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Modern challenges and prospects for the development of remote education: A systematic review of the literature

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Abstract. The events of recent years in the world and Ukraine (quarantine restrictions due to the pandemic and Russian military aggression) directly affect the format of educational services and create the need to introduce online education, which will guarantee all subjects of the educational process the acquisition of knowledge, preservation of life, as well as psychological and physical health. The research aims to conduct a literature review of the peculiarities of online education at the present stage in Ukraine and analyse its main advantages and disadvantages. As a result of a systematic analysis of the literature, the interpretation of the "online education" concept by various Ukrainian researchers and the peculiarities of online learning under martial law were analysed, and a detailed analysis of the main pros and cons of online education in Ukraine was carried out. The context of the new challenges (the coronavirus pandemic and Russia's full-scale invasion of Ukraine) makes distance learning strategically important for ensuring the provision of educational services and preserving the physical and psychological health of all participants in the educational process. The study confirms the active development of online education in Ukraine, with important improvements in infrastructure, teaching materials and teacher training. The importance of online education in both normal and crises is substantiated, and its advantages and disadvantages are identified. The need to learn how to use these technologies while preserving the value of personal communication in education is emphasised. The studies of foreign scholars are analysed and a comparative analysis of education in crises abroad and Ukraine is carried out. It has been found that online education is a promising and necessary form of education, it is developing very actively and can respond quickly and successfully to the needs of society. The practical significance of the study lies in its contribution to the further development of the field of educational technologies and education reform in Ukraine

Keywords: educational process; latest educational technologies; students; offline learning; traditional learning; online education

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INTRODUCTION

The new realities of social life actualise the expediency and rapid development of the online education market (Hasan & Khan, 2020). The massive spread of the coronavirus, quarantine, self-isolation, and Russia's large-scale invasion of Ukraine are the challenges that prompted the reorientation of the education system in the world and Ukraine in particular. The modern education system is designed

to fulfil its mission by creating a special online learning environment, thus preparing competent and competitive professionals who will perform their work efficiently, make complex decisions effectively and quickly, and improve themselves throughout their lives (Davis *et al.*, 2019). Online education is a unique opportunity and a way to continue the educational process in emergencies and crises, It has



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many features that make it possible to find an individual approach to each student, taking into account the peculiarities of the learning environment and the specifics of the perception of educational material (Petrenko, 2020). There are discussions about the quality of online education, its positive and negative aspects, the positive attitude of teachers and students to it, the ability to easily adapt to this learning format, etc. That is why the problem of the features, advantages and disadvantages of online education is relevant.

The analysis of the scientific literature on the above-mentioned issues determined many publications that address the problematic issues of online education, the peculiarities of its development and formation, the justification of its strengths and weaknesses, etc. For example, N. Zhyhaylo and O. Kharko (2021) focus on the advantages and disadvantages of the distance education system for higher education institutions, as well as analyse the general features of online education in a pandemic. The researchers conclude that students have a positive perception of online learning and, accordingly, a positive perception of the new education system. According to L. Shtykhno (2016), distance education is associated with non-traditional sources of information and promotes effective independent work opens up new opportunities for creativity, helps to strengthen various professional skills, and allows teachers to apply fundamentally new forms and methods of teaching, conceptually modelling phenomena, and processes. S. Khalatur *et al.* (2020) analysed the practice of using distance learning tools by higher education institutions in Ukraine and concluded that distance education can be effective and achieve the appropriate level of training after its software and technical components have achieved their goals and timely feedback from the teacher to the student. O. Horbatiuk and S. Polishchuk (2022) analyse the peculiarities of the functioning of higher education institutions during the war and the key advantages and disadvantages of offline and distance education. The researchers are convinced that of all educational levels, it is higher education institutions that have the greatest scope for variability in learning models due to the conscious age of students and their focus on results. In addition, the authors believe that online learning has demonstrated an unprecedented alternative to the traditional form of education during the crisis of the pandemic and in the early stages of the war when education was not ready for full-fledged classroom learning and could not guarantee the safety of the administration of the educational institution, teachers, and students. In contrast, in their study, A. Silenko and N. Kruk (2022) analyse how distance learning differs from part-time education and how it has affected students and teachers. The authors conclude that online education cannot fully and qualitatively replace full-time education but is only an additional tool that expands the possibilities of traditional education.

L. Tkachenko and O. Khmelnytska (2021) analysed the peculiarities of introducing online learning into the educational process of higher education institutions,

the concepts of “distance learning”, “distance education”, “blended learning”, as well as the pros and cons of distance learning for students. The researchers conclude that modern digital technologies are becoming a significant prerequisite for the success of both the educational process in general and distance learning in particular. I. Mala (2022) concluded that distance education through web technologies ensures an effective learning process and research and is a factor in the development of a skilled, intellectual, and highly professional society. E. Yashchenko and I. Levandovska (2021) emphasised that online education enables successful learning due to the comprehensive comprehensive teaching and learning support, allows the introduction of innovative educational technologies, and provides an individual learning process. O. Rudnytska *et al.* (2022) explored the main aspects of online learning in wartime and proved that the transition to distance learning requires the availability of appropriate technical, didactic, and teaching and learning support. In addition, the researchers highlighted the advantages and disadvantages of online learning for both teachers and students. O. Krychivska *et al.* (2022) analysed the peculiarities of distance education in crises and emergencies, argued that several important criteria should be considered when choosing resources for online learning and explored the main pros and cons of distance learning in higher education institutions.

Although many studies have been conducted on the advantages and disadvantages of distance education, there are still several issues that need to be explored. Therefore, the research relevance is determined by unpredictable social events, such as the COVID-19 pandemic and the war, significantly affecting the education system in Ukraine and, thus, requiring a deeper and more detailed assessment of the effectiveness of online education in times of crisis. The constant development of information technology and the changing needs of students make this topic relevant to understanding how to optimise the educational process and ensure access to it. The study is also relevant for identifying the advantages and disadvantages of online education for both students and teachers and improving teaching methods to meet current challenges.

The research aims to conduct a systematic review of the relevant literature and analyse the features of online education, its advantages, and disadvantages in educational institutions of Ukraine at various levels, taking into account current problems and challenges.

The scientometric databases Scopus, Google Scholar, and the electronic catalogue of the Vernadsky Library were reviewed using the keywords “online education” and “new educational technologies” to compile relevant research bases. Out of 70 papers in Scopus and several hundred in other databases, the most relevant to the topic were selected by the titles of the articles: those that deal specifically with the advantages and disadvantages of online education and the prospects for its development, and the comparison of forms of traditional education and online education. Priority was allocated to 40 relevant publications, mainly for 2019-2023.

In the process of studying the thematic literature, effective general scientific methods were used, including analysis, synthesis, comparative method, induction, deduction, as well as systematisation and generalisation. The method of synthesis was used to combine the components of the complex concept of “online education”, and obtain new knowledge and information; the comparative method was used to compare the main features of traditional learning and online learning, as well as to contrast the results obtained with the results of other scholars working on the study of current issues of online education in Ukraine and the world, its main advantages and disadvantages, and to explain its importance for the modern educational process; the inductive method was used to determine the conceptual and The methods of systematisation and generalisation were used to systematise the research results and present them.

ADVANTAGES AND DISADVANTAGES OF ONLINE EDUCATION FOR PARTICIPANTS IN THE EDUCATIONAL PROCESS

At the present stage of society’s development, due to numerous changes, crises and emergencies that are constantly occurring, online education is becoming relevant (Huong & Giao, 2019). A range of terms are used in the scientific literature to refer to the concept of online education, for example: “online education”, “distance education”, “distance learning”, “distance education”, “e-collaboration”, etc. For this study, the term “online education” is used. Online education is a well-thought-out, consistent, and pre-planned process that involves the development of relevant disciplines and methods, as well as educational programmes.

In Ukraine, online education is a relevant learning format, and it is actively developing and improving. This is evidenced by numerous research and monitoring studies conducted at the state level. For example, the State Education Quality Service studied the organisation of distance learning in general secondary education institutions. According to a study conducted by the State Education Quality Service in October 2021, a high level of digital literacy among teachers is observed in all regions of Ukraine, and schools mainly use a combination of synchronous and asynchronous modes in distance learning (Ministry of Education and Science of Ukraine, 2021). The study also found that almost every second educational institution (44% of the total number of distance learning institutions) posts all the necessary information on the organisation of the educational process in distance learning on their websites. The State Education Quality Service has found that when conducting online lessons, most teachers actively use tools to increase students’ cognitive activity: interactive exercises, presentations, and demonstrations, including videos and animations (Ministry of Education and Science of Ukraine, 2021).

Online education has several important features. For this format of education to be effective and bring the desired results, it is necessary to ensure an adequate level of teacher training and to set up students to study in a

distance education environment (Al-Rawashdeh *et al.*, 2021). Scientific and technological progress requires constant updating of knowledge, which contributes to the timely revision of curricula and teaching methods, improvement of the educational process, and enhancement of the competence of teachers of an educational institution (Beznosiuk & Ostapchuk, 2020). Equally important for the organisation of an effective distance learning process in any educational institution is its proper material, technical, scientific, and methodological support (Sadeghi, 2019). In addition, it is necessary to focus on the teachers’ training for classes, as it should be thorough and thoughtful (Kviatkovska, 2022). For example, Z. Kovalchuk (2012) emphasised that for the successful implementation of distance learning, a range of requirements must be met, which recognise the expediency of analysing distance learning technologies and synthesising the most optimal ones to adapt to modern conditions. This includes, first and foremost, a systematic understanding of the essence of distance education and its didactic features, the use of the most effective foreign pedagogical technologies adapted to domestic conditions, and the development and testing of own distance learning technologies. In particular, when selecting resources, tools and platforms for online learning, several criteria should be considered, including:

- versatility – the ability to use a single platform for all types of activities;
- effectiveness – online tools and resources should be useful in achieving the expected learning outcomes;
- accessibility – especially for those applicants who need special education;
- user-friendly interface for students of different levels;
- security – the platform for collecting personal data of teachers and students should be minimised, and different devices and operating systems should be used (Todd, 2020).

T. Sydorenko *et al.* (2021) also note that it is necessary to continue creating resources and services for distance education that can ensure uninterrupted and high-quality communication between participants in the educational process to achieve the objectives of educational activities. This will create a single information and educational space that accumulates the necessary resources and databases required by modern teaching practices.

Under martial law, online education is characterised by several other important features. In particular, preparation for classes should include elements of support, interesting forms of motivation for students, and a willingness to quickly stabilise their state of mind and communicate sincerely. Students from the area of direct hostilities may sometimes be in a difficult life situation, show rudeness or aggression, and therefore need to be provided with quality psychological support. Online education in wartime is characterised by such features as teaching tolerance, humanity, mutual assistance, and love of life for peace; it also promotes calmness to some extent and prepares for humanity exams. The knowledge and skills acquired through distance learning can help students become mature and

independent, strong, and adaptable to difficult conditions, as real life encourages them to constantly learn and use knowledge in practical activities.

Between 6 and 13 May 2022, the State Education Quality Service conducted an anonymous online survey of students and academic staff of higher education institutions of all types and forms of ownership on trends in the organisation of distance learning in higher education institutions in the 2021-2022 academic year under martial law. Approximately 27 thousand respondents from 54 higher education institutions took part in the survey. The survey revealed

that the most pressing challenge for the education system under martial law is the quality of the educational process. First and foremost, it is to ensure that consumers of educational services receive the necessary information without hindrance, to establish interactive interaction between all participants in the educational process, to provide students with the opportunity to work independently with educational materials, etc. (Analytical report on trends..., 2023).

The advantages and disadvantages of online education for teachers and students at vocational pre-university and higher education institutions are presented in Table 1.

Table 1. Advantages and disadvantages of online education for teachers and students of vocational pre-university education and higher education institutions

Advantages of online education for teachers	Disadvantages of online education for teachers
<ul style="list-style-type: none"> ● a significant reduction in commuting time and, consequently, an increase in free time; ● the possibility of video recording classes, creating presentations and storing online classes with students in video format for those students who were unable to attend seminars or lectures; ● the ability to stimulate the voluntary work of students and adjust curricula following the current conditions of distance learning; ● having more opportunities than ever to use new teaching methods and tools to make their subjects more engaging and informative; ● the opportunity to invite other lecturers, well-known specialists and representatives of various professions who have significant experience, can share it and motivate students; ● access to many new opportunities through innovative technological resources, which greatly simplifies work and increases the availability of information; ● the ability to immediately stop synchronous interaction with students in the event of an air raid or other danger. 	<ul style="list-style-type: none"> ● effective work requires a thorough knowledge of the use of various platforms and resources for online learning for students; ● low activity of students during online classes, which is difficult to control, as not all students can join the class on time, turn on the camera, etc; ● the necessity for constant self-improvement, mastering modern techniques for effective online classes; ● poor psychological state of students, and often even physical inability of students to continue their studies, which hinders the conduct of classes and disrupts teachers' plans; ● teachers need to carefully prepare for each lesson, think through its course and select a large number of materials; ● the presence of technical malfunctions that sometimes prevent classes from being held.
Advantages of online education for students	Disadvantages of online education for students
<ul style="list-style-type: none"> ● the ability to choose a convenient place to study; ● the availability of great opportunities to combine work and study, and thus simultaneously improve their financial situation and gain practical knowledge and skills; ● ease of contact with teachers via email, chat, messenger, remote platforms or social media; ● greater opportunities for shy and insecure learners to learn and interact with others more easily; ● students with disabilities can study from home, communicate with their peers and receive education. 	<ul style="list-style-type: none"> ● limited live communication with classmates and teachers; ● lack of personal contact between students and teachers; ● frequent deterioration of mental health and loss of motivation to study; ● difficulties in adapting to the new rules and conditions of study; ● lack of opportunity to experience student life to the fullest; ● technical difficulties and lack of necessary gadgets that prevent students from accessing online classes; ● lack of knowledge and skills in independent work and effective time management; ● lack of motivation to learn due to a lack of understanding of the importance of online education; ● inability to focus on learning due to numerous external distractions.

Source: compiled by the author based on scientific material analysis (Prybylova, 2013; Yaroshenko, 2019; Baryshnikova & Avlasenko-Kanarovych, 2020; Ivanov & Ghosh, 2021)

Thus, the study shows that at the present stage, Ukraine is actively developing online education and improving it. Internet platforms for the provision of online educational services that meet all the requirements have already been formed, various educational materials, programmes and courses have been developed, specially trained teachers are

used to this format of education, and students are getting used to learning with the help of the latest technologies, etc. It is proved that online education is a technology of the future that can be used in all education systems, during crises and emergencies, and also to carry out a wide range of tasks of education, upbringing, training and personal

development. It is determined that online education in Ukraine has its peculiarities, advantages and disadvantages that need to be considered. Innovative technologies will not replace live communication between students and teachers, but each problem gives rise to new opportunities: for teachers – to learn how to use digital technologies in the educational process, and for students – to learn how to acquire knowledge independently.

COMPARATIVE ANALYSIS OF TRADITIONAL AND ONLINE LEARNING IN THE WORKS OF SCHOLARS

The scientific literature contains many publications on traditional and online education, especially during the period of the pandemic and coronavirus restrictions that affected almost all countries of the world (Yuhanna *et al.*, 2020). It is worth noting that while there is a lot of information about the impact of the pandemic on education systems around the world, very little has been written about the impact of other crises on education. At the present stage, Ukrainian scientists pay considerable attention to various problems of online education and find effective solutions for its development and improvement of the educational process (Horbatiuk & Polishchuk, 2022). For example, researchers V. Zhykharieva *et al.* (2020) identified and analysed the main methods of distance education, and its types, and noted that distance learning does not stand still and is constantly evolving, so the main task for the scientific community is to search for and scientifically substantiate new methods, techniques, and types of learning and to justify their features, the feasibility of using them in certain conditions.

However, various perspectives, challenges and problems of online education are widely considered by foreign scholars, including Chinese, American, European and others. For example, K.D. Rajab (2018) compared the effectiveness of online learning with traditional forms by analysing the experience of such learning at Najran University, which suspended traditional offline classes due to the war between the Arab Coalition, Saudi Arabia and Yemeni rebel groups. K.D. Rajab (2018) identified the potential benefits of distance learning in crisis zones and concluded that there is no statistical or practical difference between distance and traditional learning, and therefore online technologies can be used to teach in war-torn regions. It is difficult to agree with the statement of K.D. Rajab (2018) regarding the fact that there is no difference between distance and traditional learning, as this study, and several others, show that there is a difference. It may not be noticeable at first glance, but it is there.

The problems of online and traditional learning in terms of preferences and behaviour of students were studied by V. Gherheş *et al.* (2021). These researchers found that during the COVID-19 pandemic, online learning has become an important alternative for reforming the entire traditional education system, and both teachers and students have had to change their behaviour, teaching or learning style, assessment methods, etc. According to

scientists, online learning has brought several benefits, but also caused some tension and frustration among participants in the educational process, showing that it is worth modelling the behaviour of all parties involved to streamline the educational process, especially in higher education institutions, and to ensure the sustainability of education. Concerning the positive aspects of distance learning, these scholars concluded that students noted that the main advantage of online learning was time savings, followed by comfort, which allows them to study and stay at home, and accessibility provided by the online environment. As for the negative aspects, the main disadvantage of online learning compared to traditional learning, as shown by the study by V. Gherheş *et al.* (2021), is the lack of interaction, in particular the lack of communication with peers, various technical problems that arise during connection, as well as the lack of practice and the ability to apply the acquired knowledge in practice.

Korean scientists T.E. Shim and S.Y. Lee (2020) analysed the experience of South Korean college students in emergency distance learning due to the spread of coronavirus and noted that the advantages of online education are a comfortable learning environment, established interaction and efficient use of time, and the researchers identified the following disadvantages: reduced concentration of students on learning and network instability. It is difficult to disagree with the mentioned advantages and disadvantages of online education, as they are among the main ones that exist in the Ukrainian system.

D.T.H. Dung (2020) suggested that online education is teaching in a learning environment where the teacher and students are separated by time, space, or both, and the course content is delivered via the Internet, multimedia resources, video conferencing, etc. Among the advantages of online learning, D.T.H. Dung (2020) also highlights the flexibility, cost-effectiveness, and convenient access to learning materials, while the disadvantages include long hours of online classes, which causes fatigue, boredom, and loss of concentration, as well as heating of electrical gadgets after prolonged online learning. The statement about gadgets heating up is interesting, but this study did not find it to be significant or to have a significant impact on online learning in Ukraine.

S. Greenhow *et al.* (2022) in their study described some of the challenges faced by higher education, as well as the technological resources and methodologies used to transform higher education into digital education. The authors noted that there is an urgent need to change the way schools teach gave examples of distance learning opportunities, and stressed that teachers' efforts, technological skills, self-confidence, skills, and experience need to increase. The results of this study showed that online education is promising and that the learning process can be enjoyable for both students and teachers.

Romanian researchers C. Coman *et al.* (2020) analysed how Romanian universities adapted the educational process to online learning during the pandemic. The results

of their study showed that the main disadvantages of online learning are technical problems, lack of technical skills of teachers, outdated teaching style that is not sufficiently adapted to the online environment, as well as lack of familiar interaction with teachers and poor communication with them. The shortcomings identified by Romanian researchers are important, they have a direct impact on the educational process and should be considered when organising and delivering distance learning.

Polish researchers, in particular M. Bączek *et al.* (2021), note that the success of online education depends on many factors, including accessibility, use of appropriate methods, tools and instruments, course content and assessment criteria. Among the advantages of online education, they highlight increased convenience, time flexibility, access to educational resources regardless of location and time, as well as reduced costs and air pollution, such as reduced carbon dioxide emissions due to reduced traffic, while the main challenges include problems with Internet access, poor quality of Internet connection and insufficient digital skills of teachers and some students. According to these scholars, some of the advantages of online learning can also be disadvantages, for example, the flexibility of time can harm those students who have difficulties with self-discipline. This opinion is quite reasonable, as some Ukrainian students also have problems with self-discipline, and therefore what will be an advantage for some will be a disadvantage for others.

P. Fidalgo *et al.* (2020) conducted a study on the features of online learning in Portugal, the United Arab Emirates and Ukraine. The researchers found that the advantages of such learning are the flexibility of time and space and time savings, as there is no need to travel to an educational institution; among the disadvantages, the researchers noted a sense of isolation, the struggle to maintain motivation, the lack of face-to-face interaction, difficulties in receiving immediate feedback, as well as the need for constant and reliable access to technology, and sometimes some difficulties with accreditation. Thus, despite the differences in the education system in the countries studied, and different values and approaches to learning, the advantages and disadvantages of distance education are common to all countries and have been noted in the present study.

B. Swanson and A. Valdois (2022) surveyed 27 students from China who shared their observations on how education in China has changed. The results of the survey showed that, for the most part, before the coronavirus pandemic, students had a negative attitude towards online education, as most universities had significant technical and implementation barriers to online learning. However, due to the pandemic, educational institutions were forced to invest in digital educational infrastructure, and thanks to the experience, most students changed their minds.

F. Ferri *et al.* (2020), analysing the opportunities and challenges of distance education, note that there are some technological, pedagogical, and social problems. Technological problems are mainly related to the unreliabil-

ity of the Internet connection and the lack of necessary electronic gadgets for many students; pedagogical problems – to the lack of digital skills of teachers and students, structured content compared to the abundance of online resources, as well as insufficient interactivity and motivation of students, and the lack of active participation of teachers in the learning process; social challenges are mainly related to the lack of human interaction between teachers and students. The problems identified by scientists are indeed important and need to be addressed, as their impact on the organisation and delivery of online learning is significant.

J. Baxter *et al.* (2022) conducted a study that examined the planning of the educational process during and after the coronavirus epidemic. The authors concluded that most schools have made progress in terms of distance education, but some schools have not succeeded due to a lack of experience and a belief that education should be delivered in schools. These schools usually lack equipment and funding for development.

Thus, online education is the subject of research by many scholars, as this format of education is becoming increasingly relevant and accessible today. Distance learning has numerous advantages, but it is not without its drawbacks, which need to be addressed and worked on.

CONCLUSIONS

The study emphasises that online education in Ukraine has developed significantly and has become an important component of the educational process in various educational institutions. It has been found that this form of education allows students to study in any convenient place and use their time effectively. Students have access to a large number of different learning resources and materials. In the current challenging environment, online education is developing dynamically, a solid foundation has been prepared, various learning materials, courses and programmes have been developed, teachers and students have been trained for the new learning format, etc.

Online education in Ukraine has several unique features, as well as advantages and disadvantages within the educational process in institutions of different levels. The study identified the advantages and disadvantages of online education for teachers and students of general secondary education institutions and teachers and students at vocational pre-university and higher education institutions. The significant advantages of online education for all participants include the ability to conduct classes and study at any convenient location, saving time on the way to work or study and, accordingly, increasing the amount of time for rest, access to a large amount of information, learning resources and new opportunities, etc. The biggest disadvantages of online education include the lack of live communication between participants in the educational process, various technical difficulties, lack of thorough knowledge for effective online learning and teaching, etc. This study does not cover all aspects of the issue, as the development

of online education is ongoing, new technologies are being actively introduced and new resources are being developed that require study and analysis. The conclusions point to the need for further development and improvement of online education in Ukraine, as well as the consideration of these results in the planning and implementation of educational programmes. For future research, it may be important to analyse the psychological aspects of online learning

in crises and further study its effectiveness and impact on the quality of education.

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CONFLICT OF INTEREST

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Сучасні виклики та перспективи розвитку дистанційної освіти: систематичний огляд літератури

Анотація. Події останніх років у світі та в Україні (карантинні обмеження у зв'язку з пандемією та військова агресія з боку Росії) безпосередньо впливають на формат надання освітніх послуг та створюють необхідність впроваджувати онлайн-освіту, яка гарантуватиме всім суб'єктам освітнього процесу здобуття знань, збереження життя, а також психологічне й фізичне здоров'я. Мета статті – провести літературний огляд щодо особливостей онлайн-освіти на сучасному етапі в Україні, проаналізувати її головні переваги та недоліки. У результаті систематичного аналізу літератури в роботі висвітлено, як тлумачать поняття «онлайн-освіта» різні українські дослідники, проаналізовано особливості онлайн-навчання в умовах воєнного стану, здійснено детальний аналіз головних плюсів та мінусів онлайн-освіти в Україні. Зазначено, що в контексті нових викликів (пандемія коронавірусу та повномасштабне вторгнення Росії в Україну) дистанційне навчання стає стратегічно важливим для забезпечення надання освітніх послуг та збереження фізичного і психологічного здоров'я всіх учасників освітнього процесу. Дослідження підтверджує активний розвиток онлайн-освіти в Україні, з важливими покращеннями в інфраструктурі, навчальних матеріалах та підготовці педагогів. Обґрунтовано важливість онлайн-освіти як у звичайних, так і в кризових ситуаціях та визначено його переваги та недоліки. Наголошено на необхідності навчитися використовувати ці технології, зберігаючи цінність особистого спілкування в навчанні. Проаналізовано статті зарубіжних науковців та проведено порівняльний аналіз освіти під час кризових ситуацій закордоном і в Україні. Виснувано, що онлайн-освіта – перспективна й потрібна форма навчання, вона дуже активно розвивається та може швидко та вдало реагувати на потреби суспільства. Практичне значення дослідження полягає в його внеску в подальший розвиток сфери освітніх технологій та реформи освіти в Україні

Ключові слова: освітній процес; новітні освітні технології; здобувачі освіти; офлайн-навчання; традиційне навчання; онлайн-освіта