

***ARTEM AKHEKIAN**, Candidate of Physical and Mathematical Sciences, Associate Professor of the Department of Management, Economics and Tourism
Lviv Institut, Interregional Academy of Personnel Management, Ukraine
LIUBOV LELYK, Candidate of Economic Sciences, Associate Professor,
Lviv Institut, Interregional Academy of Personnel Management, Director, Ukraine
LIUBOV KVASNII, Candidate of Economic Sciences,
Professor of the Department of Mathematics and Economics
Drohobych Ivan Franko State Pedagogical University, Ukraine*

DEVELOPMENT OF VOCATIONAL EDUCATION IN THE DIGITAL ERA: CHALLENGES AND PROSPECTS

The issue of restoring the human potential of Ukraine in the realities of martial law and future post-war reconstruction is becoming particularly relevant today. In particular, the task of uninterruptedly providing the defense-industrial complex and key sectors of national production with highly qualified personnel is critically acute. The object of the study is the system of vocational education in the conditions of digitalization of the economy. The problem that was solved is the inconsistency of the content, forms and methods of vocational training with the modern requirements of the digital labor market, as well as the insufficient integration of digital technologies into the educational process. Based on the results of the study, the directions of modernization of vocational education on the basis of digital transformation are substantiated, key challenges and prospects for its development are identified.

The aim of the article is to identify the patterns of development of vocational education in the conditions of digitalization, to determine the impact of digital technologies on the content and organization of vocational training, and to develop a model for the modernization of vocational education in accordance with the needs of the modern labor market. This will contribute to improving the quality of training of specialists, ensuring the formation of relevant digital competencies, and promoting their competitiveness in the conditions of dynamic socio-economic changes.

The transformation of various spheres of social life, including the system of vocational education, is taking place all over the world. The digitalization of the economy, the automation of production processes, the introduction of artificial intelligence and the development of information and communication technologies necessitate the emergence of new requirements for the qualifications of employees and the structure of professional competencies. In this regard, traditional approaches to the organization of vocational training no longer meet the needs of the modern labor market, which confirms the expediency of introducing flexible, adaptive and innovative educational models.

The problem of integrating digital technologies into the educational process, forming digital literacy and ensuring continuous professional development in a dynamic labor market is particularly relevant today. The All-Ukrainian Association of Local Governments, which represents the interests of territorial communities, has approved the draft Concept of the Implementation of State Policy in the Field of Vocational Education “Modern Vocational Education” for the period until 2027.

Thus, the relevance of the study is due to the need for theoretical justification and practical solutions to the problems of developing vocational education in the era of digital technologies, identifying the main challenges and outlining the prospects for its modernization, taking into account the peculiarities of socio-economic transformations.

As a result of the analysis of the level of implementation of digital technologies in vocational education institutions, it was found that LMS platforms and digital educational resources are most actively used, while the use of cloud services and online courses has an average level of distribution. A feature of this result is the identification of an imbalance between the availability of technologies and the effectiveness of their use, which made it possible to specify the problematic aspects of digitalization. This is explained by the unevenness of resource provision and teacher training. The quantitative assessment showed that a high level of LMS use is observed in over 60% of institutions, while other tools do not exceed 40–50%.

The study of the main problems of the implementation of digital technologies made it possible to identify key barriers: insufficient funding, low level of digital competencies of teachers and lack of systematic methodological support. A distinctive feature of the result is the establishment of cause-and-effect relationships between these factors, which made it possible to substantiate their complex impact on the effectiveness of the educational process. This is explained by the systemic nature of the digital transformation of education. Comparative analysis showed that institutions with a high level of teacher training demonstrate 25–30% better results in the implementation of ICT.

The impact of digital technologies on the formation of key competencies of education seekers, in particular information and communication, self-organization and professional mobility, was determined. A feature of the obtained result is the demonstration of the high efficiency of interactive and blended forms of learning, which ensure a deeper assimilation of knowledge. This is explained by the activation of cognitive activity and personalization of learning.