** it has been clarified that the current state of vocational-practical training of future construction industry specialists in Ukraine is sufficient, but limited by an outdated material-technical base and insufficient implementation of innovative production technologies; it has been substantiated that the successful training of qualified

personnel for the construction industry largely depends on effective forms and methods of organizing vocational-practical training, which involves the practical mastering and practicing of professional competencies of the future profession; priority requirements for the implementation of vocational-practical training of future construction industry specialists have been defined (adaptation of educational programs to Industry 5.0 standards, with an emphasis on human-centricity, strengthening the base of scientific and technical innovations, environmental literacy, and social responsibility, development of creative competencies and leadership; integration of ESG criteria into professional competencies, particularly in the context of the construction industry; orientation of the content of vocational-practical training towards the mastering by learners of innovative methods and technologies that will allow for the effective and high-quality performance of production tasks in the construction industry under conditions of rapid socio-economic global development; combination of modern theoretical knowledge of learners with practical skills acquired in a real production environment; development of the emotional intelligence of future specialists, the capacity for teamwork, and critical thinking).

Keywords: *vocational-practical training; future construction industry specialists; vocational education system; innovative technologies in construction; modern pedagogical technologies.*

Introduction. Here is the professional translation of the provided scientific text into English. The structure, paragraph count, and sentence sequence strictly correspond to the original.

In the current conditions of global instability and unprecedented losses suffered by the Ukrainian economy as a result of the full-scale aggression of the rf in 2022–2025, the professional-practical training of qualified specialists in the construction industry acquires special significance. Requirements for Ukrainian vocational education, particularly in the construction sector, are determined by global trends in industry development, the goals of the Concept of Sustainable Development, the principles of Industry 5.0, and specifically, the reorientation of the economy toward ESG standards, the digitalization of production processes, and the growing role of human capital. At the same time, our state must overcome the consequences of Russian intervention under the brutal conditions of war–rebuilding destroyed critical infrastructure, overcoming the energy crisis, logistical limitations, inflationary waves, and a shortage of qualified personnel. Despite wartime challenges, the content and forms of domestic vocational education are oriented toward modern global trends regarding the digitalization of production processes and the implementation of ESG principles in the economy, integrating innovative approaches to the organization of education, and forming the environmental consciousness and emotional intelligence of the country's future labor potential.

The importance of ensuring quality education for future specialists is one of the 17 key Sustainable Development Goals for the period up to 2030 (UN, 2015), alongside the goals of ensuring decent work and economic growth, industry, innovation and infrastructure development, and other important directions of global progress adopted at the UN Sustainable Development Summit.

The Report on the Implementation of the Sustainable Development Goals in 2025 (United Nations Department of Economic and Social Affairs, 2025) notes that although education is vital for the sustainable development of society, tangible progressive changes in resolving the issue of accessible quality education for all strata of the population in various countries have not yet been achieved. According to the report, education quality results are declining in many countries. At the same time, substantial inequality in access to quality education persists due to gender, wealth, and geographical location.

Among the recommendations of the UN Department of Economic and Social Affairs regarding the acceleration of progress in ensuring accessible quality education for all population strata, priority should be given to the development of inclusive education and the expansion of funding for the educational sector. Such an approach will simultaneously allow for solving problems of access to educational services, ensuring the quality of education, and equality of rights to learning. In this context, the introduction of effective legal norms to

guarantee compulsory free education, the elimination of digital and infrastructural imbalances (especially in the least developed countries), and the expansion of opportunities for lifelong learning for adults and marginalized population groups are envisaged.

An important component of ensuring quality professional education in our country is professional-practical training, which is based on: a competency-based approach; the integration of theoretical knowledge with practical skills; the use of modern educational and professional technologies, particularly digital simulators, artificial intelligence, virtual (VR) and augmented reality (AR) technologies; BIM modeling, etc.

Sources of research. An analysis of scientific achievements regarding the professional-practical training of future construction industry specialists in the system of vocational and professional pre-higher education indicates that Ukrainian scholars have researched various aspects of the problems of training future builders, in particular: scientific foundations of the development of the construction industry of Ukraine (Banakh, Pavlov, & Radkevych, 2017); formation of energy-efficient competence of future qualified workers in the construction industry (Herliand, Homeniuk, Drozich, Kalenskyi, Pashchenko, & Piatnychuk, 2025); innovative energy-efficient technologies in the professional training of future construction industry specialists (Homeniuk, 2025); issues of professional-practical training of future builders in vocational (vocational-technical) education institutions (Lylik, Savytska, Buchynska, & Yashkina, 2025); modular-competency approach in the training of qualified workers in the construction industry; assessment of the quality of specialist training in colleges (Luzan, Lapa, Pashchenko, Mosia, Vanina, Yamkovyi, & Kalenskyi, 2022), and others.

An analysis of the organization of the educational process for future construction industry specialists in vocational education institutions indicates that the basic approach to organizing learning is its orientation toward an in-depth professional-practical component at all stages of student training. Under such an approach, there is a maximum approximation of the students' professional education to the real conditions of their future professional activity. Besides the acquisition of professional experience, the practice-oriented component for future specialists is an important foundation for their psychological adaptation to the realities of the modern production environment. The educational process during the implementation of professional-practical training is oriented and adapted to production requirements and its regularities, which necessitates the improvement of the content of educational and training programs in accordance with production conditions, wherein the use of innovative technologies occupies a priority place both in the production industry and in the educational process. The significance of innovative technologies in the vocational education process grows simultaneously with the increase in the degree of implementation of scientific and technical progress achievements in every branch of production. At the current stage of economic development, technical progress, and the scientific-technical revolution, the necessity for the rapid restructuring of production using new highly efficient technologies comes to the fore. The process of updating technologies and equipment has intensified particularly with the development of global technological progress, as well as the intensification of research and development works in Ukraine. The modern construction industry develops under conditions of fierce competition and rapid technological changes. To ensure the efficiency of production processes and create competitive advantages, construction enterprises must focus on the development and implementation of innovative technologies that reduce construction costs, increase labor safety, profitability, and production quality, and ensure environmental friendliness and energy efficiency, etc. With the development of innovations in the construction industry, the content and technologies of the professional-practical training of future builders must change and evolve.

The purpose of the article is to analyze the current state of the implementation of professional-practical training of future construction industry specialists in the vocational education system of Ukraine, to substantiate measures for overcoming educational problems caused by the war of the RF

against our state, and to formulate requirements for updating educational programs in accordance with global and domestic trends in construction industry development, the challenges of the state's post-war recovery, the concept of sustainable development, and industrial modernization.

Research methods: theoretical analysis of scientific sources, normative-legal documents, and empirical data–to determine the degree to which the current state of implementation of professional-practical training of future construction industry specialists in the vocational education system of Ukraine has been studied; survey of pedagogical staff–to assess the level of organization of professional-practical training in vocational education institutions of the construction profile; synthesis and generalization–to form conclusions regarding measures necessary to overcome educational problems caused by the war, and requirements for updating educational programs.

Results and discussion. The professional-practical training of future builders is one of the important prerequisites for the successful implementation of tasks of modern professional education, aimed at resolving urgent issues of the state's recovery and development, overcoming global world challenges, and ensuring the rapid development of scientific and technical progress. The successful organization of professional-practical training for future specialists envisages the adaptation of educational and training programs to labor market requirements, the use of innovative approaches in teaching, and the implementation of active cooperation with construction businesses. It is precisely through the integration of theoretical knowledge with practical skills that future specialists will be able to work successfully with the latest technologies and perform tasks aimed at the sustainable development of the construction industry (Kruchek & Subina, 2025). The modern paradigm of vocational education development requires a real partnership between educational institutions and the labor market. The training of a qualified worker requires significant financial and time resources, which these enterprises usually do not have. At the same time, the level of competence of a qualified worker determines the quality of construction works and services and must meet market requirements and consumer expectations (Lylik, Savytska, Buchynska & Yashkina, 2025).

Mastering innovative methods and technologies by students, which will allow for the effective and high-quality performance of production tasks, is a primary task in forming the professional competencies of future construction industry specialists in conditions of rapid global socio-economic development. Thus, in particular, an important direction in the implementation of construction is the use of the latest machinery. Modern construction machines and equipment, equipped with diverse functions, allow work to be conducted quickly, efficiently, and safely. Innovative technologies in construction also envisage the use of new materials and structures. Such technologies ensure a reduction in construction costs, energy efficiency, and the durability of structures.

The use of innovative methods allows for the creation of comfortable buildings that meet the requirements and demands of modern society. One of the most important achievements in the construction industry today is the application of the potential of artificial intelligence, which contributes to the realization of new opportunities for construction development, allows for the automation of many technical processes, and ensures more precise and efficient execution of production tasks.

A productive achievement in the automation of the construction industry is also the use of drones, robots, and automatic mechanisms capable of performing complex works, relieving people of heavy physical loads and reducing injury risks. The ability of robots to work continuously ensures, in particular, the acceleration of the pace of production task execution and a reduction in labor costs.

The use of virtual reality (VR) technologies in construction creates opportunities for preparing detailed object models, as well as introducing additional functions, such as the visualization of movement and lighting changes, and the sensation of scales and spatial characteristics of future buildings and structures. Thanks to VR technologies, clients and project teams can study the project in greater detail and make necessary changes even before construction begins.

It is also important to form in future builders knowledge and skills regarding the use of modern construction materials and innovations that allow for increasing productivity and work quality. In particular, the use of fast-curing concrete mixtures allows for reducing the time for curing and strengthening structures, which accelerates construction rates; the application of automatic quality control systems allows for timely detection and elimination of any shortcomings and defects, which ensures the high quality of executed works, etc. (Modern technologies in construction – innovations and tips for successful project implementation, 2024).

The conducted analysis of modern approaches to the implementation of professional-practical training allows for asserting that the leading directions of professional-practical training today can be considered: orientation toward relevant educational and professional standards and innovative production experience; mastering digital tools and innovative methods and technologies of the construction industry; forming such soft skills as communicative abilities, the ability to work in a team, the ability to take responsibility, etc.; involving employers and leading specialists of the construction industry in the development of educational programs, teaching, and assessment of learning outcomes; certification of specialists in accordance with labor market requirements, etc.

At the same time, as experience shows, the dynamic development of production innovations and their successful implementation in the educational process are hindered by wartime challenges, in which Ukrainian education has been situated since 2022. Such trends are confirmed by the results of a survey conducted within the framework of the scientific research "Innovative methods of professional-practical training of future construction industry specialists in conditions of the post-war recovery of Ukraine" by employees of the Department of Professional-Practical Training of the IVE NAES of Ukraine in 2025.

More than 2070 pedagogical workers from all regions of Ukraine participated in the survey. Among the surveyed pedagogical workers, specialists whose pedagogical experience exceeded 20 years constituted almost 52% (51.9%); pedagogical workers with 11–20 years of pedagogical work experience constituted 23.3%; workers with 4–10 years of experience constituted 13.8%, and the rest, 11%, had pedagogical experience of less than 3 years (Fig. 1).

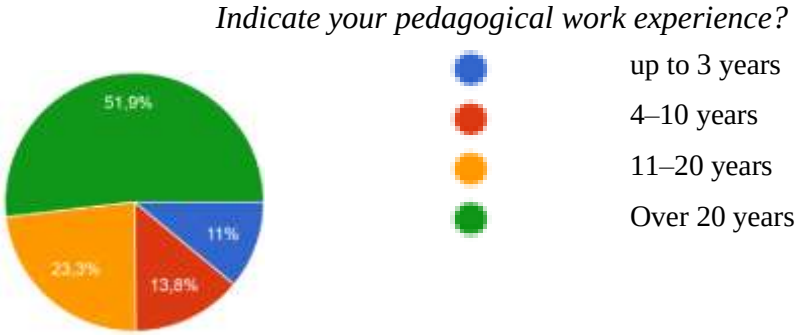

Fig. 1. Indicators of respondent distribution by pedagogical work experience.

Only 22.2% of respondents rated the general level of organization of professional-practical training at their own educational institution as high, nearly 66% of those surveyed as sufficient, 10.6% of pedagogical staff as average, and, unfortunately, 1.4% of survey participants consider the level of organization of professional-practical training at their educational institution to be low (Fig. 2).

Rate the general level of organization of professional-practical training at your educational institution

Fig. 2. Assessment indicators of the general level of professional-practical training in educational institutions where the respondents are employed.

62% of those surveyed believe that the content of professional-practical training at their educational institution fully meets the modern requirements of the labor market; 37.2% of respondents note partial compliance; 0.8% of survey participants negatively assess the compliance of the content of practical training at their own institution (Fig. 3).

Does the content of professional and practical training meet the modern requirements of the labor market?

Fig. 3. Indicators of respondents' assessment regarding the alignment of the content of professional-practical training in their educational institutions with labor market requirements.

78.7% of those surveyed claim that in their educational institution, curricula for industrial training and industrial practice are regularly updated in accordance with changes in production and technologies; 20.7% of pedagogical staff believe that such updating occurs only occasionally; 0.6% of respondents believe that the necessary updating of programs is not carried out (Fig. 4).

Are the curricula for industrial training and industrial practice in your educational institution updated in accordance with changes in production and technologies?

Fig. 4. Distribution of responses regarding the updating of industrial training and industrial practice curricula in accordance with technological and production changes.

The survey results indicate that the content of professional-practical training reflects issues of the greening of production (this opinion is held by 27.4% of respondents); energy efficiency of production (63.7% of responses); cost-effectiveness of production (50.7%) and human-centrism (29.3%). The total exceeds 100%, as respondents could choose several answer options (Fig. 5)..

Which of the issues listed below are reflected in the content of professional-practical training carried out in your educational institution?

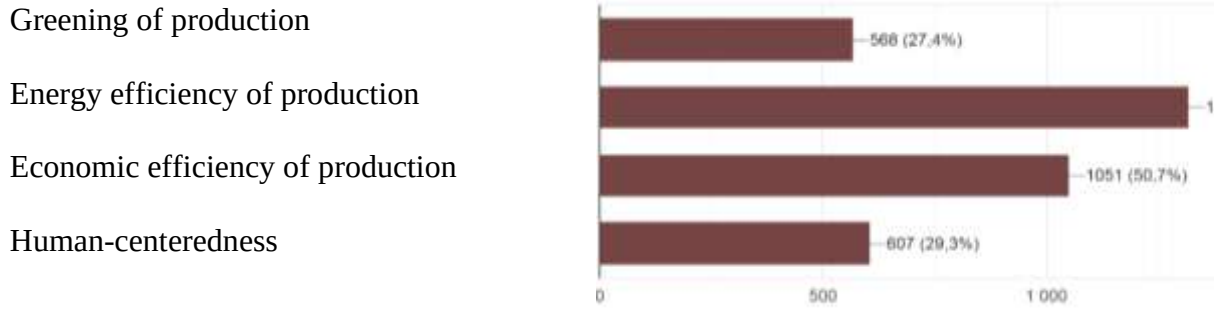

Fig. 5. Distribution of responses regarding the coverage of current issues of modern production in the content of professional-practical training.

Among the innovative technologies used in the professional and practical training of future specialists, the survey participants identified the following from the proposed list: adaptive manufacturing technologies – 15.6%; smart manufacturing technologies – 26.1%; robotics and automation – 10.7%; augmented and virtual reality technologies – 12%; green and energy-efficient technologies – 16.9%; nano- and manipulative technologies – 2%; biotechnologies – 2.2%; digital twin technologies – 5.1%, etc. At the same time, unfortunately, 40.1% of respondents indicated that none of the innovative technologies listed in the question are used when organizing professional and practical training in their educational institution (Fig. 6).

Which of the following manufacturing innovative technologies are used when organizing the professional and practical training of future specialists in your educational institution?

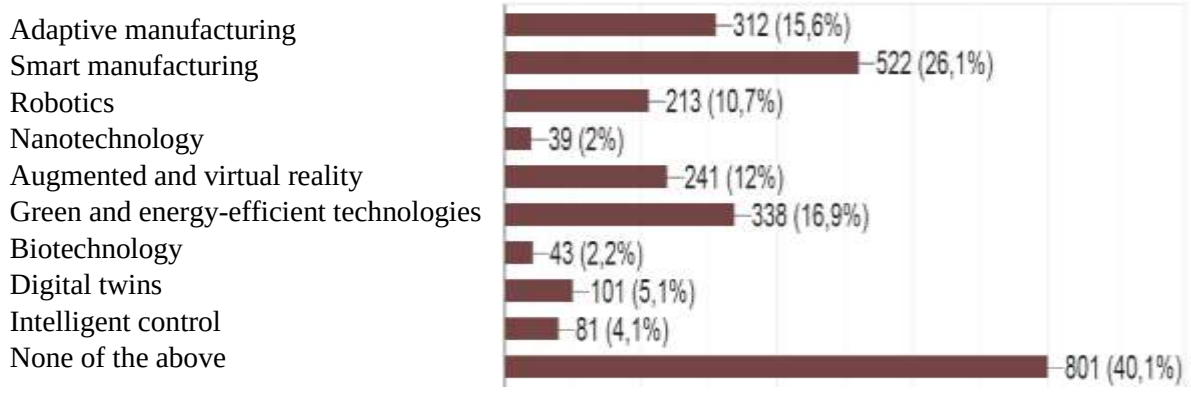

Fig. 6. Distribution of responses regarding the use of manufacturing innovative technologies when organizing the professional and practical training of future specialists.

The results of the responses regarding the use of modern pedagogical technologies in the professional and practical training of future specialists look more optimistic. Test participants were offered to choose from a list those pedagogical technologies that are used in their educational institution during the

process of training future specialists. Thus, 59.1% of respondents reported the use of problem-based learning technologies in organizing professional and practical training; project-based technologies are applied by 48.4% of instructors; game-based technologies are used by 65.8% of respondents; information and communication technologies are used by 75.5%; cooperative learning technologies – 57.7%; student-centered learning technologies – 40.8%; simulation learning technologies – 23.1%; critical thinking development technologies – 29.7%; research and inquiry-based technologies are used by 32.3% of those surveyed; artificial intelligence technologies – by 30.7% of respondents. The total exceeded 100%, as respondents could choose several answer options. Only 1.5% of those surveyed answered that they use none of the technologies listed in the question in the educational process (Fig. 7).

Which of the following pedagogical technologies are used when organizing the professional and practical training of future specialists in your educational institution?

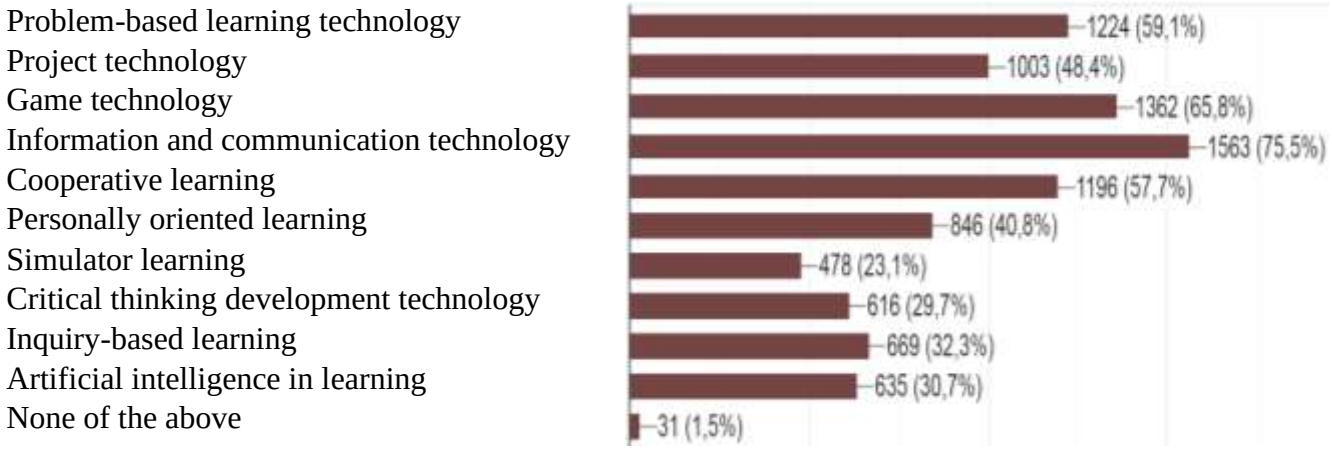

Fig. 7. Results of responses to the question about the use of modern pedagogical technologies when organizing the professional and practical training of students.

Respondents' answers regarding their educational institution's readiness to apply innovative methodologies in the conditions of professional and practical training on a 5-point scale (where 5 is the highest level) showed that the vast majority of educators rated the level of their own educational institution's readiness in terms of technical, methodological, and teaching competency support at only four points, as shown in Fig. 8.

Assess the readiness of your educational institution to apply innovative methodologies of professional and practical training (on a 5-point scale, where 5 is the highest level of readiness)

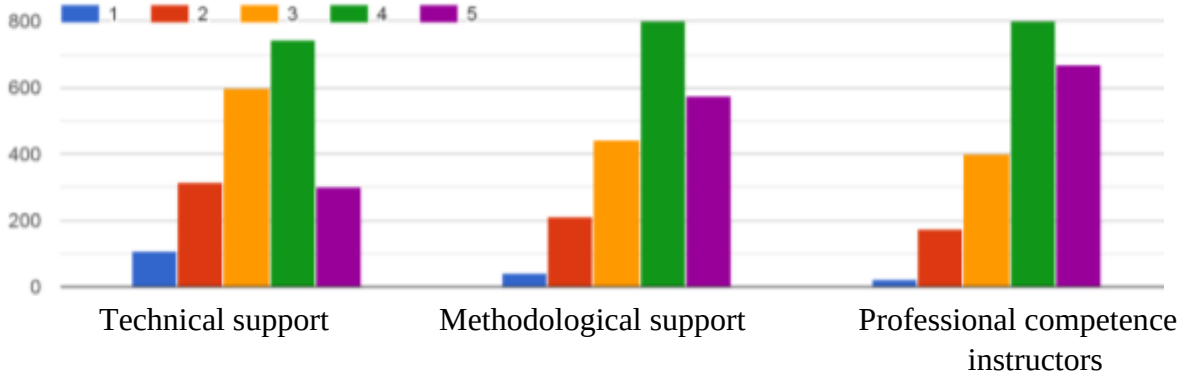

Fig. 8. Distribution of respondents' opinions regarding the level of readiness of their educational institutions to apply innovative methodologies when organizing professional and practical training.

As the survey results testify, among the main problems in organizing the professional and practical training of future specialists, the following are named: outdated material and technical base – 52.8% of respondents; lack of effective motivation of the teaching staff to master and use innovative educational technologies – 55.1%; lack of modern technologies for the practical training of future specialists – 21.8% (which, in fact, may be the result of an outdated material and technical base).

The conducted analysis indicates that in the conditions of war, the necessity of restoring critical infrastructure, arrangement, and social support of citizens affected by armed aggression, developing the vocational education system is not simple. The integration of modern technologies into the educational process has its challenges, specifically the necessity of updating the material and technical base, installing modern equipment and software, and appropriate training of instructors for the effective use of innovations in work.

Also interesting in this context are the results of the All-Ukrainian survey of vocational education students, where it was determined that the main factors influencing the mastering of construction professions, according to the opinion of all participants of professional and practical training – employers, pedagogical staff, and students – are: undergoing industrial practice at enterprises; the presence of qualified mentors at practice bases and proper qualification of the educational institution's pedagogical staff; material and technical provision of enterprises and vocational education institutions (Lylyk, I. V., Savytska, N. L., Buchynska, O. V., & Yashkina, O. I., 2025).

To solve the problematic issues that have arisen in the vocational education system at the present time, one can orient oneself to a certain extent on the provisions of the Concept of the State Targeted Social Program for the Development of Vocational Education for 2022-2027, among which are: implementation of a decentralized management and financing model oriented towards results in the vocational education system; updating the content of educational programs and improving the quality level of vocational education in accordance with the requirements of the modern labor market; development of various forms of partnership in the sphere of vocational education; increasing the motivation of the teaching staff towards creative activity and the implementation of modern technologies in the educational process, attracting young personnel and qualified specialists to work in vocational education institutions; support for international cooperation programs, academic mobility, and exchange of experience of vocational education institution employees, etc. (Cabinet of Ministers of Ukraine, 2021).

Relevant government initiatives contribute significantly to the development and restoration of the vocational education system, specifically: increasing the volume of financing for the educational sector during 2024-2025, implementation of government projects for the modernization of the material and technical base of vocational education institutions, introduction of a new model for financing the development of educators "Money follows the teacher", etc. According to the Minister of Education and Science of Ukraine O. Lisovyi at the annual educational conference "August 2025" (August 21, 2025), special attention in the 2025-2026 academic year will again be paid to vocational education. Over 200 new workshops equipped with modern equipment have already been created in more than 70 institutions, and such activity continues. Despite the war and the moral and physical destruction caused by it, Ukraine continues to ensure substantial financing of the educational sector, viewing it as the foundation for the restoration and development of the state. At the same time, O. Lisovyi emphasized that the education system must not only withstand extraordinary conditions but also become a driver of cultural and societal changes (Lykhovid, 2025).

Conclusion. Professional and practical training in educational institutions of Ukraine is generally evaluated as sufficient, although only one-fifth of educators consider it high. The content of training mostly corresponds to the requirements of the labor market, programs are regularly updated in accordance with technological changes, and current production problems (energy efficiency, cost-effectiveness, greening) are taken into account in learning. At the same time, the use of innovative manufacturing technologies remains limited (more than 40% of institutions do not apply them). Instead, pedagogical technologies (ICT, game-based, problem-based and project-based learning,

cooperative methods) are actively integrated into the training process, which indicates educators' attention to the modernization of the educational environment. The overwhelming number of respondents could not rate the readiness of their own educational institutions for the implementation of innovative methodologies with the highest score, which is caused by a number of problems (outdated material and technical base, insufficient motivation of educators to master the newest technologies, and a lack of modern means of practical training). Thus, the current state can be characterized as transitional: basic conditions are provided, but a qualitative breakthrough requires updating the material base, wider implementation of innovative manufacturing technologies, and strengthening the motivation of instructors.

Successful training of qualified personnel for the construction industry largely depends on effective forms and methods of organizing professional and practical training, which provides for the practical mastering and practicing of professional competencies of the future profession; undergoing industrial practice at enterprises under the guidance of experienced mentors; proper qualification of the educational institution's pedagogical staff; modern material and technical provision of practice base enterprises and vocational education institutions. Considering the practical realities of the construction industry and the needs for the restoration of our state in the conditions of Russian military aggression, the priority directions in the implementation of professional and practical training of future specialists in the construction industry should be: adaptation of educational programs to Industry 5.0 standards, with an emphasis on human-centricity, strengthening the base of scientific and technical innovations, environmental literacy and social responsibility, development of creative competencies and leadership; integration of ESG criteria into professional competencies, particularly in the context of the construction industry; orientation of the content of professional and practical training toward students mastering innovative methods and technologies that will allow performing production tasks of the construction industry effectively and qualitatively in conditions of rapid socio-economic development of the world; combining modern theoretical knowledge of students with practical skills acquired in a real production environment; development of emotional intelligence, ability for teamwork, and critical thinking.

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СУЧАСНИЙ СТАН РЕАЛІЗАЦІЇ ПРОФЕСІЙНО-ПРАКТИЧНОЇ ПІДГОТОВКИ МАЙБУТНІХ ФАХІВЦІВ БУДІВЕЛЬНОЇ ГАЛУЗІ В СИСТЕМІ ПРОФЕСІЙНОЇ ОСВІТИ УКРАЇНИ

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Реферат:

Актуальність: у сучасних умовах глобальної нестабільності та безпрецедентних утрат, яких зазнала українська економіка внаслідок повномасштабної агресії рф 2022-2025 рр., професійно-практична підготовка кваліфікованих фахівців будівельної галузі набуває особливої значущості; освітній процес при реалізації професійно-практичної підготовки орієнтується та адаптується до вимог виробництва і його закономірностей, що зумовлює необхідність вдосконалення змісту освітніх і навчальних програм відповідно до виробничих умов, при цьому використання інноваційних технологій займає пріоритетне місце як у виробничій галузі, так і в освітньому процесі.

Мета: проаналізувати сучасний стан реалізації професійно-практичної підготовки майбутніх фахівців будівельної галузі в системі професійної освіти України, обґрунтувати заходи подолання освітніх проблем, спричинених війною рф проти нашої держави, та сформулювати вимоги до оновлення освітніх програм

відповідно до світових та вітчизняних тенденцій розвитку будівельної галузі, викликів повоєнного відновлення держави, концепції сталого розвитку та індустріальної модернізації.

Методи: теоретичний аналіз наукових джерел, нормативно-правових документів та емпіричних даних – для визначення ступеня вивченості сучасного стану реалізації професійно-практичної підготовки майбутніх фахівців будівельної галузі в системі професійної освіти України; *опитування педагогічних працівників* – для оцінювання рівня організації професійно-практичної підготовки у закладах професійної освіти будівельного напряму*; синтез та узагальнення* – для формування висновків щодо заходів, необхідних для подолання спричинених війною освітніх проблем, та вимог до оновлення освітніх програм.

Результати: визначено сучасні умови реалізації професійно-практичної підготовки майбутніх фахівців будівельної галузі в системі професійної освіти України; обґрунтовано заходи подолання проблем, спричинених війною рф проти нашої держави; окреслено вимоги до оновлення освітніх програм відповідно до світових та вітчизняних тенденцій розвитку будівельної галузі, викликів повоєнного відновлення держави, концепції сталого розвитку та індустріальної модернізації.

Висновки: з'ясовано, що сучасний стан професійно-практичної підготовки майбутніх фахівців будівельної галузі в Україні є достатнім, але обмеженим застарілою матеріально-технічною базою і недостатнім впровадженням інноваційних виробничих технологій; обґрунтовано, що успішна підготовка кваліфікованих кадрів будівельної галузі значною мірою залежить від ефективних форм і методів організації професійно-практичної підготовки, що передбачає практичне засвоєння та відпрацювання фахових компетентностей майбутньої професії; визначено пріоритетні вимоги до реалізації професійно-практичної підготовки майбутніх фахівців будівельної галузі (адаптація освітніх програм до стандартів Індустрії 5.0, з акцентом на людиноцентричності, зміцненні бази науково-технічних інновацій, екологічній грамотності та соціальної відповідальності, розвитку творчих компетентностей та лідерства; інтеграція ESG-критеріїв у професійні компетентності, зокрема в контексті будівельної галузі; орієнтація змісту професійно-практичної підготовки на оволодіння здобувачами освіти інноваційними методами й технологіями, які дозволять ефективно та якісно виконувати виробничі завдання будівельної галузі в умовах стрімкого соціально-економічного світового розвитку; поєднання сучасних теоретичних знань здобувачів освіти із практичними навичками, набутими в реальному виробничому середовищі; розвиток емоційного інтелекту майбутніх фахівців, здатності до командної роботи та критичного мислення).

Ключові слова: *професійно-практична підготовка; майбутні фахівці будівельної галузі; система професійної освіти; інноваційні технології в будівництві; сучасні педагогічні технології.*

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