

Sharova T.M.

Doctor of Philology,

Professor of the Department of Social Sciences and Humanities

Dmytro Motorny Tavria State Agrotechnological University

Tykhonenko M.M.

teacher of Ukrainian language and literature, English language

Kobeliaky lyceum № 2

DIGITALIZATION OF EDUCATIONAL SPACE: MODERN TRENDS

Abstract. *The article deals with the issue of digital transformation in education. It is emphasized that an important aspect in the modern world is the integration of digital technologies into the educational space of an educational institution. The skills necessary for a modern person in the era of digitalization are presented, and the strategic priorities of digital transformation in education are indicated. The study contains the criteria for digital content, as well as the factors that determine the pace of development of the digital space.*

Key words: *digital transformation, digital space, content, educational process, quality of knowledge.*

Шарова Т., Тихоненко М. Цифровізація освітнього простору: сучасні тенденції. У статті розглядається питання цифрової трансформації в освіті. Наголошується на тому, що важливим аспектом у сучасному світі є інтеграція цифрових технологій в освітній простір закладу освіти. Представлені навички, необхідні сучасній людині в епоху цифровізації, а також вказані стратегічні пріоритети цифрової трансформації в освіті. Дослідження містить критерії, що висуваються до цифрового контенту, а також вказані чинники, від яких залежить темп розвитку цифрового простору.

Ключові слова: *цифрова трансформація, цифровий простір, контент, освітній процес, якість знань.*

Formulation of the problem. Digitalization of the educational space and informatization significantly change the understanding of the modern educational process in an educational institution of any level: general

secondary, vocational, professional pre-university and higher education. Modern processes of the digital society allow for open access communication without restricting the teaching and research staff, as well as students. This greatly expands the opportunities for students who want to learn and systematically exchange information [2, p. 40].

The purpose of the study. Digitalization is a significant factor in the development of economic, social, political and cultural relations in our country, especially in the context of the full-scale invasion of Ukraine by Russia, when most educational institutions were forced to switch to a distance learning format. However, according to V. Areshonkov, the current requirements for the organization of distance learning today require significant changes [1, p. 4]. At the same time, we understand that distance learning should be based on different principles and principles than traditional teaching. In any case, the transition of educational institutions from traditional teaching to innovative teaching involves a number of measures at all levels, including organizational, social, regulatory, ideological, economic, etc.

Introduction. The following scholars have paid attention to the issues of digital space in modern scientists: L. Havrilova, Ya. Topolnyk, I. Kucherak, T. Kryvorot, M. Pryhodii, A. Rastryhina, S. Tolochko, S. Sharov, V. Shynkanova, O. Bilychenko, V. Areshonkov and others. Aspects of digital strategy as a component of the social and communication space of a higher education institution are considered in the study of Bilychenko O., Researchers L. Havrilova, Ya. Topolnyk consider in their scientific work digital culture, digital literacy, digital competence as modern educational phenomena. O. Sakhno reveals the issues of digital competence and technologies for education, pointing out the main principles and tools. As we can see, aspects of the digital space are interesting to scientists from different perspectives. However, to date, the issue of digital competence of teachers in the context of digitalization of educational institutions and distance learning has been partially studied, which allows us to speak about the relevance of this issue.

Presenting the main material. Since the beginning of Russia's full-scale invasion of Ukraine, most educational institutions have switched to distance learning for security reasons. An important aspect here is the integration of digital technologies into the educational space of the educational institution. The current conditions have forced the administration of educational institutions to outline an action plan for entering the digital space through ICT:

- use of digital technologies for teaching and learning;
- development of digital skills and competencies;
- application of analytical analysis and forecasts in education [7, p. 32].

V. Nikitenko, R. Oleksenko, O. Kyvliuk emphasize the formation of the values of digital education and digital human in a digitalized society, each time focusing on the skills of a modern person [6, p. 53]. When assessing the digital modern space, we understand that this will primarily concern each individual, since it is the human factor that will allow us to build the concept of digitalization and the human being at the center of digitalization. That is why the following skills are necessary for a modern person: critical thinking, financial literacy, leadership, initiative, flexibility, creativity, digital literacy, stress resistance.

In view of the above, we emphasize that pedagogical and scientific and pedagogical workers should always learn and master new competencies in order to be flexible, which will allow them to have modern and practical cases that can be used in the educational process during distance learning.

For example, T. Kryvorot and M. Pryhodiі focus on training teachers to use digital Internet technologies in the educational process [4, p. 33]. It is clear that such training should take place in accordance with approved educational programs for professional development and be conducted by leading specialists who have experience with digital tools. I. Kucherak once emphasized that digitalization has a powerful impact on the educational space in the context of the formation of key competencies [5, p. 91]. In this aspect, it is important to understand that continuous learning through online courses, participation in trainings, workshops, webinars will allow you to be in trend and teach modern youth, using digital content that will significantly improve the quality of knowledge of students and motivate them to learn.

In today's world, digital transformation in education has certain strategic priorities, which are reduced to a number of positions, including: large-scale access to information, acceleration of digital literacy, blockchain in education, expanding the boundaries of artificial intelligence.

Researcher S. Tolochko emphasizes that large-scale access to information includes not only access to information on a free basis, but also the further use of information without any restrictions [10, p. 30]. In her research on digital technologies in education, M. Tolmach focuses on the possibilities and trends

of application, emphasizing different approaches to the teaching staff and the use of digital tools by students [9, p. 159].

As of today, the main directions of the digital space have been identified:

1. development of digital education (digital equipment, development of digital potential, modern organizational capabilities, digitally competent teachers, high-quality educational content, user-friendly tools and secure platforms).

2. improving digital skills and competencies for digital transformation (basic digital skills and competencies from an early age, digital literacy, computer education, knowledge and understanding of artificial intelligence technologies, advanced digital skills, and an increase in IT specialists).

While studying at an educational institution, students acquire certain competencies that allow them to use information correctly, search for it, and analyze it in the future. In the future, the experience gained will allow them to exchange data and communicate at different levels [8, p. 11]. But at the same time, it is necessary to navigate the digital space in order not to lose a number of priority areas aimed at economic development and progress in general. Modern researchers have identified the key areas of digitalization in the modern space: reliable infrastructure; digital literacy; digital competence and skills for teachers; assessment and approaches to assessment using digital technologies; artificial intelligence technologies [13, p. 119].

In the modern world, there are well-known criteria for digital content:

- forms of presentation of educational material and multimedia (free of charge, visualization, consideration of age peculiarities);
- the structure of information presentation (ease of navigation, availability of contextual hints, the possibility of simultaneous training of a group of students);
- interaction with the learning context (creation of tools and services for work (bookmarks, notes, individual elements);
- variability of the content of educational material (selectivity, implementation of individual educational trajectory, differentiation of learning, visual context, principles of variability) [11, p. 136].

At the same time, researcher O. Sakhno, analyzing the experience of using digital technologies, emphasizes the criteria that determine the optimality of using digital resources: multifunctionality, unification, localization and

confidentiality [8, p. 12]. L.Havrilova, Ya. Topolnyk emphasize digital culture, digital literacy, and digital competence as modern educational phenomena. Researchers point to the rational consumption of information, critical thinking, digital literacy, and also use the term IT volunteering, which allows the use of ICT to improve the world around us [3, p. 5]. In view of the above, we understand that the digitalization of education depends on:

- the pace of development of artificial intelligence;
- ensuring the mobility of information and communication activities of users in the information space;
- introduction of blockchain and cryptocurrency technologies;
- development of cloud computing and virtualization;
- development of new functions of augmented reality;
- widespread use of chatbots;
- development of user characteristics of Internet people;
- formation of the Internet of Things;
- development of robotics;
- development of the software industry;
- development of data protection systems in information systems and counteraction to cybercrime;
- development of a network of Internet service providers;
- ensuring the compatibility of ICT tools and ICT applications.

Having switched to the distance learning format, educational institutions work on educational portals in the Moodle system. This learning format allows the use of ICT tools and active involvement of students in the learning process. Moreover, today the work on the educational portal is effective in terms of connecting students, regardless of their location (in Ukraine, in the temporarily occupied territory of Ukraine, abroad) [12, p. 237]. This issue is also relevant for preschool education institutions, in particular for the teaching staff.

In her scientific works, researcher V. Shynkanova considers the issues of the principles of forming a digital educational space to improve the quality of training of future teachers of preschool education institutions, emphasizing new approaches to the educational process in preschool institutions [14, p. 311].

Conclusions. The digital educational space in modern conditions with high-quality content motivates students to learn. By mastering new digital tools and using them in practice, pedagogical and scientific and pedagogical workers

significantly improve their level of competence and join the digital transformation in education.

In the future, we see the need to address the issue of professional development of pedagogical and scientific-pedagogical staff in the context of the full-scale invasion of Ukraine by the Russian federation on the issues of mastering digital tools in educational institutions of different levels and forms of ownership.

References

1. Арешонков В. Цифровізація вищої освіти: виклики та відповіді. *Вісник Національної академії педагогічних наук України*. 2020. № 2.2. С. 1–6.
2. Біличенко О. Цифрова стратегія як складник соціально-комунікаційного простору закладу вищої освіти. *Професіоналізм педагога: теоретичні й методичні аспекти*. 2021. № 15. С. 37–46.
3. Гаврілова Л., Топольник Я. Цифрова культура, цифрова грамотність, цифрова компетентність як сучасні освітні феномени. *Інформаційні технології і засоби навчання*. 2017. № 5(61). С. 1–14.
4. Криворот Т., Пригодій М. Тренінгова підготовка педагогічних працівників до застосування цифрових інтернет-технологій у освітньому процесі. *Professional Pedagogics*. 2022. № 1.24. С. 33–41.
5. Кучерак І. Цифровізація та її вплив на освітній простір у контексті формування ключових компетентностей. *Інноваційна педагогіка*. 2020. № 22. С. 91–94.
6. Нікітенко В., Олексенко Р., Кивлюк О. Формування цінностей цифрової освіти і цифрової людини у діджиталізованому суспільстві. *Humanities Studies*. 2022. № 10(87). С. 53–63.
7. Растрігіна А. Інтеграція цифрових технологій у мистецький освітній простір ВНЗ. *Наукові записки [Центральноукраїнського державного педагогічного університету імені Володимира Винниченка]*. Серія: Педагогічні науки. 2018. № 163. С. 32–38.
8. Сахно О. Цифрова компетентність і технології для освіти: принципи та інструменти. Імідж сучасного педагога. 2020. № 6(195). С. 10–14.
9. Толмач М. Цифрові технології в освіті: можливості й тенденції застосування. *Цифрова платформа: інформаційні технології в соціокультурній сфері*. 2021. № 4.2. С. 159–171.
10. Толочко С. Цифрова компетентність педагогів в умовах цифровізації закладів освіти та дистанційного навчання. *Вісник Національного*

університету «Чернігівський колегіум» імені ТГ Шевченка. Серія: Педагогічні науки. 2021. № 13.169. С. 28–35.

11. Шаров С. В. Сучасний стан розвитку штучного інтелекту та напрямки його використання. *Українські студії в європейському контексті: зб. наук. пр.* 2023. № 6. С. 136–144.
12. Шарова Т. М. Освітній портал як ефективний засіб забезпечення дистанційного навчання здобувачів вищої освіти. *Українські студії в європейському контексті: зб. наук. пр.* 2022. № 5. С. 237–244.
13. Шарова Т.М., Шаров С.В. Електронне навчання: дієвий формат освіти. *Академічна культура дослідника в освітньому просторі: європейський та національний досвід: зб. матеріалів II Міжнар. наук.-практ. конф. (16-17 травня 2019 р., м. Суми).* 2019. С. 119–123.
14. Шинканова В. Засади формування цифрового освітнього простору для підвищення якості підготовки майбутніх вихователів закладів дошкільної освіти. *Науковий вісник Ужгородського університету. Серія: «Педагогіка. Соціальна робота».* 2022. № 1(50). С. 311–314.